



## A Preventive Approach in Inclusive Education

# Differentiating classroom practice for primary school teachers



### **DISTINC project**

Jo Lebeer, Luísa Grácio, Z. Hande Sart, Beno Schraepen, Nalan Babur,  
Ria Van den Eynde, Leen Stoffels, Adam Gogacz (Editors)

---

**BOĞAZIÇI UNIVERSITY PRESS**  
2013



**DISTINC 2013**  
DEVELOPING AN IN-SERVICE TRAINING  
FOR INCLUSIVE CLASSROOM PRACTICES

# **A Preventive Approach in Inclusive Education**

**Differentiating classroom practice  
for primary school teachers**

**In-Service Training  
Guide**

DISTINC project

Jo Lebeer, Luísa Grácio , Z. Hande Sart, Beno Schraepen, Nalan Babur,

Ria Van den Eynde, Leen Stoffels, Adam Gogacz (Editors)

**January 2013**





# **DISTINC**

DEVELOPING AN IN-SERVICE TRAINING  
FOR INCLUSIVE CLASSROOM PRACTICES

## **Edited by**

Jo Lebeer  
Luísa Grácio  
Z. Hande Sart  
Beno Schraepen  
Nalan Babur  
Ria Van den Eynde  
Leen Stoffels  
Adam Gogacz

## ► Colophon

### Boğaziçi University Cataloging –in-Publication Data

A preventive Approach in Inclusive Education : Differentiating classroom practice for primary school teachers : In-Service Training Guide / Editors ; Jo Lebeer, Luísa Grácio, Z. Hande Sart, Beno Schraepen, Nalan Babur, Ria Van den Eynde, Leen Stoffels & Adam Gogacz.

216 pages; 30 cm.

ISBN 978-975-518-342-8

1. Inclusive education. 2 Teachers --Training of. 3. DISTINC Project.

**LC1200**

**Publication No: 1078**



*This project has been funded from 2010-2012 with the support of the European Commission Life Long Learning Programme Contract N°510072-LLP-1-2010-TR-Comenius-CMP. This document reflects the views of the authors only, and the Commission cannot be held responsible for any use which may be made of the information contained therein.*

**5 1 0 0 7 2 - L L P - 1 - 2 0 1 0 - 1 - T R - C O M E N I U S - C M P**

# ► Table of Contents

Colophon.....	iv
Foreword .....	ix
Acknowledgements .....	xi
<b>Section I - Introduction .....</b>	<b>1</b>
Education for all – inclusive education.....	1
What is DISTINC .....	2
Goals of DISTINC .....	2
References to Section I.....	2
<b>Section II - What kind of training do teachers need to deal with diversity?.....</b>	<b>3</b>
The index of training needs .....	4
<b>Section III - Training in Inclusive Education .....</b>	<b>7</b>
General structure of the training.....	7
Training .....	8
Teachers' Guide .....	9
<b>Module 1 - General Knowledge about Inclusive Education .....</b>	<b>11</b>
Introduction .....	11
Goals .....	11
Teacher competences we want to develop.....	11
Content of Module 1 .....	12
The context of inclusion .....	12
Consequences for education .....	12
How to train teachers in this module.....	13
Background and Key Concepts .....	13
The right to inclusive education and equality in opportunities .....	14
The context of inclusive education.....	15
Inclusion as an ethical project: stop integration start living together.....	17
Modifiability, cognitive development, plasticity of the brain and inclusion: What do they have to do with each other? .....	20
The mechanism of labelling and stigmatization .....	21
Sources for this module .....	23
Toolbox of activities for General Knowledge about Inclusive Education .....	25
Toolbox of activities .....	26
Toolbox 1.1 Welcoming activities.....	26
Toolbox 1.2 The right to education (1) .....	27
Toolbox 1.3 The right to education (2): International declarations.....	28
Toolbox 1.4 The right to education (3): exercise .....	29
Toolbox 1.5 The context of inclusive education: an Inclusive school.....	30
Toolbox 1.6 Exploring the international context of inclusive education .....	31
Toolbox 1.7 Exploring the evolution towards inclusion.....	32
Toolbox 1.8 Brain and Learning: on modifiability and plasticity of brain development .....	33
Toolbox 1.9 Looking at schools in an inclusive way .....	34
Toolbox 1.10 Thinking in barriers instead of labels.....	35
Toolbox 1.11 Beyond labelling: How hyperactive and behaviourally challenging children experience themselves.....	36
Toolbox 1.12 Alternatives to grade retention [Samen tot aan de meet].....	37

<b>Module 2 - Inclusive Classroom Practices.....</b>	<b>39</b>
Introduction .....	39
Goals .....	39
Teacher competences we want to develop.....	39
Content of Module 2 .....	41
1. Welcome strategies.....	41
2. Adapting to different abilities .....	41
3. The teacher as a mediator of inclusion and of learning processes.....	42
4. Keep a balance between being firm and flexible .....	42
5. When to choose for stimulation – compensation – remediation – dispensation? .....	43
6. Adapting the school and classroom organization.....	43
7. Organizing support.....	43
Background and Key Concepts .....	44
What is intelligence and how we can improve it .....	44
Good teaching by removing barriers to learning: Bruner’s contributions .....	45
Differences in learning, learning styles and teaching.....	47
Feuerstein’s mediated learning theory and its implication for inclusive education.....	48
Differentiating according Feuerstein’s concept of the cognitive map.....	51
Cooperative learning .....	53
How to train teachers in this module.....	55
Sources for this module .....	55
Toolbox of activities for inclusive classroom practice.....	58
Toolbox 2.1 Welcoming activities.....	59
Toolbox 2.2 Removing barriers to achievement: effective classroom practices .....	60
Toolbox 2.3 Lesson: We are all smart!.....	61
Toolbox 2.4 Lesson plan: How to make a Japanese samurai hat? .....	62
Toolbox 2.5 Multiple Intelligences and Learning Styles.....	63
Toolbox 2.6 Feuerstein’s “cognitive map”: a tool to differentiate materials.....	64
Toolbox 2.7 General inclusive support strategies .....	66
Toolbox 2.8 Feuerstein’s mediation criteria in function of inclusion .....	67
Toolbox 2.9 Example of a structured lesson plan: making sentences.....	68
Toolbox 2.10 STICORDI: Stimulation, Compensation, Remediation, and Dispensation .....	69
Toolbox 2.11 Peer mediation .....	70
Toolbox 2.12 Cooperative learning.....	71
Toolbox 2.13 Co-Teaching .....	72
Toolbox 2.14 Bruner’s’ instruction principles .....	73
Toolbox 2.15 Your own toolbox .....	74
 <b>Module 3 - Challenging Behaviours: “What do we know? What can we learn?” .....</b>	 <b>75</b>
Introduction .....	75
Goals .....	75
Teacher competences we want to develop .....	76
Content of module 3.....	78
1. Understanding Challenging Behaviours (CB) in Children.....	78
2. Analysing and reflecting on the perspectives and roles of teachers’ beliefs, attitudes and actions in the face of challenging behaviour .....	80
3. Conceptualizing perspectives on challenging behaviour .....	81
4. Establishing set for creating positive environment .....	82
5. Developing techniques and strategies: Identifying desirable changes and developing actions based on positive behaviour support and functional behaviour.....	83
Background and Key Concepts .....	83

Children’s Challenging Behaviour: Teachers’ understanding and intervention.....	84
Ecological perspective on challenging behaviour.....	85
General Perspectives on Behaviour Management: School, learning and teachers .....	87
Prevention of Risks: School-wide positive behaviour .....	89
Creating Positive and Inclusive Classroom Environment Conducive to Learning.....	90
Development of social and emotional competences.....	91
How to Teach for the Other 3 R’s (Sternberg, 2008).....	92
Development of Self-Regulation and Self Control as a Way to Prevent and Overcome Challenging Behaviour.....	93
How to train teachers in this module.....	95
Sources for this module .....	95
Toolbox of activities for challenging behaviours.....	100
Toolbox 3.1 My Behaviour, Your Behaviour, What can we do?.....	101
Toolbox 3.2 Expectations and Behaviours: Their effects on others and the roles of expectations of a group.....	102
Toolbox 3.3 The teacher as a person and his/her impact on children .....	103
Toolbox 3.4 Good examples of beliefs and teaching practices teacher as a person and his/her impact on children .....	104
Toolbox 3.5 What is your solution? .....	105
Toolbox 3.6 Pyramid of Friends .....	106
Toolbox 3.7 Influence of Teacher-Pupil Relationship on Pupils .....	107
Toolbox 3.8 Five Steps Method: Steps in responding to pupils’ violations of rules and procedures .....	108
Toolbox 3.9 Socio-emotional competence training via Feuerstein’s Instrumental Enrichment – Basic programme (FIE-basic) .....	109
Toolbox 3.10 Decision Making Guide .....	111
Toolbox 3.11 Teaching Deliberately Basic Social Skills .....	112
Toolbox 3.12 Stop! Think! Go! .....	113
Toolbox 3.13 Child’s self-control of thoughts, feelings and actions .....	114
Toolbox 3.14 Teaching Constructive Self Talk: What and How to do it. ....	115
Toolbox 3.15 Surface Management Strategies .....	116
Toolbox 3.16 The carousel of challenging behaviour.....	117
Toolbox 3.17 Your Own Contribution .....	118
<b>Module 4 - Preventing and overcoming difficulties in early reading .....</b>	<b>119</b>
Introduction .....	119
Goals .....	119
Teacher competences we want to develop .....	120
Content of Module 4 .....	121
Background and Key Concepts .....	123
Part 1: Understanding children’s literacy development.....	123
Part 2: Theories of learning to read.....	128
Part 3 Reading difficulties .....	136
Part 4 Interventions (general).....	141
Sources for this module .....	148
Toolbox of activities for early reading.....	151
Toolbox 4.1 Reading aloud to children 1 .....	152
Toolbox 4.2 Reading Aloud 2 .....	153
Toolbox 4.3 Working on vocabulary.....	154
Toolbox 4.4 Language experience approach.....	156
Toolbox 4.5 PASS Reading Enhancement Programme (PREP) .....	158
Toolbox 4.6 Connect sounds and letters .....	159
Toolbox 4.7 Connect Word Recognition .....	160
Toolbox 4.8 Connect fluency .....	161
Toolbox 4.9 Decoding words into sounds and letters: F&L method.....	162
Toolbox 4.10 Repeated Reading of Familiar Text.....	164



Toolbox 4.11 Choral Reading .....	165
Toolbox 4.12 Choral Repeated Reading.....	166
Toolbox 4.13 Coached Reading (Assisted Reading).....	167
Toolbox 4.14 Paired Reading.....	168
Toolbox 4.15 Games.....	169
<b>Module 5 - Enhancing Reading Comprehension.....</b>	<b>173</b>
Introduction: Reading comprehension.....	173
Goals .....	173
Teacher competences we want to develop .....	173
Content of Module 5 .....	175
Background and Key Concepts and Skills .....	176
Part I Understanding reading comprehension.....	177
Part II Reading comprehension in practice .....	179
Part III Reading Comprehension Strategies .....	181
Sources of this module.....	185
Toolbox of activities for Reading Comprehension.....	187
Toolbox 5.1 RU BART Technique .....	188
Toolbox 5.2 BCDE Strategy .....	189
Toolbox 5.3 RAP-Q Technique.....	191
Toolbox 5.4 Ask 5 W's & 1 H Technique.....	192
Toolbox 5.5 FRAYER Model Technique.....	193
Toolbox 5.6 SPORE Technique .....	194
Toolbox 5.7 K-W-L Technique.....	195
Toolbox 5.8 Reading Comprehension: Active reading with reading strategies .....	196
Toolbox 5.9 Understanding news .....	197
Toolbox 5.10 Creating meaningful connections.....	198
Toolbox 5.11 Tricks for reading pleasure: Reading circles .....	200
Toolbox 5.12 Mobile reading places; reading cubes .....	201
Toolbox 5.13 Tricks for reading pleasure: Story sacks .....	202
<b>Contributing authors .....</b>	<b>205</b>
<b>DISTINC Project Partners .....</b>	<b>209</b>

## ► Foreword

“Education for All (EFA)” is a movement for a global commitment to providing a high quality of basic education for all children, young people and adults. EFA was first launched in Jomtien, Thailand, in 1990, and the international community confirmed its commitment to the EFA at the World Education Forum in Dakar in 2000. Furthermore, 164 governments pledged to achieving the EFA and identified six goals to be met by 2015, including a good compulsory primary education for all children. The idea is to make the school accessible to all children, whatever their differences or background.

Furthermore, children with special needs and/or disability should be integrated into mainstream settings through inclusive education. According to the UN Convention (Article 24), children with a disability have the right to be educated in regular school settings together with non-disabled peers with the objective of integration, and that governments should take measures to grant them that right. In this context, national legislation has been changed in order to make education more inclusive. However, the implementation is not at the desired level; for instance, teachers hardly know how to deal with the diversity of students’ needs and performance levels, there are many administrative and organizational gaps in the schools and a lack of training materials.

Nevertheless, the problem of inclusive education should be seen from a wider perspective than simply letting all children, whatever their difficulties or needs, participate in an ordinary school. The real issue is to solve a dilemma: how to create better conditions of inclusive education, and simultaneously to create optimal conditions of learning for many different children, many of whom have learning and behavioural challenges.

Until now it cannot be said that the dilemma has been solved. On the other hand, in many countries there are best practices shown that the dilemma can be solved in an inclusive way. It is known that often classroom teachers do not have the necessary training and skills to provide appropriate practices for those students. As a result many students with additional educational needs cannot benefit from regular classroom practices. It is crucial for classroom teachers to be prepared to change their mind-set towards becoming really inclusive, and then, to benefit from the most effective methods, strategies, and practical techniques.

The DISTINC (Developing In-service Training for Inclusive Classroom Practices) Project aimed to answer part of these needs. DISTINC is a European Union project financed by the European Union Lifelong Learning Programme, Comenius Multilateral Projects. Together with six partners from five countries (Belgium, Poland, Portugal, Turkey and the United Kingdom), an in-service training programme, TIE (Training in Inclusive Education), was developed for primary school teachers to improve skills and knowledge on inclusive classroom practices, particularly for children with additional educational needs (learning difficulties and/or disability, and challenging behaviours).

In the perspective of a preventive approach in inclusive education, this training guide was prepared mainly:

- To develop awareness and competence in dealing with a variety of children, focussing especially on children who experience some barriers to learning, difficulties with learning or with behaviour, whether they are identified as children with special educational needs (SEN) or not;
- To understand the principles of inclusive education in order to develop inclusive practices;
- To increase a sense of competence and self-improvement in teachers in dealing with different needs, particularly with respect to dealing with challenging behaviours and difficulties in learning to read and write.

This teachers’ guide was initially prepared with the main purpose of assisting “trainers of teachers” to teach DISTINC modules to the participants. However, it may serve as a reference document in the future for training of trainers. The guide includes six sections: Section I introduces DISTINC project; Section II provides information about the training programme and the guide; Section III through Section VI presents each training module.

Within the project period, a series of activities were conducted, starting from the needs analysis for specific and current needs of primary school teachers who have a variety of children with different needs, including children with learning difficulties and/or challenging behaviours, to the development and implementation of a training programme for teachers. Finally, different tools (conferences, meetings, brochures, internet, etc.) were used to disseminate the training programme to wider groups. Furthermore, it is believed that the DISTINC project has played a significant role in promoting European co-operation in teacher training in inclusive practices, exchange of experiences regarding inclusion and mutual understanding.

**Tamer Atabarut, Ph.D., Project Coordinator**  
**On behalf of the DISTINC Project Team**



## ► Acknowledgements

As for the coordinating partner, first we would like to emphasize how this project was initiated with the efforts of Boğaziçi University and Istanbul Provincial Directorate for National Education (ILMEM). This project was started with the idea how to guarantee the rights of children with disabilities in our schools and how to establish paradigm shifts in the practices of inclusive education. It was aimed to learn as well as share experiences and develop an in-service training based on the needs of classroom teachers who are teaching in inclusive settings in countries from the EU. Therefore initially we would like to thank to our colleagues; Jo Lebeer (Belgium), Martha Kędzia (Poland), Maria Luísa Fonseca Grácio (Portugal), Tunay Hussein (UK) and of course Tamer Atabarut and Shirli Ender Büyükbay (coordinator, Turkey) who brings all the people together. We strongly believe that our journey will continue till our societies provide equal educational opportunities for all children to reach their academic, emotional, social and physical potentials to the highest levels.

We are grateful to the Vice Rectors of Boğaziçi University, Fusun Akarsu and Gulay Barbarosoglu, and the Director of ILMEM, Muammer Yıldız, who supported the Project from the beginning to the end. We would like to extend our heartfelt thanks to former project team members of ILMEM; namely Filiz Yağmurlu, Filiz Göktürkler and Seher Mutlu, who took part in the initiation, development and initial implementation stages of the project. We are also thankful to Köksal Aksoy for the coordination of administrative works at ILMEM for TOT, testing TIE and dissemination conferences. We would like to thank to Lokman Ayva, Hale Bacakoğlu and Halis Kurulay who provide us their past school experiences as being students of inclusive practices as well how their lives were changed by the influences of their teachers during our dissemination conferences in Istanbul. We would like to extend our sincere thanks to our academic project assistants Didem Ozerman Ulcay and Burcu Ozveren for their contributions as well their creativity during the implementation phase of the project and to Nurfer Babür who helped us in activity preparation phases. We wish to express our heartfelt thanks to the project assistant Ece Gökakın as being the “angel” of the project. She was everywhere working day and night for the project and never left a question unanswered. We are in debt to Orhan Gokcol and Cem Çeliköz for their invaluable comments and guidance as being the academic and financial external evaluators of the project. We would like to thank to Dipnot Agency who worked us very closely in order to create all visibility materials (logo, web-page, brochures, etc). We would like to extend our special thanks to the teachers from public schools in İstanbul who actively took role first in Training-of-Trainers’ phase, then in the next phase of testing the training programme, and finally in dissemination conference. They made the project more visible and made us believe that “Yes, we did the right thing”. Their motivation to learn was unbelievable. Thanks to them, namely Baran Tuba Aydemir, Aynur Barkın, Serap Bayram, Serhat Sekmen Can, Ümid Esra Coşkun, Asuman Uğur Ergen, Serap Erginyürek, Zeynep Ersin, Berna Günay, Burçin Özkan, Duygu Park, Seher Sevindik, Tuğba Şenses, Erdal Tavaslı, Nurten Tekin and Gülbin Ülker. And finally we have to thank to all children who motivate us to discover new worlds.

The Polish partner would like to thank Ms Barbara Celmerowska – the director of 67 Inclusive Primary School in Łódź (Integracyjna Szkoła Podstawowa nr 67 im. Janusza Korczaka w Łodzi), Mr Rafał Kamiński a teacher of Polish and English and all other great teachers involved in the Distinc project. This is also to the memory of Mrs Marta Lebiedzik, the Principal of School of Innovative Education in Lodz (Liceum Umiejętności Twórczych w Łodzi), who was involved in organizing the DISTINCT trainings and tragically passed away a week before first training of trainers.

As for the partner in Belgium, we are grateful to Leen Stoffels & Ria Van den Eynde of the Karel de Grote Teacher Training College of the University Association of Antwerp who “jumped on the train” with their “experiential luggage” on special needs and inclusion in general, and reading in particular. To Marijke Wilssens, Ase Vermeire and Saar Callens of the Artevelde University College, Ghent, for their cooperation with masterclasses, teachers’ guide, conference and dissemination; to our colleague Beno Schraepen at the Plantijn College of the University Association of Antwerp; to Els Maldoy, Cil Leytens, Nele Crabbé, Linda De Loecht, Lucky Van Gasse and other technicians who helped with the dissemination conference organization; to Tibi Kind and Chris Heyvaert, volunteering assistance; to the directors of the University of Antwerp, in particular to Johan Meeusen, Vice-chancellor of the University of Antwerp; Elke Struyf, professor of education at the University of Antwerp; and to the administrative and technical staff Patsy De Clopper, Lea Costermans & Vera Huygebaert, Linda Springael, Bruno Fleurackers, Leen Verreydt, Cil Leytens, Chris Monteyne, who took the work on top of their regular jobs; to Tine Vervloet, Johan Huybrechts and Eva Franck (Pedagogical support City of Antwerpen), Wim Van Rompu and Elif Beyaza (Child Guidance Centre Antwerpen), Christel Vervecke (CKSA), Griet Van Balen (Karel De Grote College); to the directors and teaching staff who have been the pioneers with dissemination: Eric d’Hooghe, Marina Beernaert, Liliane Rombouts, Fatma Captagül, Noëlla Dewachter, Kris Du Pont; to Hans Schuman and Dian Fluijt of Utrecht Higher Education College. We apologize for others we might have forgotten.

As for Portugal, we would like to thank to Ana Cristina Rosário, Educational Psychologist at Conde Vilalva School (Group of Schools nº 4, Évora), for their participation in teacher training and to the directors of primary schools from Évora, Estremoz and Ferreira do Alentejo. Special thanks to the Research Fellows on the Center of Research in Education and Psychology (CIEP) of University of Évora, Nicole Rebelo, Fátima Leal, Hélio Salgueiro and João Silva and to the six primary teachers who were part of first training and without which the work would

not have been possible: Sofia Lara Tojo (Group of Schools nº 1, Evora), Teresa Nunes and Domingas Canhoto (Group of Schools nº 3, Évora), Isabel Basílio Moreira (Group of Schools of Estremoz), Sandra Santos and Ana Pinheiro (Group of Schools of Ferreira do Alentejo).

***The DISTINC Project partners***

As editors we would like to thank the project coordinator, Tamer Atabarut, project assistant Ece Gokakin and their team at the Boğaziçi University Lifelong Learning Centre (BULLC) of Istanbul for their endless efforts to make this project work possible. Also to our colleagues in the rest of the partnership who worked on organizational and logistic aspects. We are also grateful to our colleagues of Noel Park Primary School (NPPS) in London, directed by Tunay Hussein. Although they started as a full project partner, they had to withdraw being no longer able to fulfil all the partner obligations which lay out of their control. Upon our visit to NPPS in October 2011 we found a very lively inclusive school with a very intercultural population of children growing up in sometimes very difficult circumstances. We found the NPPS team to be highly committed, creative and enlightened teachers, which make the NPPS an inspiring example of inclusive classroom practice.

We thank all the writers who co-authored this teachers' guide.

Finally, we would like to thank our colleagues Mim Hutchings and Marion East from Bath Spa University in the UK who gave us their time to give feedback on the teachers' guide and project set-up, as well as, last but not least to Stephen Ward, emeritus of Bath Spa University, who undertook the incredible monk's jobs of correcting our stumbling English. We owe him a lot.

***The editors***

## ▶ Section I - Introduction

### Education for all - inclusive education

Jo Lebeer, Beno Schraepen, Luísa Grácio, Z.Hande Sart

Education for all is the slogan of UNESCO. During the last decades a worldwide movement towards inclusive education is taking place. The idea is to make the school accessible to all children, whatever their differences or background. Not only accessible but also to give every child, together with its peers, a good education. Inclusive education also means that children with special needs and/or disability are integrated into regular education settings. Article 24 of the 2006 United Nations Convention on the rights of people with disability states that children with a disability have the right to be educated in regular school settings together with non-disabled peers, and that governments should take measures to grant them that right. A number of countries have adapted their laws to make education more inclusive. But practice is lagging behind policies: teachers hardly know how to deal with the diversity of students' needs and performance levels and there are many organizational gaps.

The Organisation for Economic Cooperation and Development (OECD, 2012), which monitors education in different countries, found that one in five children, on the average, does not reach the minimum educational achievements. There are large differences between countries, but the low achievements are highly related to low socio-economic status (SES). Many urban schools have a majority of low SES children and struggle with a high percentage of low achievers. These children, although they do not carry the label "special educational needs", definitely have "additional education needs". Some of them have a really "invisible disability": they may have an unrecognized learning disability or often present a behavioural challenge or have difficulties with attention. There is a variety of causes for children's learning difficulties that must be understood in an ecological framework; they involve not only the child but also home, parents and siblings, school, curriculum, teachers, culture and values and the interaction which occurs in these settings between the child and others. Children often do not get adequate support, either at home or in the school or community.

The problem of inclusive education should be regarded more broadly than simply letting all children, whatever their difficulties or needs, participate and learn up to their potential in a mainstream school. The real issue is to solve a dilemma: how to create conditions of inclusive education, and simultaneously to create optimal conditions of learning for many different children, many of whom have learning and behaviour challenges which need to be activated, stimulated, or regulated, with little resources. It is also how to teach children with widely varying differences, not only with visible disability, but with many different experiences, levels of competences and knowledge, learning speeds, possible difficulties and needs? Educating everyone to its potential in finding adequately stimulating activities to develop learning and promote cognitive, socio-emotional, communicational, academic learning, creativity and thinking competences, must be a fundamental educational goal. Do we need super (wo)men teachers?

Until now the dilemma has been "solved" by referring those who cannot keep up the standards to special educational institutions or special needs classrooms. This is no longer feasible. The present school system creates many drop-outs and despite counter measures their number is still on the increase. These are called "*educationally at risk pupils*". There still is an overrepresentation of children from poor socio-economic backgrounds to special education, i.e. which among the children labelled with special educational needs there is a higher proportion from low socio-economic backgrounds than in the general population (Muijs *et al*, 2009). This reinforces the vicious circle: poor schooling, poor employment, poor social opportunities, social exclusion, and repetition in the next generation.

Fortunately there are alternatives. In many countries examples of good practices have shown that the dilemma can be solved in an inclusive way, and not by sacrificing the "lesser child" or the "more blessed child". Classroom teachers often lack necessary support, training and skills to provide appropriate practices for all these students. As a result of it, many students with additional or specific education needs cannot benefit from regular classroom practices. It is nice to talk about equal opportunities, but how equal are your opportunities if nobody is enabling you to acquire even basic learning prerequisites and good learning conditions? Consequently, it is crucial for regular classroom teachers to be prepared to make a mind-shift towards becoming really inclusive, and from that different perspective develop competences and the self-confidence to try and use the most effective methods, strategies, and techniques for inclusive practices.

The DISTINC project wants to answer part of these educational needs.

## What is DISTINC

Developing In-service Training for Inclusive Classroom Practices (DISTINC) is a European project, with financial support by the European Union Lifelong Learning Programme, Comenius Multilateral Projects. Together with six partners from five countries (Turkey, Poland, Belgium, Portugal and United Kingdom), we developed an in-service training programme, TIE (Training in Inclusive Education) for primary school teachers to improve skills and knowledge on inclusive classroom practices, particularly for children meeting barriers to learning and participation (sometimes called “learning difficulties” and/or “learning disability”, and challenging behaviours). Some children have additional needs (e.g. more instruction time ) while some need specific measures. Within the two years’ lifetime of the project, a series of activities took place. They included determining the specific and current needs of primary school teachers who have a variety of children with different needs, including children with learning difficulties and/or challenging behaviours and the development and implementation of a training programme to help teachers to be self-supporting. This can be at two levels: either individually or as a means to support the training of other primary teachers in inclusive classroom practice and in the domains of challenging behaviours, initial reading and writing difficulties.

## Goals of DISTINC

The goals for the teachers are:

- To develop awareness and competence in dealing with a variety of children, focussing especially on children who experience some barriers to learning, difficulties with learning or with behaviour, whether they are identified as children with special educational needs (SEN) or not.
- To understand the principles of inclusive education in order to develop inclusive practices.
- To increase a sense of competence and self-efficacy in dealing with different needs, particularly with respect to dealing with challenging behaviours and difficulties in learning to read and write.

The goals for children are:

- To increase the academic, social, and self-regulatory competences of children at risk of educational failure because of learning difficulties and/or behavioural problems.
- To decrease the risk of dropping out, underachievement or being placed in special education classes.

The goals of the project are:

- To promote European co-operation in teacher training in inclusive practices, exchange of experiences regarding inclusion and mutual understanding.
- To develop an in-service training programme to train primary school teacher trainers who will themselves train other classroom teachers.
- To disseminate the training programme to wider regions.

## References to Section I

Muijs, D., Harris, A., Chapman, C., Stoll, L., and Russ, J. (2009) Improving Schools in Socioeconomically Disadvantaged Areas: A review of research evidence. *School Effectiveness and School Improvement*, 15, 149-175.

OECD (2012) *Equity and Quality in Education. Supporting disadvantaged students and schools*. Paris: OCED.v

## ▶ Section II - What kind of training do teachers need to deal with diversity?

Ana Soltys (Ed.)

With Bengu Borkan, Z. Hande Sart, Ozlem Unluhisarcikli, Luísa Grácio, Jo Lebeer, Tunay Hussein

Inclusive education is an educational movement that allows us to create equal opportunities for all children. For this to happen it is crucial that teachers acting in regular classrooms and schools have access to methods, strategies and techniques that enable them to have inclusive and educational activities which allow them to promote the academic, emotional, social and psychomotor development of the child's potential. Therefore, it is important to determine the teachers' training needs, attitudes and opinions. The research was carried out to diagnose the potential areas where these needs most frequently occur and to understand better the current situation:

1. Teachers' experiences on children with disabilities in general, and children with learning difficulties and challenging behaviours in particular.
2. Teachers' attitudes toward inclusive classrooms, and knowledge and competence on children with learning difficulties and challenging behaviours.
3. Availability of resources/facilities/interventions provided by the schools.
4. The types of training teachers prefer to receive on inclusive education.

All the presented data have been obtained on a questionnaire *The Needs Assessment Questionnaire* passed in 2011 to teachers of the first cycle of basic education from Turkey (1842); Belgium (57); Portugal (50); Great Britain (25) and Poland (57).

The survey was carried out in the form of an opinion poll and was not completed by a representative sample of professionally active primary school teachers. It should, therefore, be treated as a source of information concerning the trends in opinions, attitudes and training needs. One can, however, claim that the achieved results show certain regularities and tendencies typical of a large group of professional teachers. On the basis of achieved results, it is difficult to arrive at any final conclusions, though one may formulate certain hypotheses for further, more detailed research.

It is important to point to the difficulties in preparation of the general report and in data interpretation. A major discrepancy between the numbers of planned and conducted interviews results from a specific position and profile of the partners carrying out the research. Taking all these differences into consideration, it is important to regard the general conclusions carefully; however, some trends are steady and similar expectations can be observed in all countries taking part in the research.

Table 1 shows the profile of pupils who represent the most important challenges to primary school teachers. One can see that all of them meet all kinds of difficulties, but the most prominent are attention difficulties, challenging behaviour and learning difficulties. Autistic spectrum disorder and intellectual impairment are also frequently met, especially in Belgium and Portugal.

Table 1: Percentages of teachers having experience with specific students' groups.

Experience with specific groups	Belgium	Poland	Portugal	Turkey	Great Britain
	%	%	%	%	%
Visual impairment	14	24	10	5	44
Intellectual impairment	58	24	70	53	80
Auditory impairment	23	21	16	16	36
Attention problems	84	82	92	76	96
Mobility impairment	35	29	48	25	32
Challenging behaviours	79	86	84	75	100
Learning difficulties	88	91	100	80	100
Autistic spectrum disorders	77	29	34	13	80
Gifted children	61	70	6	16	34



From table 2 we can read that most teachers feel reasonably competent in identifying learning difficulties or challenging behaviour and dealing with them.

Table 2: Perceived degree of competence and knowledge of teachers about learning difficulties

Learning difficulties/Challenging Behaviour LD		Belgium		Poland		Portugal		Turkey		Great Britain	
		CB	LD	CB	LD	CB	LD	CB	LD	CB	LD
Knowledge in identifying them	Low	3%		2%	4%		2%	7.4%	6%	8%	12%
	Moderate	63%	63%	32%	47%	66%	72%	57%	54%	52%	56%
	High	34%	37%	47%	40%	32%	26%	33,8%	35%	40%	32%
Practice in dealing with them	Low	3%	11%	12%	7%		4%	8,8%	8%		8%
	Moderate	77%	77%	37%	53%	82%	82%	69%	66%	52%	40%
	High	20%	11%	44%	25%	16%	12%	19,9%	21%	48%	52%

We can meet different solutions implemented in school system, depending on the level of flexibility, financial resources and development of system of education. The resources, facilities and solutions may be evaluated as an effective or not effective. The survey does not indicate the best 'global' solution but may support the directions of future development. The most effective are thought to be:

1. Implementation of an individual educational plan;
2. Individualized educational materials (handbooks, tools);
3. Individualized activities;
4. Pedagogical and psychological support available at school.
5. Cooperative learning – peer support

Also the teachers' opinions and attitudes may vary. The most common agreed opinions are that:

1. The school should be prepared to develop the system of support for these children.
2. It is time-consuming to adjust materials, class, and activities so the teacher should be rewarded.
3. It is time-consuming to adjust materials, class, and activities for the teacher so should be more assistance.
4. It is an obligation for the teacher to use interventions that are responsive to the needs of children with challenging behaviour.
5. There is no problem with teachers and their skills but with the organization support which requires a different methodology of teaching.

The most common opinions teachers *disagreed with* are:

1. There are a lot of external specialists who can deal with learning difficulties.
2. Children with challenging behaviour and learning difficulties would benefit more when they are placed in special education classrooms/schools.
3. The main way to deal with children with CB is to use prescribed medication.

## The index of training needs

Teachers indicate the following training needs as having the highest priority:

1. How to increase positive relationships among peers – 49
2. How to involve and prepare parents to support children with CB – 46
3. How to assess the progress of children with CB – 41
4. How to identify children with difficulties – 40
5. How to involve and prepare parents to support the child with LD – 39
6. How to develop IEP for children with LD – 37
7. How to organize the lesson and activities based on inclusive practices – 35
8. How to develop IEP for children with CB – 33
9. How to create, develop and use educational materials for children with LD – 33
10. How to assess the progress of children with LD – 32

## Conclusions

In spite of the existing differences in the educational systems it can be said that there are large similarities between the participating groups of teachers from countries participating in the project. Most of all it can be stated that:

1. Teachers notice the phenomenon of increasing number of pupils with learning difficulties and challenging behaviour as well as with difficulties in reading, writing and maths.
2. The range of observed problems is highest in case of pupils with learning difficulties and challenging behaviour.
3. Teachers believe that both the system of schools and their professional role should be prepared to cope with solving pupils' problems and that the system of education will have to be changed in order to take into account the growing phenomenon of school difficulties.
4. Although teachers perceive their skills as rather high in the area of identification and coping with pupils with learning difficulties and challenging behaviour, they are interested in raising their competences in this area.
5. The most effective solutions for them are first the implementation of individualized plans to work with pupils. However it may be suggested that a solution is to create separate classes, which is criticized worldwide, but on the other hand it may also show that ideas of inclusive learning should be more promoted, as well as inclusive materials and evaluation systems. They would also like to benefit from consultations with internal experts. They do not agree with the effectiveness of medication, but in some cases they are in favour of creating special education classes.
6. In case of the application of the principles of inclusive education they would like a system of support for teachers, parents and children to be developed in the schools. Teachers' additional efforts should be compensated by the assistance of others or by additional support.
7. The most observed training needs are connected to the performing tasks, problems with concentration and self-control.
8. The main area of signalled training needs is related to the preparation and involvement of parents and organization of classes on the basis of inclusive education principles, as well as preparation and application of individualized education materials.
9. Training needs referring to challenging behaviour are related mainly to difficulties in the area of self-control, concentration and performing tasks, because in the opinion of teachers the main problem is hyperactivity, ease of distraction and difficulty in regulating emotions.
10. In relation to learning difficulties, prominent problems occur in difficulties, with understanding texts, slow reading and in writing with large numbers of careless spelling mistakes and dislike of written forms of utterance.

In general, the respondents declare that they observe and handle most of the described forms of behaviour in their everyday work. These forms of behaviour can thus be considered as typical and unavoidable; yet, they are not dealt with in any systemic way at any of the pre-middle-school levels. The teachers admit that they should receive greater support from the school as regards preparing individualized lesson plans, materials and grading scales for problematic pupils. Still, they also claim that such help should be considered primarily the responsibility of specialists who collaborate with the school or work at the school. Some of the teachers also support the idea that difficult pupils should be treated pharmacologically or placed in special classes; however, the percentage of that kind of attitudes is not significant.



## ▶ Section III - Training in Inclusive Education

Bengu Borkan, Jo Lebeer, Luísa Grácio, Beno Schraepen, Z. Hande Start

### General structure of the training

The aim of DISTINC project was to develop a teacher training programme for primary school teachers working in inclusive classrooms, i.e., with a very diverse population with diverse educational needs. The Training for Inclusive Education (TIE) provides knowledge about inclusive education in general and teaching children with learning challenges and behavioural challenges in particular. Mainly it consists of strategies, techniques, and development of the necessary skills for teaching in inclusive classrooms. It enables children with learning difficulties and/or challenging behaviours to increase their opportunities in reaching their academic, social, emotional, and physical potential with their classmates.

TIE was meant to be a 30-hour training programme including five modules, but in practice it can take much longer. Each module is built around a different set of topics and includes presentations and activities for trainers to use in the training, as well as for teachers and some activities to do with children.

The following is a brief outline of the modules.

#### Module 1: General Knowledge about Inclusive Education

The first module deals with the conceptual aspects of inclusive education. A human rights perspective is reflected, so we emphasize that while we are all different and are not equal, we do have equal rights. How can we make a mind-shift? It is a philosophical question with a practical direction. In a myriad of understandings and different practices, it is important to train teachers to have a good understanding of the meaning of what it really means to include every child, and about new ways of thinking and understanding it.

The themes in module 1 are: the inclusive paradigm; inequity in education, learning and behavioural challenges; principles of inclusive education; inclusion as an ethical project; a human rights perspective; medical and social model in learning difficulties; plasticity and ecology of the mind.

#### Module 2: Inclusive Classroom Practices

The second module deals with the inclusive classroom practices required to deal with a wide diversity of educational needs and abilities in an inclusive context. It emphasizes the need to diversify lessons to meet the needs of different pupils and to implement pedagogic approaches which allow children with different needs to learn and participate.

The themes involved are: welcoming activities; adapting instruction to different abilities (e.g. Gardner's multiple intelligences and learning styles); how to approve teaching and learning processes ( Feuerstein's mediation theory: the teacher as a mediator of inclusion and learning processes; the cognitive map as a tool to vary learning materials; Bruner's instruction principles; balancing between structure and flexibility); "sticordi" – stimulation – compensation – remediation – dispensation; adapting the classroom organization; cooperative learning, co-teaching and organizing support.

#### Module 3: Challenging Behaviours: "What do we know? What can we learn?"

The third module includes the basic conceptual knowledge, effective, practical and applicable strategies, techniques and activities that will be helpful for teachers in dealing with challenging behaviours in the school environment. Teaching is a challenging and complex profession given the multiple tasks required in a classroom with a large number of pupils with different backgrounds and developmental needs. One of the most difficult aspects of this profession is to deal with pupils who have challenging behaviours. Unless teachers are equipped with the necessary knowledge, skills and attitudes, not only the pupils with challenging behaviours but all pupils in the classroom suffer academically, socially and emotionally.

In the development of the module a more comprehensive perspective has been adopted by integrating a reflective and preventive approach to the problem, rather than reactive and punitive approaches. That is, this module is built on the idea of creating and maintaining a safe, supportive and positive environment that prevents and minimizes challenging behaviours, and consequently fosters learning. It depends upon the idea that teachers' beliefs, attitudes and actions are crucial in creating such an environment. Additionally, teamwork is seen to be important. Schools and teachers should collaborate and build partnership not only with parents, specialists, and administrators, but also with all stakeholders who are in the ecological system of pupils with challenging behaviours.

In this module, the following themes are the focus of the training: understanding challenging behaviours in children, analys-

ing and reflecting on the perspectives and roles of teachers' beliefs, attitudes and actions in the face of challenging behaviours, conceptualizing perspectives on challenging behaviours, establishing set for creating supportive and positive environment, developing techniques and strategies for managing pupils with challenging behaviours.

#### Module 4: Initial Reading Difficulties

Reading has enormous importance in our lives and learning to read is a very important academic task during the elementary school years. Reading is a complex process that is influenced by cognitive, linguistic, perceptual, and affective factors. Even though reading abilities continue to develop throughout the life span, research recognizes the importance of early years in children's academic success in school and later in life. The fourth module, therefore, focuses on the development of reading starting from early stages until skilled reading. In this module, the following themes are the focus of training: Some concepts related to early literacy, reading difficulties, fluency, and reading theories (Chall's reading theory and the PASS theory), as well as intervention strategies and ways to increase motivation for reading. The aim of the Module 4 is to equip the teachers with the basic conceptual knowledge, effective, practical and applicable strategies, techniques and activities to deal with difficulties in early reading skills. It has four parts: (1) Understanding children's literacy development; (2) Theories of learning to read; (3) Reading difficulties and (4) General interventions. Sixteen intervention approaches and methods are presented in the "toolboxes".

#### Module 5: Difficulties in Reading Comprehension

In the reading development process, the initial step is "learning to read". Afterwards, the process of "reading to learn" begins and develops. This is not only important to achieve academic success, but also important to increase knowledge for a variety of contexts. Reading comprehension is the essence of the reading, involves higher level cognitive skills and strategies, which a reader has to integrate to make a meaning out of what it is read. Module 5 is developed to equip the teachers with the basic conceptual insights, effective, practical and applicable strategies, techniques and activities to deal with reading comprehension.

## Training

The Training in Inclusive Education (TIE) programme consists of five modules. Each module includes a different topic area and has been bound individually to make the materials more manageable and to allow the topics to be taught separately if needed.

Module 1: General Knowledge about Inclusive Practices

Module 2: Inclusive Classroom Practices

Module 3: Challenging Behaviours: "What do we know? What can we learn?"

Module 4: Initial Reading and Writing Difficulties

Module 5: Difficulties in Fluency and Reading Comprehension

The five modules of TIE have been designed to be taught in a minimum of 30 hours during five days. This is a pragmatic choice, but it must be regarded with caution and flexibility. It may not be optimal to teach this course in a sufficiently profound way; 30 hours can only cover the main ideas of the five modules, which have a theoretical part as well as practical applications. Therefore, the design of the course can be flexible to meet the scheduling demands of participants and instructors. The 30 hours do not need to be done in the same week. Spreading may be preferable to allow the teacher some time to reflect, assimilate new ideas and to try and implement some of the proposed activities. The duration and partition of teaching the module contents depend on local needs, which differ from country to country and even from school to school. There is enough content to do a full year of training or even more. Teachers cannot be expected to gain all necessary competences in 30 hours. To use the analogy of trekking: this 30h DISTINC course is like creating a "base camp" from where further exploration can be organized. It gives a map and guides you when looking at an orientation table. To walk the whole trail takes much longer. If you want to see the whole landscape, you necessary will have to learn how to climb.

Some parts of the modules can be courses in themselves; for instance: "learning to work with the Index for Inclusion" (part of module 1) in itself is a process involving at least one school year; "school-wide positive behaviour support" in itself takes five days (part of module 3). "Learning how to mediate" (part of module 2) is in itself a five-day module part of a 25-day training in learning how to use the Feuerstein's Instrumental Enrichment Programme. A thorough understanding of mediation is needed to train other teachers, and that requires an additional train-the-trainers course of ten days. Learning to work with other cognitive enrichment programmes such as Das-Naglieri PASS-based reading enhancement also takes a few days. The goal of the present guide is not to give all these courses, but to provide critical knowledge and instruments to improve the competences which teachers already have and to go further.

Yet, to continue the analogy of trekking, one does not have to wait to have studied all these sub-modules before starting the journey.

Therefore, the content of each module could be modified by trainers, based on the needs of the participants as well. In using this guide, the main actor is the teacher as the new learning is only possible from the beliefs and knowledge that he or she has built, modified or deepened.

The reading and discussion of the contents do not need necessarily have to be done in the order indicated in the guide. Starting with reading module 1, however, is recommended, since it presents the inclusive principles and philosophy that are prerequisites for all other modules.

In order to obtain a “snowball” effect, the idea is to train key figures in every school who will act as trainers of their colleagues.

To realize these goals the teacher and the teacher-trainer should be able to

1. Transfer knowledge to her/his classroom practices;
2. Use, adapt or create new activities based on the insights and knowledge provided by the guide;
3. Transfer knowledge to teachers in training;
4. Construct learning activities for teachers in training that focus on these shifts of thinking;
5. Create lessons for teachers in training that are based on these insights;
6. Be a model through his/her lessons towards these insights for teachers in training.

For successful implementation of the programme, the following points are strongly recommended.

- All materials should be read and planning should be done before the training
- Target teachers should be classroom teachers
- Participation should be on voluntary basis
- Class size should be around 15-20 participants
- The training room should be selected so that it allows participants to do group works

## Teachers' Guide

This *teachers' guide* has been prepared with the main purpose of assisting “trainers of teachers” (ToT) and teachers themselves to teach DISTINC modules to the participants. Particularly it can serve as a reference document in the future for trainers of trainers. The guide consists of six sections: Section I introduces DISTINC project; Section II provides information about the training programme and the guide; Section III through Section VI presents each module.

The *first part* in each module description includes the objectives and the key concepts of the modules as well as background knowledge. Background knowledge is theoretical and is kept to a minimum, but it is essential. If teachers know why they do something and understand what they are doing, they will be able to choose better. Key concepts are given to be conveyed to participants in presentations. Soft copies of the presentations are available on the DVD (or WEB). The icons given in Table 3 Icons used in the Manual are used throughout the guide to draw the readers' attention.

The *second part* in each module, called *Toolbox*, includes a set of suggested activities. For each activity a “fact sheet” is presented with goals, target group, methods and materials, author, background information, time needed and references to where to find more information. Toolbox items can be directed at varying target groups: some of the activities are useful while training other teachers; other activities are more for children; some of the activities are for teachers as well as children.

The content of the toolbox items may be widely different and can also serve different purposes. Some toolbox items are just presentations of an approach or a suggested set of principles (e.g. dealing with learning styles – module 2), which teacher-trainers and teachers can use in their training or apply in the classroom. Other toolbox items are summaries of an entire programme (e.g. the Index for Inclusion – module 1, or the “peer mediation programme of Shamir and Tzurriel” – module 2). Obviously, this requires more investment of time to study and apply them. Nevertheless, we thought that it is important to mention them as tools for inclusive education. There are also toolboxes with a lesson plan.

For each toolbox item, there is more extensive information (including presentations, full texts and presenters' notes) in the soft-copy in the accompanying DVD or on the website.




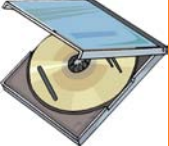
The concept of “Toolbox” must be understood more in the sense used by Vygotsky as social-cognitive tools – instruments to develop higher thinking, more awareness, facilitating a teacher's practice of adapting education in an inclusive way, in order to reach the goal of

“education for all”, not excluding any child. It is more like a *library of ideas* and activities, than a cookbook which tells the teacher what to do one after the other. Therefore, the teacher or teacher-trainer may select activities in function of needs.

The selection of Toolbox activities has been done according to the criteria of: usefulness, theoretical foundation, evidence-based, experience of success, practicability. The set is not meant to be complete, as a library is not complete.

At the end of every module an “empty” Toolbox is added. This is to invite readers to add their own toolbox items: something they developed themselves, or an approach they discovered and which has proved its efficacy. The idea is that this guide is to be like an open source. The reader, therefore, is requested to add his/her own material.

Table 3 Icons used in the Manual

	<p>Background Knowledge Icon This icon refers to important background information that ToT holds.</p>
	<p>Toolbox Icon This icon refers to activities which could be performed and details are given in the Toolbox section of the corresponding module.</p>
	<p>Web Icon This icon indicates that there are web resources such as movie or a web page that ToT should share with participants in the training.</p>
	<p>Video Icon This icon indicates that a video or an activity is provided on CD.</p>

## ▶ Module 1 - General Knowledge about Inclusive Education

Edited by Beno Schraepen

Also with contributions from: Adam Gogacz, Jo Lebeer, Z. Hande Sart, Leen Ackaert, Nancy Van Sieleghem, Johan Huybrechts and Eva Franck

### Introduction

Module 1 starts with basic knowledge on inclusion as a concept and is designed to explore its consequences for education. Defining inclusion is closing it down; therefore, discussing and reflecting about this concept and its impact on a general educational system, a school or a classroom will be more valuable and sustainable.

Knowing that inclusion is a right for all children, that it's defined by its context, that all children have learning potential and that exclusion is an injustice seems to be evident when you talk about it, but it's less evident when you have to bring this in practice. Inclusion is about everyone and starts by questioning our perspectives and values regarding society, education, teaching and children. How we look at and think about education and learning will define how we organize it and how we teach. The language, the philosophy and ethical framework introduced in this module will be used through all modules.

### Goals

The main goal of this module is to explore the concept of inclusion and its significance for educational practices and as well as its application to teaching pupils with learning difficulties or challenging behaviour. The content of the module consists of frameworks behind the concept of inclusion, inclusive values, ethics and scientific backgrounds. The learning materials are selected in order to create paradigm shifts in thinking about education for all and guaranteeing rights to education in a more inclusive perspective.

Goals of this module are:

- To understand the context and principles of inclusion and inclusive education;
- To understand the philosophical and scientific frameworks behind the concept of inclusion;
- To understand the legal framework for human rights perspective in inclusion through international conventions and declarations;
- To look at educational practices, schools, teachers' attitudes, classroom management strategies and pupils with and without special needs from an inclusive perspective;

More detailed goals are outlined in Toolboxes with methods and materials as well as learning activities.

### Teacher competences we want to develop

Module 1 is constructed in order to develop the following teacher competences:

#### To know

1. Know the concept of inclusion;
2. Know the international human rights framework behind inclusive education;
3. Know international declarations that support inclusion and inclusive education;
4. Know about the general paradigm shift in looking at and dealing with children with special needs.

#### To be aware and understand

1. Understand a philosophical background, a human rights perspective and scientific research behind this paradigm shift
2. Understands the consequences this paradigm shift has for our thinking, education, the school and the classroom practice;
3. Understand the shift from a merely medical, individual, static, deficiency-oriented view on learning and behaviour problems towards an actual, i.e. bio-psycho-social, dynamic and ecological view;
4. Explain the broader context of inclusion;
5. Understand the effects of labelling children.

#### To show

1. Discuss the educational practice from an inclusive perspective;
2. Reflect on the educational practice from an inclusive perspective;
3. Describe pupils with special needs from an inclusive perspective, focusing not on disorders but on barriers and resources;
4. Develop new insights on the own educational practice;
5. Uses other alternatives for labelling children.



## Content of Module 1

### The context of inclusion

Topics	Key ideas	Suggested activities
<b>The right to inclusive education, U.N.-declarations, Equality</b>	<ul style="list-style-type: none"> <li>Through history and societal evolution some groups are still in a segregated position;</li> <li>Inclusion and belonging is a right and not a favour;</li> <li>Inclusion is embedded in several international declarations.</li> </ul>	Lecture and a workshop <ul style="list-style-type: none"> <li>Text as background for the lecture;</li> <li>Presentations (Toolbox n°1.2 and toolbox 1.3);</li> <li>Exercises (toolbox n° 1.4).</li> </ul>
<b>Mitchell's 16 propositions on inclusive education Inclusion in your own region What can we learn from an example of best practice</b>	<ul style="list-style-type: none"> <li>Inclusive education is a contextual concept</li> <li>What inclusive education means depends on the educational context of the region (school system, funding, teacher training, ...);</li> <li>What is the educational context of your region?</li> <li>What could be the significance of inclusive education?</li> <li>What about inclusive education worldwide?</li> </ul>	Lecture and discussion <ul style="list-style-type: none"> <li>Presentation (Toolbox n°1.6)</li> </ul> Exercise based on the film of Cleves school at Newham <ul style="list-style-type: none"> <li>Discussion (Toolbox n°1.5).</li> </ul>
<b>Inclusion as an ethical project Inclusion is part of a new paradigm Socio-cultural perspective on disability Shifts in thinking</b>	<ul style="list-style-type: none"> <li>From an inclusive perspective the integration paradigm failed. Inclusion finds its origin partly in this failure.</li> <li>What's integration about? What are the results? Has the integration perspective failed? How come?</li> <li>Where does inclusion come from? From segregation to inclusion</li> <li>Integrating people versus including people</li> </ul>	Lecture and discussion Background text This is the place to confront the teachers with some facts and figures about inclusion and segregation in your own country Presentation including reflective exercises (Toolbox n°1.7)
<b>Cognitive activation, brain plasticity and inclusion Mediated learning experience and Structural Cognitive Modifiability Socio-cultural constructive theory of cognitive development (Vygotsky, Feuerstein, Bronfenbrenner)</b>	<ul style="list-style-type: none"> <li>Plasticity and ecology of the mind: the brain develops through activation after birth</li> <li>Inclusion is not only for social reasons; also it is important for learning in all areas, for all children.</li> <li>Teachers need a shift in belief system that every child has a potential (Feuerstein's concept of structural cognitive modifiability).</li> <li>Mediated learning experience generates cognitive development.</li> <li>Cognitive and socio-emotional developments are interdependent.</li> </ul>	Read background text "modifiability, cognitive development, plasticity of the brain and inclusion" on page 41 Lecture, presentation ... focus is on giving information to broaden the views of the participants. (Toolbox n°1.8)

### Consequences for education

Topics	Key ideas	Suggested activities
<b>Looking at schools in an inclusive way Cleves school as an example of best practice</b>	What can we learn from best practices? Inclusion is about reflecting on existing barriers in school or class organization ... it's about starting a process towards more inclusion. Creating an inclusive culture at school.	Introducing the Index for inclusion, and questionnaires as a process instrument and a working and evaluation tool for schools: <ul style="list-style-type: none"> <li>Presentation about the index as a framework to look at inclusion in schools;</li> <li>Inclusion questionnaire as a start for discussion or reflection in school teams;</li> </ul> (Toolbox n°1.9) Exercise based on the film of Cleves school at Newham. (Toolbox n°1.5)
<b>Thinking in barriers, not in labels Labelling is about language Labelling is about professional discourse Labelling is about power</b>	There is a link between labelling and stigmatization Labelling, and stigmatization are contra-productive in inclusive processes. Labelling should be avoided, there are enough good alternatives.	Presentation including, cartoons for discussion and some footage on you tube (Toolbox n°1.10) Movie about children with behavioural challenges experiencing themselves (Toolbox N°1.11)

<b>Preventing school drop-out: school policy to abolish grade retention</b>	Grade retention (repeating a year) in primary school is rarely effective: under-achievers who repeated a grade or more have higher risk of leaving school early.	Awareness raising activity: presentation “together until the finish” (Toolbox 1.12) School-based training “together until the finish”
---	--	--

## How to train teachers in this module

<b>Awareness raising activities</b>	The activities and materials mentioned in the Toolbox offer a wealth of possibilities; one has to choose the most relevant.
<b>Small group discussion</b>	The focus in this module is on discussion, sharing, reflection, exploring ...
<b>Reflective methods Looking at examples and discussion</b>	Teachers have a specific view on education and children. <ul style="list-style-type: none"> <li>• Why did they become a teacher?</li> <li>• People often get stuck in dealing with differences, why?</li> <li>• Of course we can find enough examples about exclusion or segregation in education and society, but can we find good practices? Why are these examples inclusive?</li> <li>• How can we make a translation for the educational practice?</li> </ul> The answer is not found in “more methods” but “more awareness of a change in attitude and belief system”. Therefore, reflective methods are more useful.
<b>Demos</b>	Show Video samples for discussion and reflection.

## Background and Key Concepts

In Module 1 we provide fundamental information about the background of inclusion and inclusive education, and we introduce an *inclusive language* that will be used throughout the training guide. It’s a general module focusing on the teachers and education in general as a social and cultural framework.

The key concepts we have selected can help the understanding of the concept of inclusion as a framework (or a paradigm) and its significance for educational practice and challenges today. One of the main barriers in learning about inclusion is that it’s about shifts in thinking, that it’s about looking at the same reality but in a different way, allowing us to see other opportunities in dealing with this reality. Some of these opportunities are new, but some of them we’ve forgotten and some of them are simply about common sense. It makes inclusive thinking simple and complex at the same time.

As part of the project, we tried to determine the needs of teachers regarding inclusive education in each partner country. So be aware that this is merely a selection based on what each partner country in the project on primary teachers of each country found necessary; of course, there is more, much more.

The following concepts will be used as fundamental frameworks for the sessions presented in the toolboxes:

- The right to inclusive education and equality in opportunities;
- The context of inclusive education;
- Inclusion as an ethical project: stop integration start living together;
- Modifiability, cognitive development, plasticity of the brain and inclusion: what do they have to do with each other?
- The mechanism of labelling and stigmatization.

## The right to inclusive education and equality in opportunities

Adam Gogacz

The right to education is one of the fundamental human rights as defined in the Universal Declaration of Human Rights in 1948. However, the idea, of equal access to education, regardless of social or economic conditions, is much older. Its components can be traced in various parts of the European cultural heritage, starting from the Christian idea of having enlightenment of every soul. In the Middle Ages, which in common perception is an epoch characterized by enormous social stratification, the idea of education was universal and access to education was provided to all willing individuals, regardless of wealth or social status (Le Goff, 1964, 1994). Another issue was the scope of course material that was the subject of this education. It was only basic religious truths, because they only have to provide happiness – salvation and eternal life. But we should remember that the subject of education is always focused on achievements of the particular age. In this respect the Middle Ages was not far from the idea. Moreover, the idea of free and equal access to education for many years became only a theoretical idea, having nothing in common with educational practice. This was true even in the times of Enlightenment that presented a holistic view of human nature. Rather than promote equal access to education, Enlightenment thinkers devoted a lot of their time to thinking about equality itself. The discussion of that problem ended happily in the failure of the idea that all men are naturally equal (Chiswick, 1991).

Equality can be regarded in many ways. As equality before the law, that is a necessary idea to build an efficient, functioning society. As equality in access to basic achievements of civilization, that is in turn the foundation of being developed. Finally, equality can be understood in the most basic way – that is the belief that we are all equal in general (Abernethy, 1959).

The idea of equality cannot mean that all individuals are the same, have the same skills and methods of activities. The idea of equality refers rather to the availability of means to implement the subjectivity of each and every human being. Any measures, tools and methods developed by mankind in course of the development of civilization should be available to everyone regardless of any circumstances: cultural, economic and even biological, including both biophysical and biopsychic. The idea of inclusive education, therefore, is based on equality of access to any tools (in general) that are needed for our own individual development. It is based on access to education, which does not end with the ability to place the child in school (Booth and Ainscow, 2002). In fact, all the problems arise from the moment of contact the child as an individual has with the school as an institution. The problems can be defined in general as how to provide every child an equal chance of development, since children are so different from each other and their educational needs arising from an individual shape? At the same time we cannot become subject to the illusion that since children are so individualistic, it is necessary to go in the direction of extreme individualisation of curriculums. This is not possible from an economic and technical point of view, but above all it is not good from the standpoint of the child, which yet has to live in society. We all know what happens to children brought up in isolation: they are not only unable to adjust to life in society, but are also poorer in experience, because in education. The rule of synergy is more visible than in any other process: children learn a lot from teachers, or from educational materials, but even more they learn from each other. Hence there's a need to create a learning environment, where every child can be the beneficiary of one of their basic rights – rights to education, but also an environment in which each child will have the option of learning from others and being the subject of learning and development of others.

But the first official document that was attributed to the idea of inclusive education was *The Universal Declaration of Human Rights* (1948). In that document, the requirement of access to education regardless of race, sex, place of residence, and, importantly, the degree of disability, was pointed. It was stated that no obstacle can be a justification for closing the road to learning before anyone.

However, the main feature of any general idea is that it can be indeterminate or even delusive, and yet the devil is always in the detail. Many documents since the Declaration were formulated and published, and the problem still exists. What is very optimistic, is that each successive document, any subsequent report, each new concept is becoming more detailed and better targeted to those specific areas, which constitute a real problem in the realization of the general idea of universal access to education, and thus equal opportunities for development.

Chronology of the documents is as follows:

- *The Universal Declaration of Human Rights* (1948)
- *Convention on the Rights of the Child* (1989)
- *World Declaration on Education for All* (1990)
- *Standard Rules on Equalization of Opportunities for Persons with Disabilities* (1993)
- *Salamanca Statement – Guidelines for Action on Special Educational Needs* (1994)
- *Madrid Declaration* (2002)
- *UN Convention on the Rights of Persons with Disabilities* (2008)

The last document mentioned, namely *UN Convention on the Rights of Persons with Disabilities*, is of great importance. It does not proclaim any new rights for any disabled people, but it shows the ways of ensuring their functioning in society. The article 24 of the Convention commits governments and all institutions responsible for education to provide an inclusive system of education. It is stated that the system of education should be organized in such way that it would enable to develop all potentials of any member of society. According to this act “children with disabilities are not excluded from free and compulsory primary education, or from secondary education, on the basis of disability.” (UN Convention Art. 26,p.2a, 2008). It is binding for institutions responsible for education to create such a system that includes all children no matter what their physical conditions but also prevents any dropouts caused by any disabilities. In fact this act not only responds to needs of contemporary societies that want to develop, but also it produces the environment to create a shift in thinking about education towards its inclusive form.

The most important problem seems to be the conviction that a common start has to be developed for all children. Therefore, individualized curriculums are needed, not separate but in the area of the educational community where children learn the most from each other. The context of socialization is after all one of the basic rules of the educational process.

Someone who is going to take part in the process of inclusive education must be especially aware of the following general principles:

1. The children are not equal but they have equal right to develop.
2. They all have the right to public school as we all have the right to take part in public life.
3. The teacher must have a flexible approach, so she/he must have a flexible and open mind.
4. Children are not only taught – children are learning.
5. The teaching plan is less important than the child. We should use the term: “developing plan” instead of “teaching plan”. The effective combination of two elements of the developing process – a child and a plan – requires flexibility.
6. A child doesn’t have disabilities but a child has abilities.
7. School is for integration, not for division.
8. Diversity is a gift that allows children to understand the world is diverse. So diversity of cultures, beliefs, talents, abilities, etc. is not a threat but the chance for better and faster development.

(Activities: Toolbox n°1.2, Toolbox n°1.3, Toolbox n°1.4)

## References

- Abernethy G. L. (1959) *The Idea of Equality: An anthology*, Richmond: John Knox Press.
- Booth T. and Ainscow M. (2002), *Index for Inclusion: Developing, Learning and Participating in Schools*, Bristol: CSIE.
- Chiswick H. (1991) *The Ambivalence of the Idea of Equality in the French Enlightenment , History of European Ideas*, 1991, Pergamon Press., 215-223.
- Le Goff J. (1964) *La civilisation de l'Occident medieval*, Paris: Arthaud.
- Le Goff J. (1994) *L'Homme medieval*, Paris: Point.

## The context of inclusive education

Beno Schraepen

In *Contextualizing inclusive education* Mitchell (2005) makes a ‘profile’ of inclusive education based on international experience and publications. On the one hand it’s a summary based on similarities. He gives insight in what the evolution towards more inclusion in education and the different interpretations of the concept of inclusion in which different societies have in common and how they vary. By exploring the different contexts where inclusion happens, suddenly ‘a context of inclusion,’ ‘an inclusive perspective’ appears that provides a broad framework for discussion and deeper insight.

Captured in 16 propositions he shows what inclusion is about and he holds up a mirror we can use to reflect (theoretically and personally) on tendencies towards inclusion in society in general, and education in particular.

Because these 16 propositions are further explored and discussed in the learning material provided in this module. Below we give a summary of them (Mitchell, 2005, pp. 1-21):

1. Inclusive education extends beyond special needs arising from disabilities and includes consideration of other disadvantage and marginalization such as gender, poverty, language and geographic isolator. The complex inter-relationships that exist among these factors and their interaction with disability must also be a focus of attention.

2. Inclusive education is a complex and problematic concept.
3. Although there is no universally accepted definition of inclusive education, there is a growing international consensus as to the principal features of this multidimensional concept. With regard to the students with disabilities these include the following:
  - a. entitlement to full membership in regular age-appropriate classes in their neighbourhood school
  - b. access to appropriate aids and support services, individualized programmes with adequate differentiated curriculum and assessment practices.
4. From the perspective of placement criteria alone there are three main types of provision for students with special educational needs:
  - a. one track (serving all students in one system)
  - b. dual track (serving students SEN in one system and all others in another main system)
  - c. multi track (serving various groups in different parallel systems)

Inclusion refers to a one track system.

5. The inclusive education / segregation divide is not limited to the regular class versus the special class/school but also covers a range of other educational provisions that separate students.
6. With regard to students with disabilities inclusive education is a site of conflicting paradigms centred on two different conceptualizations of special needs:
  - a. a psycho-medical model
  - b. a socio-political model
7. Inclusion goes beyond education and should involve consideration of employment, recreation, health and living conditions. It should therefore involve transformations across all government and other agencies at all levels of society.
8. Inclusive education is not always made available to all students with special educational needs (SEN) arising from disabilities, particularly those with severe multiple disabilities.
9. Inclusive education policies and practices must take into account reforms in general education especially those that are derived from such neo-liberal philosophies as marketization, devolution, public choice, competition, and the setting of accountability criteria such as standards, outcomes, and high stakes testing. Since contemporary educational reforms often provide disincentives for schools to adopt inclusive education, the state has an obligation to intervene to ensure that such (usually unintended) consequences are prevented or ameliorated.
10. Inclusive practices often fall short. Reasons for the policy-practice gap are manifold and include
  - a. barriers arising from societal values and beliefs;
  - b. economic factors;
  - c. a lack of measures to ensure compliance with policies;
  - d. the dispersion of responsibility of education;
  - e. conservative traditions among teachers, teacher educators and educational researchers;
  - f. parental resistance;
  - g. lack of skills among teachers;
  - h. rigid curricula and examination systems;
  - i. fragile democratic institutions;
  - j. inadequate educational infrastructures particularly in rural and remote areas;
  - k. large class sizes;
  - l. resistance from the special education sector;
  - m. a top-down introduction of inclusive education without adequate preparation of schools and communities.
11. Inclusive education exists in historical contexts in which vestiges of older beliefs co-exist with newer beliefs.
12. Inclusive education is embedded in a series of contexts extending from the broad society through the local community, the family, the school and to the classroom.
13. Because cultural values and beliefs, level of economic wealth and histories mediate the concept of inclusive education, it takes on different meanings in different countries and even within different countries. The form taken by inclusive education in any particular country is influenced by the nature of the settlements reached at any one time between
  - a. Traditional values such as social cohesion and group identity, collectivism images of wholeness, fatalism hierarchical ordering of society and
  - b. Modernization values such as universal welfare equity and equality, democracy, human rights, social justice, individualism and parent choice

14. Economic considerations play a significant role in determining approaches to inclusive education. These include:
  - a. A recognition that it would not be realistic to provide special schools throughout a country;
  - b. The adoption of a human capital policy of developing all individuals primarily as a means of enhancing the economy;
  - c. An attitude that persons with disabilities are economic liabilities and are therefore of low priority.
15. Since there is no model of inclusive education that suits every country's circumstances, caution must be exercised in exporting and importing a particular model. While countries can learn from others' experiences, it's important that they give consideration to their own social-economical-political-cultural historical singularities. The challenge to importers of inclusive philosophies and practices is to determine how far their country's indigenous philosophies, ideologies and practice should be encouraged, respected, challenged, overthrown, or blended with those from outside. 'Exporters' have similar obligations to respect local values.
16. Inclusive education requires major shifts from old to new educational paradigms

(Activities: Toolbox N° 1.5, Toolbox N° 1.6)

## References

Mitchell, D. (2005) *Contextualizing inclusive education*, London: Routledge.

## Inclusion as an ethical project: stop integration start living together

Beno Schraepen

In practice as well as in theory 'inclusion' is often considered to be the same as 'more integration'. It becomes even more confusing in countries where integration has the same meaning as inclusion. We don't want to start a semantic discussion but when we focus on the history, meaning and background of the two concepts, we'll have to admit that we're talking about two completely different concepts. Inclusion as a theoretical perspective is very critical towards the concept of integration, a criticism that cannot be countered anymore by arguments supporting the concept of integration. The fact that one group has to integrate in society starts from the idea that they're outside society and that they should do an effort to find a place in society and to participate in societal structures. Therefore, society provides support so they can keep up with the standards in society, standards decided by middleclass majority or structures in power. Moreover, looking at society from an inclusive perspective leads to other solutions for, and a different approach of, people, then looking at society from the concept of integration. As such, inclusion can have a broad influence on societal structures and organization, on social theory and science. Therefore this shift can be called a real paradigm shift. We'll go deeper in the inclusion/integration opposition further in the text.

A lot of resistance against inclusion is based on the fear of change. People raised in a society, have learned about this society and have shaped their society based on integration, are now invited to make this change happen. This means that first we have to reflect on where integration brought us. What are the results of thirty years of integration policy, practice and culture? Did it make a difference and for whom? Does it still hold solutions for new societal problems? Is it failing and why?

This text support learning activities in the toolboxes that reflects about our view on people and society. It's about knowing some data about the situation of minority groups and their participation in education, employment and leisure activities. It's about discussing values and power structures in society, organizations and relations. It's about knowing the history of minority groups, care and education. It's about realizing that segregation of, for example, people with disabilities is often institutionalized with the result that they don't participate actively and fully in society. (How many persons with a disability do you have in your circle of friends? How many with an intellectual disability? Who has a colleague with a disability? )

During the evolution of mankind and actual society, the segregation of people who didn't fit the standards was evident. From the survival of the fittest in prehistoric times over the ancient Greek ideal of perfection in Greek civilizations towards the dominant values of the Catholic Church in the middle ages, the general attitude towards people with disabilities consisted of fear, guilt, pity and shame. Little rascals and beggars were removed to protect society; the Great Confinement where people who didn't fit the standard, were put away in workhouses or asylums, covers the end of the dark ages. Evolution in *science* and technology during the Age of Reason, brought pedagogic optimism, but also the first institutions for people with disabilities. After the eugenic experiments in the transition from the nineteenth to the twentieth century, rehabilitation is at hand.

Depending on the policy of a country or culture of society, in western society people with disabilities are placed in total institutions or



in special education. Parents shouldn't worry; their children will be taken care of by professionals. Running through history, we can conclude that society, and therefore our (child) care system, is built on exclusion of the abnormal, the disabled, the poor, the different other, the one who doesn't fit the standard. And while the target of care and education lies in the inclusion of everyone in society, children with disabilities are constantly threatened in their rights because the policy, care structures, welfare organizations, education and the dominant views of professionals, are infected by exclusion mechanisms. The result is that people live in separated worlds: a mainstream world and the segregated worlds of those who don't belong to the mainstream.

One effort to put an end to the segregation of people with disabilities we find in the normalization principle. This principle, introduced in the late 50's by Bengt Nirje, states that patterns of life and conditions of everyday living which are as close as possible to the regular circumstances and ways of life or society, should be made available to all people with disabilities. Developed during the 1970's by Wolfenberger for the Canadian National Institute of Mental Retardation, its influence was concentrated on Scandinavian and North American society (Nirje, 1982).

A broader and more influential attempt to bring segregated people in the mainstream is called integration. *To integrate*, is an action to bring people from one separate world into the mainstream, as in *to move from one world to another*, as in *to adapt to the mainstream*. Integration as a concept finds its origin in the emancipatory and civil rights movements of the late sixties. Integration becomes the key to get a place in our society. Participation leads to integration, but not unconditionally. Knowledge about society and adaptive skills are necessary to find or receive a place in society; but society determines the conditions. Integration policy has led to 'an integration apparatus'. The concept of integration fits the politics and policy of the majority. They determine 'the target groups' who have to integrate and they finance structures that focus on integration of these target groups. The integration model makes it easy to control the effectiveness of policy and the expenses of social action by the government. As a result, a categorical policy based on 'problematic groups' predominates and reinforces the hierarchy of the powerful and the powerless. What are the results so far? Today people with disabilities are still underrepresented in higher education and overrepresented in unemployment statistics. Unemployment of immigrants is always significant higher than native or non-disabled persons. Children from special schools have more difficulties in finding a job. More immigrant than native children are living in poverty. This is where integration went wrong.

The integration model cannot answer the following questions without questioning itself:

*Who has to integrate and in what? Who decides that? When are you fully integrated? What if you don't want to? What if you can't? What is the difference then between integration and assimilation?*

No matter what the positive intentions and goals were/are of the integration apparatus, the starting point for integration is always based on separate worlds (us and them), those who belong and those who don't belong yet. In order to define the latest category, the powerful have to label different target groups. When you have the right label and you belong to a target group, you must be lucky because then society will provide you special support, finance, extra means ... so you can integrate in society. The focus is clearly on change in the person and not on change in society. Society stays inaccessible for a lot of people, and the status of power and hierarchy is confirmed: the labelled people who are part of minority groups are often considered 'less' or 'minor'. And what about those who succeeded with integration? Unless they have reached full assimilation to the dominant culture, they still have the status of integrated people; one is never fully integrated. We're still talking about a 'deaf politician' or 'ethnic related violence'.

Integration fails because it's based on a top-down approach to people, carried out by a majority of native middleclass professionals with little knowledge about the people they're dealing with. Integration became a kind of 'free tolerance', a 'coming *in-the-grace*' of those in power without the guarantee of full participation to the decision making process. The integration industry isn't really supporting emancipation or equal participation. Actions developed by policy and social workers are creating a demand instead of answering to it. They confirm and uphold the mechanisms that are responsible for inequality and nothing really changes when you belong to a minority group.

A shift is needed and it seems that the focus on inclusion will be (or already is) the next step. Inclusion as a concept is not new, but what's really new is that it's now in the spotlight on the international stage. The rise of inclusion as a policymaking and societal concept became possible in the context and changes of the last decades. The civil rights movements in the USA and South Africa, globalization and networking, the influence of the world economy and liberal politics on the local level, the impact of postmodern shifts in thinking on science, the emphasis on quality of life in health and social care, the shift in social sciences from a pure psycho-medical model to a social-cultural model. It's in this context that inclusion has anchored itself in international declarations and it became a concretization of the human rights framework.

Inclusion is about making human rights work for everyone, starting from the fact that exclusion is an injustice. Everyone has the right to play, learn, work and live together and to develop identity within a broad and diverse context. Valuing some people more than others is unethical. One cannot 'not belong' to society; everybody belongs to society.

How can we make inclusion happen? Crucial for an inclusive perspective is being aware about how we look at people, diversity and society. To look sharper, to look at diversity in a different way we need other and different glasses. What follows is a brief introduction to some more practical models that carry out inclusive values and at the same time can be seen as foundations for inclusive processes.

An interesting model that can be used is the *Circle of Courage* introduced by Brendtro and Shahbazian (2004). Their philosophy integrates the best of western educational thought with the wisdom of indigenous cultures and emerging research on positive youth development. The circle emphasizes the importance of the shared values of belonging, generosity, independence, and mastery. (Brendtro and Shahbazian, 2004) The Circle of Courage connects perfectly with inclusive values. Looking at education, employment, leisure, care systems through the values of this model, can help to make inclusion concrete.

More specifically towards people with disabilities *the social model and cultural model of disability* gives us more insight in the disability concept. The social model (Oliver, 2004) states that systemic barriers, negative attitudes and exclusion by society defines who's disabled and who is not. Impairments don't have to lead to disability; it causes individual functional limitation when society fails to take account of or include people. The cultural model (Devlieger, 2003) says that disability is defined and reflected by culture. It emphasizes the potential of disability as a state of being: "The identity of disabled people is shaped by efforts to pass as normal. Disabled people hold out a challenge to society to reflect on itself.

Another model that connects with inclusion is the 'diversimilarity model' (Ofori Dankwa and Lane, 2000) that is based on a gradual shift towards the diversity paradigm. The focus is on appreciating and valuing the differences and similarities between individuals. Differences make society rich and therefore everybody is welcome; unconditional acceptance is the key.

Focusing on the philosophical background of inclusion, a rich work is *Rethinking Inclusive Education* by Julie Allan (2007) where she explores some postmodern concepts of Deleuze, Derrida and Foucault in relation to inclusion and education.

Inclusion can be seen as an ethical project which criticizes the fact that we take exclusion of people for granted, that we approve and even reinforce the structures in society that create inequality in society. We say that everyone is welcome, but we don't act like it. Inclusion acts against labelling and stigmatization of people, defines problems into challenges and focuses on eliminating barriers and creating resources for participation. Inclusion must be seen as process not a product; when inclusion is a fact it evaporates.

(Activities: Toolbox N° 1.7)

## References

- Topping, K. J. and Maloney, S. (2005) *The Routledge Falmer Reader in Inclusive Education. Readers in Education*, London: RoutledgeFalmer.
- Ainscow, M., and Booth, T. (2006) *Index for Inclusion: Developing learning, participation and play in early years and childcare*, London: Centre for Studies on Inclusive Education.
- Allan, J. (2007) *Rethinking inclusive education. The philosophers of difference in practice. Inclusive education: Cross cultural perspectives*, Dordrecht: Springer.
- Brendtro, L. K., and Shahbazian, M. (2004) *Troubled children and Youth: Turning problems into opportunities*. Champaign, Ill: Research Press.
- Devlieger, P., Rusch, F. R., and Pfeiffer, D. (2003) *Rethinking disability: The emergence of new definitions, concepts and communities*, Antwerpen: Garant.
- Gibbs, G. (1988) *Learning by Doing: A guide to teaching and learning methods*. Further Education Unit. Oxford Polytechnic: Oxford.
- Nirje, B. (+1982) *The basis and logic of the normalisation principle*, Sixth International Congress of IASSMD, Toronto
- Ofori-Dankwa, J., and Lane, R. (October 01, 2000) Four Approaches to Cultural Diversity: Implications for teaching at institutions of higher education. *Teaching in Higher Education*, 5, 4, 493-499.
- Oliver, M. (2004) If I had a hammer: the social model in action. In: J. Swain, S. French, C. Barnes and C. Thomas, (eds.) *Disabling Barriers – Enabling Environments*, London: SAGE, 7-12.
- Sengé, P. M. (1990) *The fifth discipline: The art and practice of the learning organization*, New York: Doubleday/Currency.



## Modifiability, cognitive development, plasticity of the brain and inclusion: What do they have to do with each other?

Jo Lebeer

The paradox between inclusion as a right to belong and participate, and the need to activate development, is a false one. Sometimes inclusion is understood as merely social belonging, accepting the child's differences as they are, without attempting to actively work at development and learning. That leads to a "passive-acceptant attitude": the child is allowed to be in class, but little is done specifically to raise its academic or other developmental levels. Medical labels, such as learning disorder, learning disability, behaviour disorder, autistic spectrum disorder, etc. as sanctioned by the DSM<sup>1</sup>, may have two sides: the positive side may be recognition of a way of functioning which may be considered problematic. A negative side may be the adoption of a *pathogenic* viewpoint, i.e. the tendency to look at behaviour only from a medical point of view, as a symptom of a disease, assuming immutable characteristics of the individual. This carries the risks of not seeing, understanding or doing educative actions regarding the possibility to change the way of functioning of a child. It accompanies lowering expectations regarding the child's potential to adapt and to learn. A key concept in this respect is *modifiability*: how modifiable is a child and how can an inclusive environment contribute? That has to do with teachers' beliefs in the possibility of learning.

A *social-construction model of intelligence* sees cognitive development more as a dynamic result of social interaction and culture (e.g. Vygotsky, Bruner, Feuerstein) than being genetically determined. It could be called a *salutogenic* model – based on the word "salus" or health, meaning the study of what goes right.

Social-construction learning theories find support nowadays in the modern neurosciences, which demonstrated that brain architecture is not finished at birth, but needs environmental activation for further development. Emotional human interaction triggers brain development. The construction of the child's mind, i.e. language, thinking; understanding affect, social behaviour and rules; the ability to refrain from impulsivity, to use symbols, to develop higher abstract thinking, etc. needs social activation as well as affective bonding. Feuerstein found that a child builds his cognitive functions gradually, proportionally to the degree of *mediated* learning experience. Normally, mediation is offered by parents, teachers, peers or other people with a definite intention to teach concepts or behaviour, transcending the actual interaction. Mediation is like translating the world to a child, equipping the child with the necessary prerequisite (cognitive) tools to understand and act in the world. This process can be hampered by internal (brain, genetic) or external (emotional, relational, and socio-economic) causes. Unfortunately nowadays, for various reasons, children may receive less mediated learning experience. It can be that parents have no time, no awareness, and no opportunity to mediate, or they may that believe other stimuli such as TV can replace mediation. It may explain the almost epidemic increase during the past twenty years in diagnoses of autistic spectrum or attention deficit disorders, which are hard to explain by genetic influences alone. It also explains why a majority of children with SEN or with less-than-normal intelligence have backgrounds of poor socio-economic status. However, this vicious circle can be broken by creating conditions of good mediated learning experiences. This is a possibility for teachers.

Teachers are being confronted by children who have difficulties in self-regulation when they enter school. By giving these children mediated learning experiences, teachers may have a profound influence on shaping a child's brain, by facilitating cognitive development and its capacity to learn. Under the influence of activation by the environment (emotions, culture and education – called "*ecological plasticity*") plasticity of the brain is an on-going phenomenon during the entire lifetime. New connections are formed between nerve cells and networks are created each time an activity with some kind of meaning is performed. The brains of well-trained pianists are different from just regular players. So are the memory zones in the brains of expert London taxi drivers, who know the streets by heart, different from the ones who are novice or use technological navigation. In other words: function creates structure. Thus teachers may become performers of "closed brain surgery". Most of the children, who present some kind of learning barrier, do so because of coming from low mediation backgrounds. Their brains are certainly modifiable. But even those who have an inborn brain difficulty are modifiable to a certain extent. One has to understand, however, that modifiability is not equal to "becoming normal".

Modifiability of cognitive development needs a heterogenic environment, which confronts the child with many challenges, stimuli and the need to adapt. In an environment that always stays the same and is overprotective there is no need to change. A child's mind is shaped by its "ecology of development" (Bronfenbrenner, 1981). An inclusive school is a really heterogenic environment and that's a main developmental reason for inclusive education. In inclusive schools children not only learn academic skills, but also learn to regulate their behaviour, to follow rules, to interpret messages and execute tasks, to behave, to play, to deal with each other and to express themselves. But they need mediators who help them to develop these skills. Mediators can be teachers, but also other peers, volunteers, anyone.

1 The Diagnostic and Statistical Manual of the American Psychiatry Association, describes all the mental disorders in a systematic way

That is the reason why a cognitive-mediational approach, based on a postulate of modifiability, is more conducive to successful inclusive education. Adopting a viewpoint of modifiability, however, implies a different approach in assessing children. Classic psychometric testing or mere psychiatric labelling does not give valid information about a child's potential to change. We need more dynamic and ecological approaches in assessment, such as proposed in the DAFFODIL project (Lebeer, Candeias and Grácio, 2011). Children need to be taught cognitive prerequisites. This can be done in many ways and with many programmes, e.g. Feuerstein's mediated learning-based Instrumental Enrichment, Nyborg's Concept teaching, Sue Buckley's programmes, Das-Naglieri's PASS-based reading enhancement, etc.. Nyborg found that when a child is taught concepts and principles in a systematic way, learning becomes more accessible.

In Module 2 we will, among others, introduce Feuerstein's Mediated Learning criteria and the concept of the Cognitive Map as tools for teachers to create a more inclusive classroom practice. In Modules 4 and 5, the Das-Naglieri PREP (Pass-based reading enhancement programme) will be introduced.

## References

- Bransford, J., Brown, A. and Cocking, R. (2003) *How people learn*. Washington: National Academy Press.
- Feuerstein, R. (1979) Ontogeny of learning in man. In M.A.B. Brazier, (Ed.), *Brain Mechanisms in Memory and Learning: From the Single Neuron to Man* (pp. 361-372) New York: Raven Press.
- Hansen, A., Hem, M. and Sønnesyn, G. (2003) A strategy of concept teaching and a concept teaching model. Magne Nyborg's educational approach, in: J. Lebeer (Ed.) (2003) *Project INSIDE. How to activate cognitive development of children with or at risk of developmental or learning problems inside the educational system?* Southsea (UK): Down Syndrome Educational Trust Ltd.
- Lebeer, J. (1998) How much brain does a mind need? Scientific, Clinical and Educational Implications of Ecological Plasticity, *Developmental Medicine and Child Neurology* 40: 352-357
- Lebeer, J., Candeias, A.A. and Grácio, L. (Eds.) (2011) *With a different glance. Dynamic Assessment and Functioning of Children Oriented at Development and Inclusive Learning*. Antwerpen/Apeldoorn: Garant.
- Lebeer, J., Sønnesyn, G., Roth, M. and Pokorna, V. (2006), Shortlist of programmes, methods and approaches that activate cognitive development – List of criteria, in: J. Lebeer (Ed.) *In-clues. Clues to inclusive and cognitive education*. Antwerpen/Apeldoorn: Garant, 63-66.
- Rose, S. (1998), Neurogenetic determinism and the new euphenics, *British Medical Journal*, 317, 1707-08
- (Activities: Toolbox N° 1.8)

## The mechanism of labelling and stigmatization

Beno Schraepen

Why are we labelling, and what's the effect of labelling on the person that has to live with it? Briefly we can state that labelling is about language, that it is a product of a discourse and that it's related to power and hierarchy in society. The inclusion-paradigm reacts against labelling and stigmatising in society because it's one of the main barriers to equality and full participation.

*"A label is just a name, what's wrong with that, I don't mean anything with it!" a teacher says.*

This quote brings four aspects of language together: context, description, meaning and significance. Language is functional and intentional for both receiver and transmitter but they both start from a different context. Language is never neutral, a name or word holds several meanings, we're never 100% sure about the significance and specific language evokes different feelings or associations. On top there is a direct and confused relationship between language and the development of identity. Imagine that you have another name; would you then be or become or feel someone else? We develop through language, the world gets meaning through language, people, how they behave, how we interpret them; it all gets a meaning through language. What people say or not say about us influences who we are or who we (don't) want to be. The language of the other is a mirror in which we do or don't recognize ourselves. In our childhood we explore our environment through language, a language provided by adults. Some people get a name and a meaning through their label. What is then politically correct language? In our attempts to avoid labels we invent new ones. The use of 'special needs' instead of learning disorders, disability or language problems was meant to avoid labelling because we all have special needs. That's the theory. In practice it's used to identify the children with and children without special needs. So in our intention to avoid the label we create a new one (the same has happened with 'black') It's in the use of the language that it gets meaning and that's how a name becomes a label. Certain language or names are used within a specific context and they get meaning through the context. In the context of inclusive education, talking about special needs starts from the perspective that everyone has special needs; in a context of segregated

education special needs are used to distinguish or separate the one from the other. Labels are used to describe the otherness, what's different from the norm.

### A label is a product of a discourse.

Based on Foucault's definition, we can summarize discourses as "systems of thoughts composed of ideas, attitudes, courses of action, beliefs and practices that systematically construct the subjects and the worlds of which they speak". Now it seems obvious that a discourse is related to power structures and power relations. The dominant discourse on disability is still a medical one. The parents and the child are introduced in the world of disability through the medical discourse that is used to describe and understand what's 'wrong' with the child. A change from a medical discourse towards a socio-bio-psychological one doesn't make any difference. On the one hand it emphasizes that social and psychological aspects are as important as biological ones; on the other hand they both start from an expert view, where the expert has the knowledge and the power to give meaning or label. The same expert who keeps on inventing new labels or gain more knowledge about a label so they become a bigger expert. Expertise goes together with status especially in an academic world. Labels often find their origin in a professional language, but they also create a distance with the non-professionals. Labels are theoretical constructs that function as a filter between you and reality.

A more positive approach we find in the social-cultural discourse that's based on the social and cultural model of disability. The social model looks at disability as a social construct that is part of society. The barrier is in society. The cultural model acknowledges the abilities instead of disability. People with a disability develop an identity and culture based on their experiences as a disabled person and thus differentiate themselves from able-bodied persons. For examples, we speak about Deaf culture; black persons who became disabled in the USA discovered that their disability opened more doors to inclusion; Stephen Hawking states that his disability sharpened his view of the world and beyond. These models are linked because they start from the civil and human rights. The personal becomes political.

According to Foucault language and discourse is about power and hierarchy. Who chooses the label for whom? Who gives function to a label? How does a label define your status in society? Evidence for the link between status and label we find in the research of Jane Mercer. The majority (or those in power) define the label on the minority.

### The labelling mechanism

The negative effect of labelling a person can be described as a self-destroying prophecy. A self-fulfilling prophecy based on positive connotations and expectations can also be present (the Pygmalion effect). Labelling someone is based on (general) assumptions about someone, assumptions that create expectations. Especially children want to meet the expectations of adults, even when these are lower than their competences. By meeting the expectations they confirm their label. As a reward the environment adapts to the label and the labelled person adapts to environment. A comfort zone is created around the label what makes it difficult to escape from. The person becomes his label, requires the status attached to the label and writes him/herself into the hierarchy of the dominant majority. Persons with disabilities are often alienated from who they really are (I can't do this because I have ADHD!) Thus labelling has also a negative effect on the self-image and self-concept of the child

Some recommendations:

- Avoid negative labels; replace them by more accurate and positive terms that have a positive meaning.
- Use a social-cultural perspective instead of a medical or bio-psycho-social.
- Help to make the silent voices audible.
- Support self-advocacy.
- Use People first language ('has' not 'is').
- What about the consequent use of non-disabled, white, able-bodied, non-immigrant?

(Activities: Toolbox N° 1.10, Toolbox N° 1.11)


### References

- Devlieger, P., Rusch, F. R. and Pfeiffer, D. (2003) *Rethinking disability: The emergence of new definitions, concepts and communities*. Antwerpen: Garant.
- Davis, K. (2004) What's in a name: Our only label should be our name: Avoiding the stereotypes. *The Reporter*, 9(2),10-12.
- Galvin, R. (2008) *Liberating the disabled identity: A coalition of subjugated knowledge*. Saarbrücken: VDM.
- Goffman, E. (1990) *Stigma: Notes on the management of spoiled identity*. London: Penguin Books.
- Heatherton, T. F. (2000) *The social psychology of stigma*. New York: Guilford Press.

- Norwich B. (1999) The connotation of special education labels for professionals in the field. *British Journal of Special Education* Volume 26, No. 4 Dec 1999.
- Riddick, B.(2000) An examination of the relationship between labelling and stigmatisation with special reference in Dyslexia. *Disability and Society*, 15 (4):653-667
- Rosenthal, R. and Jacobsen, E. (1968) *Pygmalion in the classroom: Teacher expectation and pupils' intellectual development*. New York: Holt, Rinehart and Winston.
- Strega, S. (2005) The view from the poststructural margins: Epistemology and methodology reconsidered. In L. Brown and S. Strega (Eds.) *Research as resistance* (pp. 199–235) Toronto: Canadian Scholars' Press. Garant.

## Sources for this module

	<b>Literature about inclusive education and rights</b>
Topping, K. J., and Maloney, S. (2005)	The Routledge Falmer reader in inclusive education. Readers in education. London: Routledge Falmer.
Allan, J. (2007)	Rethinking inclusive education The philosophers of difference in practice. Inclusive education : cross cultural perspectives, v. 5. Dordrecht: Springer.
Ainscow, M., and Booth, T. (2006)	Index for inclusion: Developing learning, participation and play in early years and childcare. London: Centre for Studies on Inclusive Education.
Sengé, P. M. (1990)	The Fifth Discipline: The art and practice of the learning organization. New York: Doubleday/Currency.
Gibbs, G. (1988)	Learning by Doing: A guide to teaching and learning methods. Oxford: Further Education Unit, Oxford Polytechnic.
Mitchell, D. (2005)	Contextualizing inclusive education. London: Routledge.
	<b>Literature about labelling</b>
Devlieger, P., Rusch, F.R. and Pfeiffer, D. (2003)	Rethinking disability. The emergence of new definitions, concepts and communities. Antwerp/Apeldoorn: Garant.
Davis, K. (2004)	What's in a name: Our only label should be our name: Avoiding the stereotypes. The Reporter, 9(2),10-12, 24. <a href="http://www.iidc.indiana.edu/index.php?pageId=364">http://www.iidc.indiana.edu/index.php?pageId=364</a>
Galvin, R. (2008)	Liberating the disabled identity: A coalition of subjugated knowledge. Saarbrücken: VDM.
Goffman, E. (1990)	Stigma: Notes on the management of spoiled identity. London: Penguin Books.
Heatherton, T. F. (2000)	The social psychology of stigma. New York: Guilford Press.
Norwich B. (1999)	The connotation of special education labels for professionals in the field. <i>British Journal of Special Education</i> Volume 26, 179–183
Riddick, B.(2000)	An examination of the relationship between labelling and stigmatisation with special reference in Dyslexia. <i>Disability and Society</i> , 15 (4):653-667
	<b>Internet sources</b>
Icebreakers	<a href="http://www.group-games.com/index-of-all-group-games">http://www.group-games.com/index-of-all-group-games</a> <a href="http://www.icebreakers.ws/">http://www.icebreakers.ws/</a>
Index for inclusion:	<a href="http://www.eenet.org.uk/resources/docs/Index%20English.pdf">http://www.eenet.org.uk/resources/docs/Index%20English.pdf</a> <a href="http://www.csie.org.uk">http://www.csie.org.uk</a>

The ICF-framework	<a href="http://www.who.int/classifications/icf/en/">http://www.who.int/classifications/icf/en/</a>
The UN-convention on equal rights for persons with a disability	<a href="http://www.un.org/disabilities/convention/conventionfull.shtml">http://www.un.org/disabilities/convention/conventionfull.shtml</a>
UNESCO site for inclusive education	<a href="http://www.unesco.org/new/en/education/themes/strengthening-education-systems/inclusive-education/">http://www.unesco.org/new/en/education/themes/strengthening-education-systems/inclusive-education/</a>
	<b>Video sources</b>
In-clues. Clues to inclusive and cognitive education.	DVD accompanying the book Lebeer, J. (Ed.) (2006) In-clues. Clues to inclusive and cognitive education. Antwerpen/Apeldoorn: Garant .Available from Garant publishers Antwerp, Belgium <a href="http://www.maklu.be/MakluEnGarant/en/BookDetails.aspx?id=9789044121537">http://www.maklu.be/MakluEnGarant/en/BookDetails.aspx?id=9789044121537</a>
Inclusive education in Portugal.	Directed by Luísa Grácio. Portuguese spoken, with subtitles in English. Production: University of Evora, Centre for Research of psychology and education, in Lebeer, J., Candeias, A.A. and Grácio, L. (Eds.) (2011) With a different glance. Dynamic Assessment and Functioning of Children Oriented at Development and Inclusive Learning. Antwerpen/Apeldoorn: Garant. <a href="http://www.maklu.be/MakluEnGarant/BookDetails.aspx?id=9789044128024">http://www.maklu.be/MakluEnGarant/BookDetails.aspx?id=9789044128024</a>
A model of an inclusive school: the Janusz Korczakschool in Lodz, Poland.	Polish spoken with English subtitles. Translation Rafal Kaminski. <a href="https://www.dropbox.com/sh/j39qj7umpglvo0k/BHzSo0wXzt">https://www.dropbox.com/sh/j39qj7umpglvo0k/BHzSo0wXzt</a>



## Toolbox of activities for General Knowledge about Inclusive Education

Toolbox 1.1	Welcoming activities
Toolbox 1.2	The right to education
Toolbox 1.3	The right to education (2): International declarations
Toolbox 1.4	The right to education (3): exercise
Toolbox 1.5	The context of inclusive education: an Inclusive school
Toolbox 1.6	Exploring the international context of inclusive education
Toolbox 1.7	Exploring the evolution towards inclusion
Toolbox 1.8	Brain and Learning: on modifiability and plasticity of brain development
Toolbox 1.9	Looking at schools in an inclusive way
Toolbox 1.10	Thinking in barriers instead of labels
Toolbox 1.11	Beyond labelling: how hyperactive and behaviourally challenging children experience themselves
Toolbox 1.12	Together to the finish

## Toolbox of activities

### Toolbox 1.1 Welcoming activities

<b>Goals:</b>	Some little group games in order to get to know each other in the group, these little games can be done with children too
<b>For whom?</b>	Teacher-trainers, teachers, support teachers, children ...
<b>Methods :</b>	Just read the descriptions and choose some games that fit the group
<b>Materials:</b>	Variety packs of candy, enough for each person to be able to have at least five pieces; toy bear or marionette
<b>Approximate time needed to teach</b>	15'
<b>Where to find:</b>	<a href="http://www.group-games.com/index-of-all-group-games">http://www.group-games.com/index-of-all-group-games</a> <a href="http://www.icebreakers.ws/">http://www.icebreakers.ws/</a>

#### Description of the activity: Candy introductions

Candy Introductions is a get-to-know-you game that helps individuals learn new facts about each other in an easy way. They select various pieces of candy from a bag, and each candy variety is associated with a fact about themselves which they will introduce to the others. This game also goes by other names, including the M&M game, Candy Confessions, the Skittles Game, the Gum Drop Game, among others.

Candy Introductions can work with any group size. The icebreaker works best when the group size is limited to 12, so if you have more than 12, divide the larger group and run the icebreaker within the smaller sized groups. This icebreaker works best indoors, and is well suited for classrooms or meeting rooms. Materials required are: candy with about five different variations (colour or candy type), and an optional chalkboard/whiteboard.

Purchase several variety packs of candy, enough for each person to be able to have at least five pieces. They can be any candy type, but not too many choices (limit it to around five or six different varieties) Alternatively, you can buy gummy bears, life savers, gum drops, skittles, M&Ms, or any other candy that already has a variety of colours.

#### *Instructions for How to Play*

Pass around the candy and tell each participant to choose anywhere from one to five pieces of anything that they want. Instruct them not to eat it yet, though. After they have chosen their candy, you will tell them what each candy type/colour represents.

## Toolbox 1.2 The right to education (1)

<b>Goals</b>	<ul style="list-style-type: none"> <li>• Creating awareness that inclusion is a right</li> <li>• Informing about the international context of inclusion</li> <li>• Giving knowledge about Inclusion as an international concept</li> </ul>
<b>For whom?</b>	Teacher-trainers, teachers, support teachers, children ...
<b>Methods</b>	Presentation and reflective discussion in small group
<b>Materials</b>	Background text by Adam Gogacz PowerPoint presentation following the text
<b>Author(s)</b>	Adam Gogacz
<b>Approximate time needed to teach</b>	1 hour
<b>Background</b>	International rights and declarations <a href="http://www.un.org/disabilities/convention/conventionfull.shtml">http://www.un.org/disabilities/convention/conventionfull.shtml</a> (Art 24)
<b>Where to find more information?</b>	Toolbox 1.2 DVD or online <a href="http://www.distinc.eu">www.distinc.eu</a>

### Description of the activity

Read the text and summary first.

Formulate questions or discussion topics, for example:

- What do you know about inclusion?
- Is inclusion a right or a favour?
- Who knows about the Salamanca statement?
- What is the difference between equality and being equal?
- How do you explain the continuous resistance against inclusion?
- Where does it come from?
- How do you feel about inclusion?
- Where do your feelings of resistance come from?
- Who knows about the UN-Convention on rights of persons with disabilities?
- ...

The session can start with the following questions or a quiz, followed by the presentation that focuses on these questions




### Toolbox 1.3 The right to education (2): International declarations

<b>Goals</b>	Creating awareness about <ul style="list-style-type: none"> <li>• the international consensus about inclusion</li> <li>• the legal background and support for inclusion</li> <li>• legislation and guidance for inclusion</li> </ul>
<b>For whom?</b>	Teacher-trainers, teachers, support teachers, children, ...
<b>Methods</b>	Presentation and reflective questions
<b>Materials</b>	PowerPoint presentation
<b>Author(s)</b>	Z. Hande Sart
<b>Approximate time needed to teach</b>	1 hour
<b>Background</b> 	<a href="http://www.un.org/disabilities/">http://www.un.org/disabilities/</a> (un-declaration) <a href="http://www.csie.org.uk/inclusion/legislation.shtml">http://www.csie.org.uk/inclusion/legislation.shtml</a> (an overview)
<b>Where to find more information?</b>	Toolbox 1.3 DVD or online <a href="http://www.distinc.eu">www.distinc.eu</a>

#### Description of the activity

The main purpose of this activity to challenge our views about disability from the perspective of different disability “models”. During the presentation teachers are asked whether a medical model or a social model would be enough to explain and/or to overcome oppression or stigmatization in our society. Additionally, UN Conventions as well as some declarations are set forth as examples to see whether we can guarantee the rights of individuals with disabilities in general and specifically for pupils with disabilities.

### Toolbox 1.4 The right to education (3): exercise

<b>Goals</b>	<ul style="list-style-type: none"> <li>• Creating awareness that inclusion is a right</li> <li>• Informing about the international context of inclusion</li> <li>• Giving knowledge about Inclusion as an international concept</li> </ul>
<b>For whom?</b>	Teacher-trainers, teachers, support teachers
<b>Methods</b>	Exercise in small groups, Reflective discussion
<b>Materials</b>	Golden rules PowerPoint presentation presenting one version of the golden rules
<b>Author(s)</b>	Adam Gogacz
<b>Approximate time needed to teach</b>	1 hour
<b>Background</b> 	International rights and declarations <a href="http://www.un.org/disabilities/convention/conventionfull.shtml">http://www.un.org/disabilities/convention/conventionfull.shtml</a> (Art 24)
<b>Where to find more information?</b>	Toolbox 1.4 DVD or online <a href="http://www.distinc.eu">www.distinc.eu</a>

#### Description of the activity

Based on the sessions in Toolbox 2a and 2b we present the following exercise:

“Based on what you know and what you’ve learned, what could be the 10 golden rules of inclusive education?”

- Individual or group of max 3 teachers. (20 minutes)
- Presentation of golden rules by the small groups or individuals
- Construct a list of 10 rules based on the input of the teachers
- Compare it with the list of the teacher trainer
- Group discussion (40 minutes)

## Toolbox 1.5 The context of inclusive education: an Inclusive school

<b>Goals</b>	<ul style="list-style-type: none"> <li>Introducing an inclusive perspective to look at education, schools, teacher attitude, class management and pupils with and without special needs</li> <li>Create awareness that inclusion is realistic and doable</li> </ul>
<b>For whom?</b>	Teacher-trainers, teachers, support teachers
<b>Methods</b>	We look in group at the footage from Cleves school Group discussion about the clip
<b>Materials</b>	Cleves rap (footage) Reflective questions to start group discussion
<b>Author(s)</b>	Film: Cleves School Newham Questions: Beno Schraepen (Incena, Study centre on Inclusion and Enablement, Plantijn University College, Antwerp)
<b>Approximate time needed to teach</b>	1 hour
<b>Background</b> 	Cleves school in Newham is a flagship school for inclusion, designed and organized to include every child. They work in large groups (100 pupils) so they can maximize their resources, the learning happens in smaller groups, grouped to fit the learning needs.
<b>Where to find more information?</b>	Toolbox 1.5 DVD or online <a href="http://www.distinc.eu">www.distinc.eu</a>
<b>Video material</b> 	Videoclip Cleves school in Newham London, <a href="http://vimeo.com/9523199">http://vimeo.com/9523199</a> Toolbox 1.4a DVD or online <a href="http://www.distinc.eu">www.distinc.eu</a>

### Description of the activity


Show the Cleves rap (5')

Start a group discussion.

The following reflective questions can be your guide:

- What have you seen? What do you feel?
- Would you like to work in that school? Why, why not?
- Would you let your children go to this school? Why, why not?
- What do you think these teachers need to realize this?
- How do you think this school is organized?
- How do you think a lesson is organized?
- How do you think the eliminate barriers in learning and participation?
- What resources do they use?
- What inspires you to take with you to your school or classroom?


## Toolbox 1.6 Exploring the international context of inclusive education

<b>Goals</b>	<ul style="list-style-type: none"> <li>• Introducing an inclusive language</li> <li>• Exploring an inclusive perspective to look at education and schools</li> <li>• To explore what inclusion is about in an international context</li> <li>• Create awareness about education in the home country compared to the international context</li> </ul>
<b>For whom?</b>	Teacher-trainers, teachers, support teachers
<b>Methods</b>	Presentation, lecture, discussion
<b>Materials</b>	PowerPoint presentation: 'Contextualising inclusive education'
<b>Author(s)</b>	Beno Schraepen (Incena, Study centre on Inclusion and Enablement, Plantijn University College, Antwerp) based on  Mitchell, D. (2005) <i>Contextualizing Inclusive Education</i> . London: Routledge.
<b>Approximate time needed to teach</b>	2 hours
<b>Background</b>	 <p>In the first chapter of his book "Contextualising inclusive education", David Mitchell, makes a summary about the 'the context of inclusive education' based on international publications and experiences. He goes on a search for responses on the question 'what is inclusive education about?' Cfr. Background text and key concepts page 15</p>
<b>Where to find more information?</b>	Toolbox 1.6 DVD or online <a href="http://www.distinc.eu">www.distinc.eu</a>

### Description of the activity

Present the presentation "Contextualizing inclusive education" with the 16 principles, and organize a discussion on these topics.

## Toolbox 1.7 Exploring the evolution towards inclusion

<b>Goals</b>	<ul style="list-style-type: none"> <li>• To gain insight in the evolution from segregation to inclusion</li> <li>• To understand the difference between the integration and an inclusion perspective</li> <li>• To introduce a social – cultural perspective on disability</li> <li>• Based on same facts and figures about education in the country, understand the need to a more inclusive perspective on education</li> </ul>
<b>For whom?</b>	Teacher-trainers, teachers, support teachers
<b>Methods</b>	Presentation, lecture, discussion
<b>Materials</b>	PowerPoint presentation: 'Stop integration, start living together'
<b>Author(s)</b>	Beno Schraepen (Incena, Study centre on Inclusion and Enablement, Plantijn University College, Antwerp)
<b>Approximate time needed to teach</b>	2 hours
<b>Background</b>	Cfr. Background text and key concepts page 17
	
<b>Where to find more information?</b>	Toolbox 1.7 DVD or online <a href="http://www.distinc.eu">www.distinc.eu</a>



### Description of the activity

Present some results or figures of how people belonging to several minority groups are integrated in society or the community


- What do we see?
- What efforts does society or the community make to integrate people belonging to minorities?
- How do they then participate equally in several domains like employment, education and leisure?
- Who has people with disabilities in their circle of friends? Who has someone with intellectual or severe complex disabilities in their closest circle of friends? How come?
- What could be reasons that they don't participate equally?
- Why does an integration perspective seems to fail?
- ...

Show the presentation, some reflective questions are included

## Toolbox 1.8 Brain and Learning: on modifiability and plasticity of brain development

<b>Goals</b>	<ul style="list-style-type: none"> <li>• To create awareness of the belief system about brain development;</li> <li>• To underpin pedagogy with the idea of brain plasticity;</li> <li>• To convey the concept of modifiability of cognitive development, which is contingent on mediated learning experience;</li> <li>• If teachers believe children are modifiable, they will be more inclusive</li> <li>• To create awareness for the processes of thinking, their modifiability and the influence of mediation;</li> <li>• To explain what is “a cultural constructive model of intelligence”;</li> <li>• To give a salutogenic view on learning disabilities: a view that focuses not on pathology, but on plasticity and strengths;</li> </ul>
<b>For whom?</b>	Teacher-trainers, teachers, support teachers
<b>Methods</b>	Present the presentation in an interactive way Awareness exercise from Feuerstein’s Instrumental Enrichment Programme “Organization of Dots”: to become aware of your learning processes and need for mediation
<b>Materials</b>	PowerPoint presentation Sheets with exercises of slide 19-21 Pencil and eraser
<b>Author(s)</b>	Jo Lebeer
<b>Approximate time needed to teach</b>	4 hours
<b>Background</b> 	Modern neuroscience gives ample evidence that the brain is not finished at birth, but is plastic, i.e. it continuously undergoes changes, to make connections and networks, under the influence of learning, in a cultural environment. Cognitive functions are the product of mediated learning experience. Every child is modifiable and if teachers believe this they will exclude less.
<b>Where to find more information?</b>	<p>Bransford, J. , Brown, A. and Cocking, R. (2003) <i>How people learn</i>. Washington: National Academy Press</p> <p>Lebeer, J. (1998) How much brain does a mind need? Scientific, Clinical and Educational Implications of ecological Plasticity. <i>Developmental Medicine and Child Neurology</i> <b>40</b>: 352-357.</p> <p>Feuerstein, R., Feuerstein, R.S., Falik, L.H. and Rand, Y. (2006) <i>Creating and Enhancing Cognitive Modifiability: The Feuerstein Instrumental Enrichment Programme</i>. Jerusalem : International Centre for the Enhancement of Learning Potential.</p> <p>Lebeer, J. (2008) Cognitive Modifiability, Neuroplasticity and Ecology, in O.S. Tan., and A. Seok-Hoon Seng (Eds.) (2008) <i>Cognitive modifiability in learning and assessment: international perspectives</i>. Singapore: Cengage Learning Asia, pp. 83-110.</p> <p>Lebeer, J. (2003) The art of cognitive bricklaying: Feuerstein’s Structural Cognitive Modifiability and Mediated Learning Experience, in Lebeer, J. (Ed.) (2003) <i>Project INSIDE. How to activate cognitive development of children with or at risk of developmental or learning problems inside the educational system?</i> Southsea (UK): Down Syndrome Educational Trust Ltd.</p>
<b>Video material</b> 	Extract of “The mind of a child”, a documentary movie made by Gary Marcuse of Face-to-Face Media (Vancouver), which can be found on the DVD belonging to the book “With a different glance”, or whole film.

## Toolbox 1.9 Looking at schools in an inclusive way

<b>Goals</b>	<ul style="list-style-type: none"> <li>• Introducing a framework to look at a school in an inclusive way;</li> <li>• Using a questionnaire as a start for a process of reflection;</li> <li>• Detecting barriers and resources to overcome these barriers in the school or class room;</li> <li>• Introducing an 'inclusive language' to talk about education.</li> </ul>
<b>For whom?</b>	Teacher-trainers, teachers, support teachers
<b>Methods</b>	Use the questionnaires to start a discussion about the barriers in schools. The presentation can be used before or after the questionnaire.
<b>Materials</b>	Questionnaire 1 'What I know about Inclusion?' Questionnaire 2 'Index for inclusion: Quicksan' PowerPoint presentation about the index
<b>Author(s)</b>	Mark Vaughan, Jo Lebeer and Beno Schraepen based on "The index for inclusion" ( <a href="http://www.csie.org.uk">www.csie.org.uk</a> ) and the research project "Capability of schools towards inclusion and diversity"
<b>Approximate time needed to teach</b>	3 hours
<b>Background</b>	The index for inclusion is a reflective instrument that supports the inclusion process in education, schools or the classroom. The text by Mark Vaughan contains the background information (cfr. Toolbox). 
<b>Where to find more information?</b>	The Index for Inclusion has been published by the Centre for Studies on Inclusive Education, Bristol, U.K. ( <a href="http://www.csie.org.uk">www.csie.org.uk</a> ). Extracts can be found in Toolbox 1.7 DVD or online <a href="http://www.distinc.eu">www.distinc.eu</a> .

### Description of the activity

The index for inclusion is a tool for coaching a school process towards more inclusive schools. It contains theory, vision as well as practical reflection questionnaires and checklists. The index provides a set of examples, reflective questions and resources that support the process of inclusive education.

Choose one of the questionnaires for the teachers to fill in

- The purpose of the first questionnaire "What do you know about inclusive education?" is to discuss how teachers understand the concept of inclusive education. Everyone fills in the first page, on the second page they select 3 or 5 or 7 definitions that come the closest to their understanding of inclusive education. In group they discuss why they selected these definitions.
- The purpose of the second questionnaire "Index for inclusion: indicators" is that teachers look at their own school and teaching context in an inclusive way. Everyone fills in the questionnaire. First part of the discussion is about reflecting on your own school and can be organized by discussing the differences and similarities in the answers on the dimensions culture, policy and practice. The second part of the discussion is about the question:

What barriers do you meet?

What do you need to change this?

What resources can you use or are needed?

## Toolbox 1.10 Thinking in barriers instead of labels

<b>Goals</b>	<ul style="list-style-type: none"> <li>• Explain the mechanism of labelling as an outcome of the medical and psychological discourse;</li> <li>• Make professionals aware that how you speak about individuals reflect our attitude towards them which determines our actions;</li> <li>• Make professionals aware about their role in labelling individuals;</li> <li>• Making clear that labelling is about (professional) language, status and power in society;</li> <li>• Creating shifts in thinking to look beyond the label;</li> <li>• Introducing alternatives for labelling.</li> </ul>
<b>For whom?</b>	Teacher-trainers, teachers, support teachers
<b>Methods</b>	Use the questionnaires to start a discussion about the barriers in schools. The presentation can be used before or after the questionnaire
<b>Materials</b>	Presentation + exercise 'I am' The presentation contains: <ul style="list-style-type: none"> <li>• Information and references;</li> <li>• Cartoons with reflective questions aside;</li> <li>• Link to you tube footage about labelling;</li> <li>• Personal reflection and group discussion.</li> </ul>
<b>Author(s)</b>	Beno Schraepen (Incena, Study centre on Inclusion and Enablement, Plantijn University College, Antwerp)
<b>Approximate time needed to teach</b>	3 hours
<b>Background</b> 	The inclusion-paradigm reacts against labelling and stigmatizing in society because it's one of the main barriers for equality and full participation. A label is a product of a discourse. Based on Foucault's definition, is related to power structures and power relations. Read more in "Background and key concepts", page 21
<b>Where to find more information?</b>	Toolbox 1.10 DVD or online <a href="http://www.distinc.eu">www.distinc.eu</a>

### Description of the activity

The session starts with the 'I am ...' test: describe yourself in 20 sentences (10 minutes)

The results are discussed in the group (20 minutes)



Some people read their top 7. What are similarities between the answers? Some people read their top 7-14. What are similarities? What are differences with the top 7, or between people? Who has other descriptions?

What is not on the list or only on the list of certain individuals? Why?

Followed by the presentation including some discussion material.



## Toolbox 1.11 Beyond labelling: How hyperactive and behaviourally challenging children experience themselves

<b>Goals</b>	Reflection and discussion on labelling children and the way their best interests are insured.
<b>For whom?</b>	Teacher-trainers, teachers, support teachers, policy makers, ...
<b>Methods</b>	Interactive workshop
<b>Materials</b>	Documentary 'Herdruk' Powerpoint presentation: 'Give right to the 'labelled' child
<b>Author(s)</b>	Leen Ackaert and Nancy Vansielegem
<b>Approximate time needed to teach</b>	1.30 h
<b>Background</b> 	Based on the idea that disability is a social construct, and the powerful effects of stigmatisation, this approach wants to look at it from an insider-perspective, i.e. the children who experience a particular way of being. See Background texts and key concepts page 23.
<b>Where to find more information?</b>	<a href="http://www.kinderrechtencommissariaat.be/en/about-us">http://www.kinderrechtencommissariaat.be/en/about-us</a>
<b>Video material</b> 	"Her-druk", interviews with children who talk about their experience with being labelled deviant in behaviour (Dutch spoken with English subtitles).

### Description of the activity

ADHD, ADD, ASD, ... we're not astonished anymore when an active child is called a child with ADHD. Also the fact that one single child can have many different labels doesn't surprise us anymore.

In the past, we used to call ADHD – and/or ASS-children, 'very active' or 'timid' children. Now we call them children with disorders and give them various labels.

Together with the growth on labels, psychotropic medication used by youngsters also increases. In 2005 1.7 million daily doses of Ritalin were prescribed to children. In 2010 this figure tripled to 5.06 million.

Do those figures proof a change of our biological constitution? Or do they indicate a tendency to look in another way to children's behaviour. Are we evolving to a society where 'disruptive' behaviour is much more easily problematized, individualized and medicalized, instead of normalized?

Article 3 of the Convention of the Rights of the Child states: 'In all actions concerning children, whether undertaken by public of private social welfare institutions, courts of law, administrative authorities or legislative bodies, the best interests of the child shall be a primary consideration'.

In our search for the 'best interests of the 'labelled' child' the voice of the 'labelled' child is quite often still missing. In research on children with behavioural problems or ADHD, the perspective, experiences and visions of the 'labelled' children themselves remain too often absent.

In the interactive workshop 'the child behind the 'labelled' child' we focus on the experiences and visions of the labelled children themselves. Through individual and reflexive-philosophical conversations 'Herdruk' shows the experiences of 30 children with behavioural problems. In 'Herdruk' the children give witness about their behavioural disorder, their diagnosis and what is undertaken to help them. On the basis of the documentary 'Herdruk' we look at the perspective of labelled children and we reflect on the possibilities that can be undertaken to give more weight to their perspectives.

## Toolbox 1.12 Alternatives to grade retention [Samen tot aan de meet]

<b>Goals</b>	<ul style="list-style-type: none"> <li>• To make teachers aware that grade repetition has little or no effectiveness and to change the practice of grade repetition;</li> <li>• To give schools effective alternatives to grade repetition;</li> <li>• To diminish unqualified output;</li> <li>• To reinforce school teams: in their capacity for policy making;</li> <li>• To diminish educational delay and grade retention.</li> </ul>
<b>For whom?</b>	Teacher-trainers, teachers, support teachers
<b>Methods</b>	Step-by-step school based training of whole team
<b>Materials</b>	Two books, PowerPoint
<b>Author(s)</b>	Johan Huybrechts and Eva Franck
<b>Approximate time needed to teach</b>	4 days, in several workshops
<b>Background</b>	 <p>The Project Alternatives to grade retention [Samen tot aan de meet] started by the City of Antwerp education Policy Department. Education Research has shown that grade retention will lead neither to higher achievement, nor to higher motivation or well-being. Underachievers who repeated a grade or more, have a much higher risk on early school leaving than underachievers who never repeated a grade. The few positive outcomes of grade retention on pupils' achievement and self-esteem, seem to disappear quite quickly after one year and often revert to negative effects in the long run</p>
<b>Where to find more information?</b>	<p>Eurydice (2011) Grade retention during Compulsory Education in Europe: Regulations and Statistics. Brussels: Education, Audio-visual and Culture Executive Agency.</p> <p>Books at present only in Dutch:</p> <p>Juchtmans, G., Belfi, B., De Fraine, B., Goos, M., Knipprath, H., Vandenbroucke, A. en Verbeeck, B. (2011) Samen tot aan de meet. Alternatieven voor zittenblijven. Antwerpen/Apeldoorn: Garant).</p> <p>Juchtmans, G., Franck, E., De Roover, K., Vandenbroucke, A., Knipprath, H. en Huybrechts, J., (2012) Samen tot aan de meet. Alternatieven voor zittenblijven. Inspiratieboek. Antwerpen/Apeldoorn: Garant.</p>

### Description of the activity

From 2008 as General Education Policy the city of Antwerp chose to invest in a comprehensive project reduce educational delay by stimulating schools to broaden their view of education and the learning process. Schools try to enhance their students' learning, using specific methodologies to carry out "Alternatives to grade retention [Samen tot aan de meet]" with the entire school team. The first two phases are dedicated entirely to questioning the practice of grade repetition, by contrasting the convictions of teachers (always within the context of the school and together with the entire school team) with the research evidence. This approach also requires a core group of believers at the school to slowly try to alter the opinions of their colleagues. In the first phase this core group must register how decisions are made at school concerning grade repetition<sup>2</sup>. Also convictions towards grade repetition of the school team as a whole are gathered as a starting point for improvement. In the second phase the school works slowly on altering the school team's point of view on grade repetition. Experience has shown that this process needs to be undertaken cautiously and can take a while. It is only in the third phase that schools can start working on exploring and implementing new initiatives to stimulate the learning process of every pupil so they can cultivate their full potential. In the last phase schools must conduct an extensive evaluation. Do the chosen initiatives fulfil the premised objectives, taking into account the specific school context? Schools are asked which improvements can be made, and consequently which phase might need more attention.

All these actions were assembled into a useful framework: the house of 'Alternatives to grade retention [Samen tot aan de meet]' with four major building bricks (core elements or domains); initiatives concerning didactics (cooperative learning, peer tutoring,...); school climate (parents' involvement and engagement; a positive relation between pupil and teacher based on mutual trust and respect); evaluation (permanent and individual assessment in order to point out point of improvement for each student, followed by a personal plan of development) and school organization (looping of teachers, grade classes,...). 'Alternatives to grade retention [Samen tot aan de meet]' advocates the implementation of an integrated 'cocktail' of initiatives from the four different domains. All these different initiatives are far from new, but 'Alternatives to grade retention [Samen tot aan de meet]' encourages schools to search for their own specific cocktail, given their specific school context and based on their specific problem with reference to grade retention.

2 An OECD report already mentioned one of the mean reasons why some countries have more educational delay than others: the absence of external and objective criteria for whether or not a pupil must repeat a grade. In countries, such as Belgium, the Netherlands, Luxemburg, and others, there are no national criteria or tests. In these countries decisions are made based on teachers' instincts rather than on clear-cut and a priori fixed criteria.

### DOEL: Samen tot aan de meet

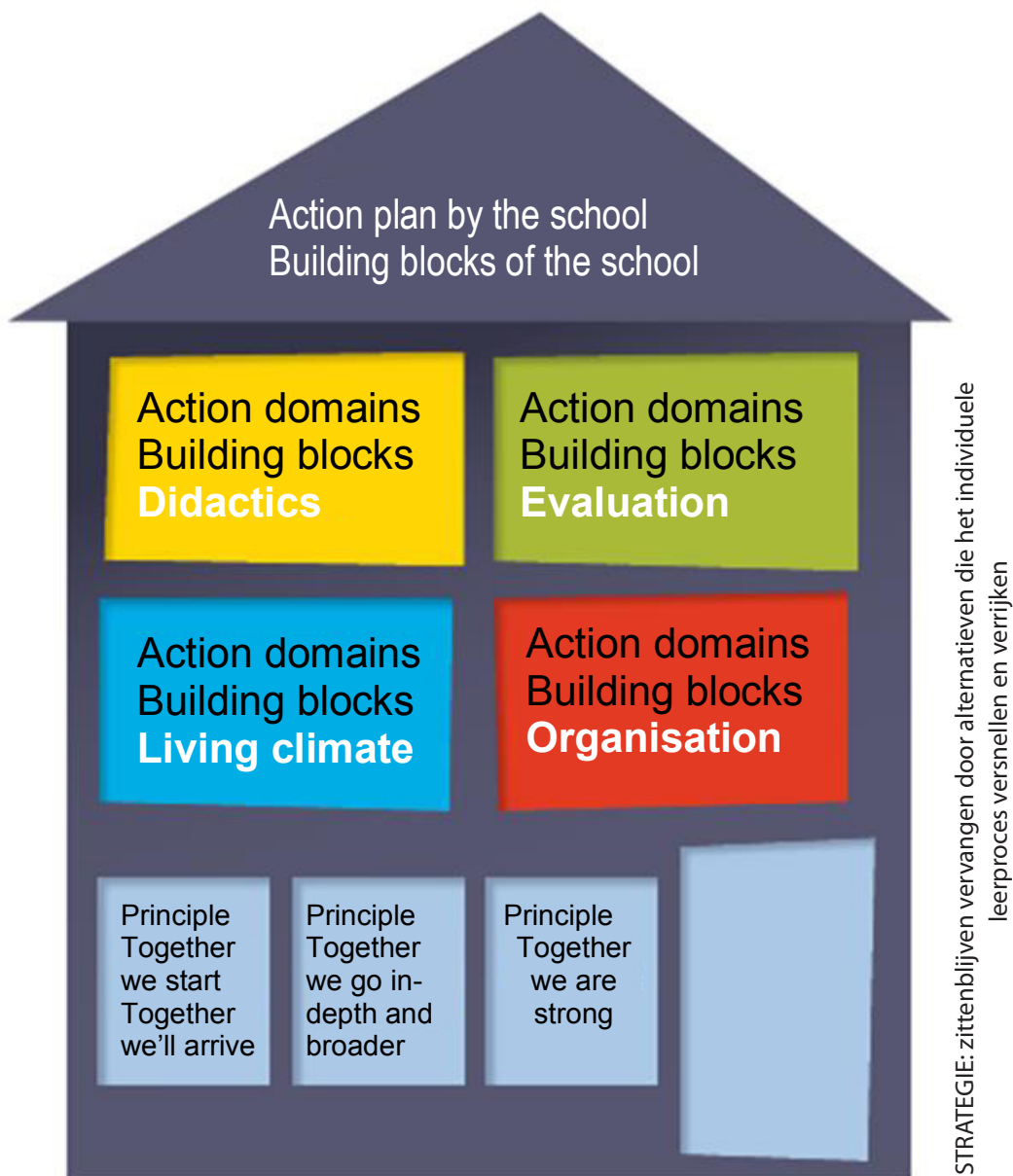


Figure 1 Principles of the project "Alternatives to grade retention [Samen tot aan de meet]"; to avoid grade retention

## ▶ Module 2 - Inclusive Classroom Practices

Edited by Jo Lebeer

Also with contributions from: Luísa Grácio, Isabel Fialho, Marília Cid, Adam Gogacz, Nursel Deniz, Susan Van Alsenoy, Luc Van den Steen, Adina Shamir, Ase Vermeire, Saar Callens, Dian Fluijt.

### Introduction

Whereas in Module 1 teachers have learnt to understand the principles of inclusive education, Module 2 aims to put the ideas into practice. Teachers are in an important position in what concerns to accept, valorise and use differences in pupils' learning in order to promote their learning and remove barriers to their participation. "Accepting" difference does not mean to "be resigned to" a present situation. To resign means to remain passive, whereas many situations are modifiable. With this in mind, this module aims to provide teachers with some guidelines and tools to conduct educational activities that promote learning in a framework of diversity.

In designing this module, we did not want not to succumb to a widely heard request to give a set of "recipes". Although e.g. there is a lesson on Japanese origami to illustrate the need to differentiate modalities of instruction, certainly the idea is not that now every teacher will do origami if she wants to be inclusive. Working with ready-made lessons is all too tempting for a hasty teacher looking out for lesson plans. Therefore this module contains some examples of lesson plans, but only as an example. It is much more important to learn the didactics and the "techniques" of dealing with different abilities, to become aware of a teacher's capacity to deal with that, to learn to be creative, both in personalising teaching style and in choosing materials, as well as in re-organizing the groups within a class as in the school and looking for additional resources. The key to inclusion is: be creative, be flexible.

Therefore the authors of this module are both classroom teachers with long standing experience in dealing with difference, as well as teacher trainers.

### Goals

The goals of Module 2 are:

- To feel more competent in dealing with a wide diversity of educational needs/abilities in an inclusive educational context;
- To be able to diversify lessons according to the varying needs of pupils;
- To implement inclusive classroom practices/ which allow pupils with different educational needs to learn and to actively participate in classrooms.

### Teacher competences we want to develop

Module 2 is constructed in order to develop the following teacher competences:

#### To know

1. To know principles of universal design in learning (UDL);
2. To know principles of cooperative learning and peer mediation;
3. To know Gardner's multiple intelligence theory;
4. To know principles of Feuerstein's Mediated Learning experience criteria in relation to inclusive education;
5. To know principles of adapting educational materials and teaching styles;
6. To know Bruner's learning principles in relation to inclusive education;
7. To know the difference among stimulation, mediation, compensation, remediation and dispensation.

#### To understand and to become aware

8. To consider all children as modifiable, having a potential to learn;
9. To see differences between children as a source of enrichment; to be open to the children's own solutions, ideas and experience;
10. Look at a pupil's strengths and talents. Look beyond diagnostic labels;
11. To strive for high standards for everyone, but according to each child's individuality;
12. To be aware of your own belief systems that you consider low performing children are lazy; incapable or dumb;
13. To realize that you don't have to do everything alone or behave as a teacher super(wo)man;
14. To understand that inclusive education is teamwork;
15. To become aware of the importance of the teacher's role as a good "mediator";

16. To understand that there might be biological, social or other reasons why a child does not learn or behave as expected;
17. To realize that inclusive practice does not mean that teachers have to devote all their time to the pupil who is not performing as others;
18. To understand that teaching a child with different needs is not “a matter for the SEN-teacher”, but that a regular teacher can do it if he/she knows how to differentiate;
19. To critically re-examine the notion of what is “fair. As something that does not mean that every student gets the same, but that every student gets what he or she needs;
20. To have insight in the three-tier model: Tier 1= for everyone; Tier 2 = for a selected group of at-risk children needing more attention; Tier 3= for children who need individual mediation and intervention;
21. To become oriented to learning processes, being able to identify cognitive processes beneath learning performances.

### To show in practice

1. Accept and valorise pupils' differences;
2. To transmit a feeling of belonging to every pupil, whatever their difference; to be welcoming; to be caring for all pupils;
3. Give encouraging individualised comments even if the answers are not totally correct.
4. To adopt an attitude of flexibility in dealing with standards in function of the individuality of the pupil. Being firm while at the same time flexible;
5. To ask for help to experts or other support;
6. To design activities as universal as possible, i.e. which allow pupils with varying needs to participate and contribute in his/her own way;
7. To be able to manage different learning styles;
8. To be able to create a learning environment where everybody is able to learn and develop basic functioning (cognitive functioning, self-regulatory skills, and socio-emotional skills), each with his/her individual specific needs;
9. To use your own source of creativity in solving challenges;
10. To plan and design different activities where everyone of the classroom will feel competent;
11. To be able to choose and vary the level of difficulty of a task in function of the pupil's individuality;
12. To adapt teaching materials and styles in function of the students' needs and individuality;
13. To implement different organisations of learning situations: individual, pairs, small and large groups, reorganise classic age-based grouping in the school if necessary;
14. To be able to design activities where pupils can learn and to work together within class and across classes;
15. To teach pupils how to help each other in practical things;
16. To teach pupils how to help each other in solving tasks without giving the solutions at once. To develop a cooperative mentality rather than a competitive mentality;
17. To teach pupils in giving positive comments to each other;
18. To acknowledge cooperation with parents;
19. To put into practice the knowledge about variability and preferences of ways of teaching children: which learning style is best for what kind of problem and promoting awareness of their own preferential styles;
20. To identify preferential “intelligences” (cf. Gardner's model and to develop all the different kinds of it intelligences);
21. To design activities which are tuned in to the different styles at different times; to be able to vary modalities of teaching using different channels: hearing, visual, touch, movement or music;
22. To give comments on the thinking process and not only on the objective results;
23. To be able to activate critical thinking skills of students;
24. To develop the pupil metacognitive self-skills, i.e. the ability to plan, execute and check a task;
25. To be able to teach in a dialogical way, asking questions about how children learn, how they solved a certain task, how they plan, execute and check their tasks;
26. To motivate the child to join the proposal or activity;
27. To be able to regulate a child's attention and behaviour before and during a task;
28. To foster dialogue between pupils and between teacher and pupils;
29. To be flexible in evaluation procedures, taking into account a pupil's individuality.

## Content of Module 2

### 1. Welcome strategies

Organise regularly welcome strategies to make all children feel welcome. Some examples are given in Toolbox 2.1.

### 2. Adapting to different abilities

Topics	Key ideas	Suggested activities
<b>Recognizing different pace and time for different children</b>	General introduction in inclusive classroom practice. Four essential questions: 1. What is the essential learning in this lesson? 2. How do the students learn best? 3. What needs modifying? 4. How will students demonstrate their learning?	<ul style="list-style-type: none"> <li>Show PowerPoint "Removing barriers to achievement" and discuss themes "ability/achievement Toolbox N°2.2.</li> <li>Reflective exercise: have you had any positive experience with a different child (a child learning differently) in your class; what did you do? What worked?</li> <li>How do you react to a child who does not perform as expected?</li> </ul>
<b>Recognizing mixed abilities, different learning styles and modalities</b>	Gardner's multiple intelligences. Creating empathy and awareness in peers. Bruner's teaching principles; Dealing with different learning styles. Children who are in a same class have mixed abilities. "If a child does not learn the way you teach him, teach him the way he learns".	<ul style="list-style-type: none"> <li>Lesson plan: We are all smart! (Toolbox N° 2.3)</li> <li>Lesson plan: making a Japanese Samurai Hat (Toolbox 2.4).</li> <li>Group discussion using PowerPoint on Learning styles and Gardner's multiple intelligences (Toolbox 2.6).</li> </ul>
<b>Adapting curriculum materials</b>	Learn to adapt materials according to Feuerstein's concept of "the cognitive map". Curriculum materials (sheets, books, any didactic material) can be analysed in terms of 7 parameters: content, modality, phase of mental act, mental operations, degree of abstraction, of complexity and of efficiency.	<ul style="list-style-type: none"> <li>Explain Feuerstein's cognitive map (Toolbox 2.7) using PowerPoint.</li> <li>Activities for teachers: Let the teachers pick a task that they want to give to the pupils the following week, particularly one for which they think "this and this one in my class will not be able to do this"; then adapt the task according to the cognitive map variables (Toolbox 2.7).</li> </ul>
<b>Learning to select teaching tools: when needed, use ICT – based teaching materials</b>	Allow the use of any learning tool necessary, such as tape recorders, spell checkers, misspells' dictionaries, laptops, voice-activated software, text readers and calculators. Teach keyboard and word-processing skills beginning in the primary school.	<ul style="list-style-type: none"> <li>Ask the teachers: do they know what kind of ICT materials, hardware or software, exist which can help difficult readers or other to overcome their difficulties?</li> <li>See General inclusive support measures (Toolbox 2.8).</li> <li>See also module 4 and 5.</li> </ul>

### 3. The teacher as a mediator of inclusion and of learning processes

Topics	Key ideas	Suggested activities
<b>Feuerstein's principles of mediated learning</b>	The key idea is that a teacher who teaches along the 12 mediated learning criteria will be more inclusive. The most important criteria are mediating "feeling of competence", "individuation", "sharing" and "belonging".	<ul style="list-style-type: none"> <li>• Toolbox N° 2.9 Mediated Learning Criteria: show and explain slides with cartoons.</li> <li>• Illustrate mediation with movie fragments from documentary movies, e.g. "Mind of a child", "Etre et avoir", "Includes DVD Austerdalen school (the scene in the beginning of the day) or a fiction movie such as "Dead Poets Society".</li> </ul>
<b>Peer tutoring and mediation</b>	Peers tutoring each other is more motivating and leaves space for the teacher to other things. Peer mediation is a step further, in so far as children help younger, children, or those who have particular difficulties, to acquire competences. For that they need to be trained. Teach child how to mediate to their peers.	<ul style="list-style-type: none"> <li>• Peer tutoring can be tried in pairs or little groups, children training each other in skills which already have been instructed</li> <li>• Peer mediation is a systematic training method to train children to mediate to younger peers or less advanced peers. Read Shamir's and Tzurial's paper <a href="#">Toolbox N°2.12</a>.</li> </ul>

### 4. Keep a balance between being firm and flexible

Topics	Key ideas	Suggested activities
<b>Bruner's four instruction principles</b>	Motivation – Structure – Sequence and Reinforcement: universal principles of instruction, which also hold when you teach in an inclusive setting to widely different children.	<ul style="list-style-type: none"> <li>• Show the presentation on instruction principles and look for examples where the principles match or don't match the everyday reality of a widely different class <a href="#">Toolbox 2.15</a></li> </ul>
<b>Adopting a clear lesson structure</b>	Making the lesson structure visible to all learners; it is easier to grasp the goals and to follow, when the structure of the lesson is visible.	<ul style="list-style-type: none"> <li>• Reflective exercise: what are phases of a well-structured lesson? How do you communicate this to the pupils?</li> <li>• Example of a structured lesson. <a href="#">Toolbox N°2.10</a></li> </ul>
<b>Differentiating goals and dealing with standards</b>	Find a balance between the pressure to reach the standards given for a certain stage, and the individual needs of different children, some of whom might not be able to reach the set age group standards in time.	<ul style="list-style-type: none"> <li>• Reflective exercise and discussion: do you make different tests according to the child's abilities and individualised goals? How do you comment on tasks with a lot of mistakes?</li> <li>• Refer to "mediation of feeling of competence" and "mediation of individuation" concepts <a href="#">Toolbox 2.9</a></li> </ul>
<b>Learning to differentiate evaluation, school achievement</b>	How can you creatively deal with keeping high expectations, while being flexible?	<ul style="list-style-type: none"> <li>• Do you give every child the same criteria of evaluation?</li> <li>• How do you measure progress?</li> <li>• Is time a criterion for measuring progress?</li> </ul>

## 5. When to choose for stimulation – compensation – remediation – dispensation?

Topics	Key ideas	Suggested activities
<b>“Sticordi”-measures STICORDI stands for Stimulation, Compensation, Remediation and Dispensation</b>	STICORDI measures are widely used in the Belgian (Flemish) educational system when pupils for one reason or another do not keep up the targets set for the group. Stimulation is when you want to improve a child’s specific skill or understanding because you believe it will be able to do it. Teachers aim to stimulate self-confidence in pupils, provide more time for exams and tests, offer the possibility of using helpful resources, try to evaluate pupils on what really matters, etc.	<ul style="list-style-type: none"> <li>• First define the different concepts (Toolbox 2.11 gives definitions and an example for maths lessons).</li> <li>• Then: look for practical examples in your own experience. When do you invest in remediation, compensation, differentiation, dispensation?</li> <li>• Can this system be used universally?</li> </ul>

## 6. Adapting the school and classroom organization

Topics	Key ideas	Suggested activities
<b>Modify the organization of space. Modify classroom “architecture”</b>	Modify the classroom seating arrangement to make it more inclusive and cooperative. Frontal teaching is not very conducive to inclusion	<ul style="list-style-type: none"> <li>• Reflective exercise. Show picture or a video sample of an inclusive classroom. For picture: see Toolbox N°2.2. For a video, see Austerdalen School, on Inludes video or the Janusz Korczakschool in Lodz (see source p.90). Why and how does this facilitate inclusion?</li> </ul>
<b>Modify the group division</b>	<ul style="list-style-type: none"> <li>• An ordinary class group is already heterogenic.</li> <li>• Work in different groups within the classroom; some children are more independent; others needs repeated and deeper instruction.</li> <li>• Reorganization of mixed age groups, even temporarily, can be helpful in optimising instruction and learning.</li> </ul>	<ul style="list-style-type: none"> <li>• Reflective exercise. In what way can you revize your classic way of working with one age group doing all the same and receiving the same menu?</li> </ul>

## 7. Organizing support

Topics	Key ideas	Suggested activities
<b>Learning to ask for support</b>	Not all problems can and need to be solved by extra support staff. The kind of support must be rightly chosen, adapted to the real needs. It does not always need to be an adult or a specialist. Children can support each other. First the teacher needs to reflect on what kind of support is really needed in this particular task or activity, why it is needed, who could give it, where (within class or outside), in what way	<ul style="list-style-type: none"> <li>• Activity: small group discussion 30'</li> <li>• What exactly do you need support for in the class or outside?</li> <li>• Why do you need this?</li> <li>• Is support needed, or is a different measure needed, e.g. modifying the task?</li> <li>• Who can give support? Can something be done by peers of the same class or of other classes? (See peer mediation and cooperative learning.)</li> <li>• Are there any people in the community that could give the requested support?</li> <li>• How do you think the support person must act? What must he/ she do? Why? Where?</li> <li>• Toolbox 2.14 Co-teaching</li> </ul>
<b>Cooperative learning</b>	Involving peers; working in partnerships. Children work in small groups on a common task, in which everyone takes a significant role, which can be different for every child, according to abilities, preferential learning styles, different intelligences or learning goals.	<ul style="list-style-type: none"> <li>• Can you think of an activity which can be done in group, and in which all children can participate, with different contributions, each on “their” level? See also: peer mediation Toolbox 2.12.</li> </ul>



## Background and Key Concepts

### What is intelligence and how we can improve it

Luísa Grácio, Elisa Chaleta, Isabel Fialho

Through the years several theories have emerged trying to explain what intelligence is, and to find out its diverse effects by conducting educational, psychological, medical psycho-educational and/or community-based interventions.

On the other hand, in the last 50 years several aspects of the human mind and its potential have been discovered. Here we will focus on only two of these discoveries as: 1. Intelligence can be enhanced and amplified (e.g. Masters and Houston, 1972; Harman, 1988; Machado, 1980; Feuerstein, 1980); 2. There are multiple intelligences (e.g. Gardner, 1983; 1987; 1999; 2002; 2004).

So, what is intelligence? According to Gardner (e.g., 2004), intelligence consists of multiple realities, implying that there are several forms of intelligence, and consequently, several ways of knowing and learning. From this point of view, intelligences are understood as tendencies or psychobiological potentials that may, or may not, fulfil themselves depending on cultural and environmental factors. This means intelligence isn't one-dimensional, static, fixed and only innate. On the contrary, intelligence is multiple and modifiable, with the possibility of development if properly stimulated.

What does each of these intelligences consist of and what implications do they bring for teaching, learning and inclusion? According to Gardner's (1999, 2002) multiple intelligences theory there are nine types of intelligences divided in four large groups: conventional, expressive, personal and new intelligences.

**The conventional intelligences** group clusters linguistic and logical-mathematical intelligences. The first is connected with the ability to learn and use spoken and written language and to the learning of different languages. The second is connected with the ability to analyse logical problems, develop mathematical operations and scientific thought.

**The expressive intelligences** group includes musical, bodily-kinaesthetic and spatial intelligences. Musical intelligence is about skills for the composition, execution and appreciation of musical patterns. Bodily-kinaesthetic intelligence is related to the skills to use the body with a goal, solve problems or produce something and spatial intelligence concerned with skills to recognize and manipulate spatial patterns.

**The personal intelligences** group includes intrapersonal and interpersonal types of intelligence (i.e., ability for self-understanding and self-regulation ability to understand the intentions motivations and desires of others).

Lastly, the group designed as "**new intelligences**" includes the naturalistic and existential forms of competences (i.e., abilities related to flora and fauna and interaction with the environment and nature and ability to place oneself in relation to the cosmos and the big existential questions, to experience great intensity feelings or states of consciousness, such as love or creativity).

According to Lazear (1991) each of these intelligences is connected to the five senses and, generally, a particular intelligence can be activated through sight, hearing, taste, touch, smell, speech and communication with others, intuition, metacognition or spiritual insight.

Each human being possesses these nine intelligences, though not all of them are developed at the same level. In most cases, one or two types of intelligence are more developed than the others. We all have the ability to develop all of the different kinds of intelligence, but in order to do so we have to activate them at certain points in time and use them regularly.

In the classroom there is a possibility to promote learning and inclusion of very different children through a teaching and learning process with the following characteristics:

1. Teaching aims to develop different types of intelligence in children. Each intelligence can be taught as a specific subject: music skills, language, art, calculus and mathematical reasoning, physical education, citizenship and several personal and social skills, etc.
2. Teaching is based on the diverse types of intelligence. Each type of intelligence can be used as a means to achieve knowledge in subjects that go beyond that type of intelligence. For example, we can use body movements to teach vocabulary and spatial concepts, music to teach mathematical concepts, plastic expression to teach about other cultures or history, etc.
3. Teaching focuses on the different types of intelligence. Teaching about multiple intelligences and how students can achieve, strengthen and use them in learning and in daily life (meta-intelligence).

By providing the opportunity of learning situations that appeal to different types of intelligence, teaching marked by these characteristics increases learning possibilities for children with different types and levels of intelligences. Why?

- (1) By appealing to the stronger type of intelligence in the child, it facilitates learning of more abstract or complex concepts or contents.
- (2) By appealing to the more developed types of intelligence, it increases the child's motivation, implication and accessibility to learning, promoting the possibility for the child to experience success and to learn.
- (3) The recurring appeal to the regular use of different forms of intelligence improves and develops each of the different types, increasing the diversity of internal resources available to answer problems and challenges inside and outside the classroom.

Understanding Gardner's multiple intelligence theory makes it easier to differentiate teaching to widely different children.

See toolbox-items 2.2,2.3, 2.4,2.5

## References

- Gardner, H. (1983) *Frames of mind: The theory of multiple intelligences*. New York: Harper and Row.
- Gardner, H. (1987) Developing the spectrum of human intelligences: Teaching in eighties, a need to change. *Harvard Educational Review*, 57, 87-93
- Gardner, H. (1999) *Intelligence Reframed, Multiple Intelligences for the 21st century*. New York: Basic Books.
- Gardner, H. (2002) M.I. millennium: Multiple intelligences for the new millennium. R. DiNozzi (Producer) Los Angeles: Into the Classroom Media.
- Gardner, H. (2004) *Changing minds: The art and science of changing our own and other people's minds*. Boston: Harvard Business School Press. Translated into French, Spanish, Japanese, Italian, Korean, Dutch, Portuguese, Greek, Polish, Russian, Turkish, Chinese, Danish; Awarded Strategy Business's Best Business Books of the Year (2004).
- Harman, W. (1988) *The global mind change*. Indianapolis: Knowledge Systems.
- Lazear, D. (1991) *Seven Ways of teaching: The Artistry of Teaching with Multiple Intelligences*. USA: SkyLight Training and Publishing Inc.
- Masters, R. and Houston, J. (1972) *Mind games*. New York: Delacorte Press.
- Machado, L. (1980) *The right to be intelligent*. New York: Pergamon Press.
- Feuerstein, R. (1980) *Instrumental enrichment*. Baltimore, MD: University Park Press.

## Good teaching by removing barriers to learning: Bruner's contributions

Isabel Fialho, Marília Cid and Luísa Grácio

Bruner's theoretical framework is based on the idea that learners construct new ideas or concepts based upon existing knowledge and that they are active learners. He introduced the ideas of readiness for learning and spiral curriculum and believed that any subject can be taught at any stage of development in a way that fit the child's cognitive abilities (Bruner, 1977). He also advocates the use of discovery learning based on problem solving and exploration of alternatives. Teachers should then provide problematic situations to students and encourage them to understand (1) the general contents structure (basic ideas, information and essential relationships, contents as a whole); and (2) learning through inductive method (from specific examples given by the teacher to the discovery of general questions by the students).

For this to happen, the exploration of alternatives has to involve three phases:

1. Activation – experience some degree of uncertainty to start the exploration of alternatives. Teachers should then provide problems with adequate difficulty degree (e.g., so that intrinsic motivation for the child's curiosity can occur).
2. Maintenance – maintenance of the exploration. It involves ensuring that the experience is safe for the child (guided by the teacher).
3. Direction – knowing the goal and that the exploration of alternatives is important to achieve the objective. It is also important to inform children about how far they are from achieving it.

With this in mind, teachers can use *discovery learning*:

1. using specific examples from which students discover general laws or generalizations (inductive learning);
2. taking students to think about possible answers and explain to them what they are thinking (hypothesis);
3. encouraging and asking questions that lead to insight, e.g., the discovery of some basic principles.

The main advantages Bruner sees on discovery learning are:

1. discovery of facts and relationships based on children experiences;
2. improved retention and use of information;
3. increased conceptualization;
4. long-lasting effects;
5. stronger feelings of self-esteem;
6. development of creative thinking;
7. Well-developed mind.

However, Bruner accepts and proposes an optimal level of uncertainty and he does not believe that students have to discover for themselves all the solutions to all problems.

Bruner’s theory of instruction sets out four key principles that enable better teaching: motivation, structure, sequence and reinforcement (Bruner *et al*, 1966, Bruner, 1971).

1. Motivation – refers to conditions that predispose for learning. Bruner believes that children are naturally curious, have an intrinsic motivation and a willingness to learn. However, he does not exclude the external reward or reinforcement that he believes to be important for initiating certain actions or ensuring that they are repeated, although considering their transitory effects. School can contribute to increased intrinsic motivation (e.g., curiosity directed to activity; construction of disciplined curiosity, for instance through games in the form of questions), but also to build a sense of competence (interest on what each one is “good”), helping children to build any degree of competence to feel that they have capabilities to accomplish the task. Reciprocity is also a motivation generated by the need to work cooperatively with others. For Bruner, intrinsic motivation is rewarding in itself and consequently self-sufficient: the teacher should explore this fact, facilitating and regulating motivation. Since learning and problem solving require exploration of alternatives, this action is fundamental in creating a predisposition, a motivation for long-term learning. The exploration of alternatives involves activation, maintenance and management.
2. Structure – the second principle of Bruner’s theory requires that any subject or theme can be organised in an optimal way in order to be understood by virtually any student. The structure of any matter to be taught is characterised by three elements: 1) mode of presentation (way in which information is communicated), 2) economy of presentation, and 3) power of presentation.

	1. enactive representation (actions)
Mode of presentation <sup>3</sup>	2. iconic representation (images, diagrams)
	3. symbolic representation (language, spelling, numbers)

Economy of presentation depends on the amount of information that students need to retain for further learning. The less information the student has to retain, the greater the economy. To provide concise summaries and syntheses are ways of economy of presentation. Power of presentation – to be powerful, the presentation of some aspect of the world must reflect its simplicity.

3. Sequence – this principle states that any subject can be organized so as to be transmitted and understood by any student. Thus, the degree of difficulty felt by the student depends in part on the sequence in which the content is presented. Bruner believes that cognitive development occurs according to a fixed sequence, from the enactive, through iconic, to symbolic representation and advocates this same sequence for teaching any subject. The teacher should then introduce any new subject with actions on physical objects. Secondly, the students should be encouraged to explore by using pictorial representations. Finally, the teacher should communicate messages symbolically through words, numbers and other symbols.
4. Reinforcement – according to this principle, learning requires reinforcement. To achieve mastery of the knowledge students need to receive feedback about what they are doing. The time at which students receive the reinforcement is crucial: the results must be known at the exact moment when student evaluates his performance. The reinforcement must be given in a way that is understandable to the student.

In conclusion, Bruner values the *process* of learning over the *product* of learning, arguing that the process of learning has a much longer life span than the accumulation of knowledge.

Teachers, who understand Bruner’s teaching principles, find it easy to put them into practice. It gives them tools to differentiate methods and materials according to different children’s needs.

(See also the PowerPoint presentation on the DVD in Toolbox 2.14)

3 The choice of the mode of presentation depends on the age of the children, their previous experiences and the subject matter.

## References

- Bruner, J., Oliver, R.R. and P.M. Greenfield (Eds.). (1966) *Studies in cognitive growth*. New York: John Wiley and Sons.
- Bruner, J. (1971) *Toward a theory of instruction*. Cambridge, Mass: Harvard University Press.
- Bruner, J. (1977) *The process of education*. Cambridge, Mass: Harvard University Press.

## Differences in learning, learning styles and teaching

Luísa Grácio, Marília Cid

Cognitive styles and learning styles are both variables that explain the differences between the students and their learning.

Cognitive styles are defined in different ways for different authors. According to Witkin, Moore, Goodenough and Cox (1977) cognitive styles consist of subtle, rather stable forms of how the individual perceives, thinks, solve problems, learns and relates to others. For Messick (1982), however, they rely on consistent individual differences in the forms of organizing and processing information and experience.

To sum up, cognitive styles are differential individual patterns of reacting to stimulation received, processing information (i.e., understand and organize) and cognitively facing reality. They are, therefore, related to the structure of thinking, referring to qualities or modes of knowing, but do not reflect higher or lower intelligence levels.

Some cognitive styles constitute themselves as learning standards. Indeed, learning styles or learning orientations are preferred ways of studying and learning whose consistent use can lead to permanent or stable states. The so-called learning styles are then not real styles, but preferences. The learning style preferences are individual and affect, for instance, where, when, with whom, with what and how we prefer to learn.

Learning styles are not related to *what* the student learns, but with the educational conditions in which it is more likely to learn. There are many different learning styles and we are all capable of learning in almost all styles, regardless of our preferences.

There are three major schools of thought regarding learning styles. One connected to the mode of perception considers learning styles as different preferred modes of receiving information: visual, auditory, read-write and kinaesthetic (e.g., touch, hearing, smell, taste, and sight) (Fleming and Baume, 2006 – VARK). Another one relates to models of personality. In this case, it has to do with the way we interact with our environment. Each of us has a preferred form, consistent and distinct, of perceiving, organizing and retaining information. This is due to the way we were brought up (environment and education) and genes (DNA or nature). The most familiar example of the latter way of understanding different styles of learning is the Gardner's theory of multiple intelligences.

The third line of thought is linked to the information processing and characterizes learning styles as different ways of processing information, i.e., doing, thinking, feeling and seeing (e.g., Kolb, 1984, 2001). This is one of the theories about learning styles with implications for teaching as it depicts learning as a process in which knowledge is created through the transformation of experience. To this author, learning is a cyclic process consisting of four phases. The first is a concrete experience. The second phase is observation and reflection on the experience. The third relates to the development of abstract concepts. The fourth and final phase refers to an active experience of these concepts. At the end of these four stages of learning the cycle is repeated.

Thus students would differentiate in: (1) the preferred form of receiving information (more concretely, or more abstract) and (2) the way of internalizing information (active experimentation or reflective observation). This has implications for how teachers can teach and the teaching sequence to follow.

When analysing an individual, learning style often arises as a key component of being able or unable to learn. Thus, those who are responsible for helping others to learn, such as teachers, should identify these styles and adjust to them.

How can we use learning styles? According to Merrill (2000), teachers can: (1) start defining the teaching strategies based on the type of content being taught or the goals of instruction (interactions content/strategy); (2) use the styles and preferences of the student to adjust or refine the learning strategies. However, it is important to be aware that the interactions content/strategy takes precedence over interactions learning style/strategy.

Taking into account learning styles is important for several reasons. Most students are unaware of their learning styles, and if left to their own devices it is unlikely that they will start to learn new ways of learning. Knowledge of learning styles can be used to increase self-awareness of students about their strengths and weaknesses as learners. So, learning styles can also be useful in helping students

to master the learning goal (be aware and take control of their own learning). That is an advantage claimed for metacognition (being aware of their own thinking and learning processes). Encouraging students to become knowledgeable about their own learning and the learning of others makes them gain a lot about learning awareness and enables self-regulation.

Reflecting on learning styles can sometimes hinder learning instead of helping. When a student chooses and uses his preferred learning style he should ask himself, "Is this really the best learning style for me to use or another one would result better?" Choosing the best method of learning is part of the process of becoming aware and taking control of one's own learning.

Using learning styles as a tool to help students learning to learn, rather than a tool for stereotyping them in a particular style, can help them to achieve one or more styles to find appropriate strategies to particular and diverse learning.

(Toolbox: PowerPoint presentation toolbox N° 2.6b)

## References

- Kolb, D.A. (1984) *Experiential Learning: Experience as a Source of Learning and Development*. Englewood Cliffs, NJ: Prentice Hall.
- Kolb, D. A., Boyatzis, R. E., and Mainemelis, C. (2001) Experiential Learning Theory. Previous research and new directions, in R. J. Sternberg and L. Zhang (eds.) *Perspectives on thinking, learning, and cognitive style: The educational psychology series* (pp. 227–247) Mahwah, NJ: Erlbaum.
- Messick, S. (1982) Developing abilities and Knowledge: Style in the interplay of structure and process. *Educational Analysis*, 4 (2), pp. 105-121.
- Witkin, H. A., Moore, C. A., Goodenough, D. R., and Cox, P. W. (1977) Field dependent and field independent cognitive styles and their educational implications. *Review of Educational Research*, 47, 1–64.
- Fleming, N., Baume, D. (2006) Learning Styles Again: VARKing up the right tree!, *Educational Developments*, SEDA Ltd, Issue 7.4, pp4-7.
- Merrill, D. (2000) Instructional Strategies and Learning Styles: Which takes precedence? In R. Reiser and J. Dempsey (Eds.) *Trends and Issues in Instructional Technology*, Prentice Hall.

## Feuerstein's mediated learning theory and its implication for inclusive education

Jo Lebeer

The work of Reuven Feuerstein on Mediated Learning Experience and cognitive modifiability is relevant for dealing with a variety of children in an inclusive way. To summarize it briefly: if a teacher knows and understands how to mediate, understands and believes he has a role in structuring a child's mind, he/she will automatically become more inclusive.

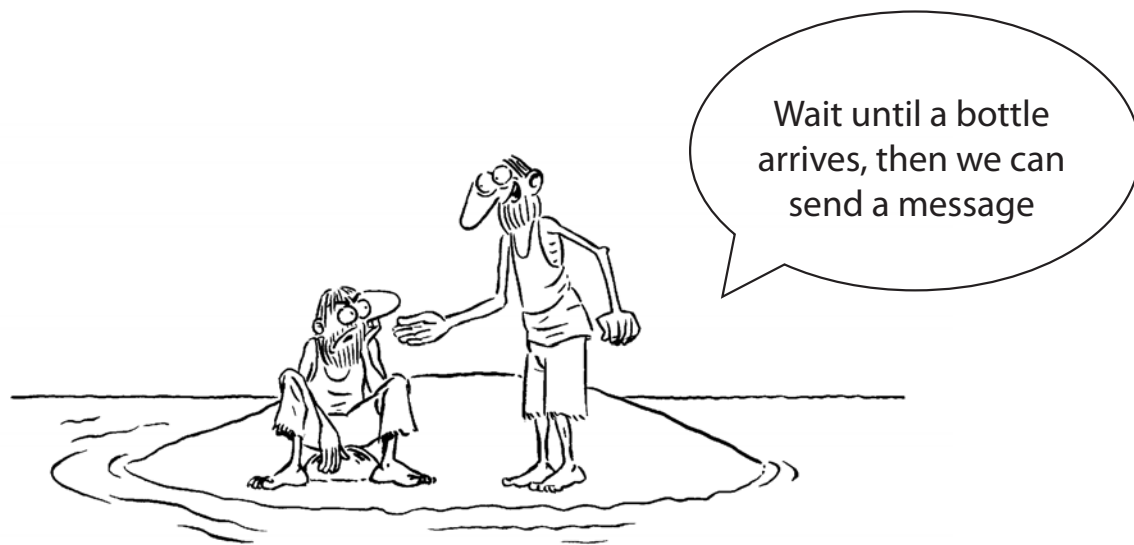
Feuerstein is a Romanian-born Israeli psychologist who developed his theory of Structural Cognitive Modifiability (SCM) and Mediated Learning Experience (MLE) and their practical applications (Instrumental Enrichment Programme, Learning Propensity Assessment and Shaping Modifying Environments). The theory is based on his work with children and adults who had learning and other cognitive difficulties because of deprived social circumstances or brain or genetic conditions. Basically the theory states that a child's cognitive performance can be significantly modified through mediated learning intervention aimed at creating new cognitive structures. Together with Vygotsky, Bruner and Bronfenbrenner, Feuerstein's theory can be regarded as fitting in the ecological and cultural constructivist model of intelligence which stresses the social and cultural origin of cognitive development. Though having in common many basic concepts with the cognitive structuralist theories of Piaget (Kozulin, 1998, Feuerstein *et al.*, 1980), he thought that just experience and maturation were not enough, and that specific human interaction is essential. He called this "mediated learning experience". MLE is the main cause of adequate cognitive development leading to higher order cognitive skills, such as: systematic exploration, precise perception, the acquisition of a vocabulary to precisely label objects, their position and characteristics, the integration of information, the definition of a problem, spontaneous comparison, making hypothesis and making plans, checking whether it is right or wrong, etc. Mediated Learning Experience is the basis of structural cognitive modifiability, i.e., the capacity of every child to become modified by the stimuli, to enlarge its thinking capacity.

Take the example of mediating optimistic alternative, one of the MLE criteria. A parent or teacher who mediates optimism not only transmits a positive emotional state, but also stimulates the child to look for additional information, to hypothesise solutions, to look systematically for cues which justify a possibly positive solution, etc. (Figure 2)

Simple instruction does not necessarily lead to better thinking. Not every instruction is a mediated instruction. A mediating intervention as a specific human intervention which is different from merely stimulating a child. In a mediating intervention, the mediator – a parent, caregiver, teacher, therapist, older child, anyone with a specific intention – interposes himself/herself between the world of

stimuli and the child in order that the child will assimilate the stimuli into internalized cognitive structures, so as to become modified by them. To that purpose, the mediator adapts stimuli by selecting, filtering, magnifying, or reducing, naming, relating them to other stimuli, etc. in order to make the stimulus more accessible, more understood, more digestible, incorporated and elaborated. Stimuli are the normal stimuli of a child's world: objects, events, actions, smiles, anything. The difference from "normal" pedagogical interactions is that an MLE interaction responds to twelve criteria. An interaction becomes a mediating interaction when there is at least an explicit intentionality on the part of the mediator, with the child reciprocating that intention, an attempt to "transcend" the here-and-now, relate to other situations, to add a meaning to the stimulus, to regulate behaviour, to boost feelings of competence. The criteria are briefly explained below.

A child's cognitive modifiability depends on the MLE acquired by the child in interaction with mediating caregivers. Children who have received an insufficient amount or type of MLE demonstrate a reduced cognitive modifiability. This leads to learning difficulties, behaviour difficulties, difficulties in communication, in socio-emotional development. The condition, however, can be changed through intervention loaded with mediation.



*Figure 2: Mediation of optimistic alternative, as defined by Reuven Feuerstein, has an emotional as well as cognitive aspect: choose for a positive outcome, even if you don't know that it will be positive, will create a positive learning disposition; the cognitive aspect is the mediation of systematic search for cues and evidence, as well as hypothetical thinking and planning. Children who are mediated optimistic alternative will develop better thinking skills. © drawing Peter Sackx. Reproduced with permission from Lebeer, 2003*

Feuerstein *et al.* (1980) developed a specially designed cognitive enrichment programme called "Instrumental Enrichment" (FIE). The FIE programme includes 14 units of paper and pencil tasks aimed at cognitive areas such as organization, analytic perception, comparison, classification, orientation in space and time, etc. The FIE programme is attuned predominantly to the needs of nine year-old children or older, even adolescents and adults. There is also a FIE-basic programme, aimed at younger children (aged 5-7) and older children with serious cognitive deficiencies (Feuerstein and Feuerstein, 2003). The programme covers four major cognitive areas: perceptual-motor development (oriented toward visuo-motor coordination, attention and planning behaviour); decoding emotional expression and understanding their social/behavioural correlates; abstract/integrative thinking and understanding functional relationships. The application of the programme requires a thorough training and supervised practice. The programme has been researched extensively. One of the findings is its potential to change teachers' attitudes and practices to make a mind-shift towards becoming more process-oriented, more inclusive and more differentiating, i.e. that the teacher is making children aware of how they think, how to arrive at a certain answer, how to find information, how to know it is right. Mediating teachers give more positive individual comments to children and in this way they also become less exclusive (Tebar, 2003). The FIE programme is a systematic set of tools which, when implemented seriously, may help raise cognitive level and improving school learning. In itself, such a programme (or similar cognitive education programmes) does not improve inclusive education, because that depends on other factor. However, it can contribute to improve inclusion in various ways: by increasing the teacher's teaching capacity for dealing with diversity, and by increasing the child's capacity



for learning, by improving the children's mutual understanding and cooperation. The most important driving force in it is the quality of mediation.

Mediation has to do with teaching style. For the implementation of inclusive education classroom practices therefore, learning how to mediate is crucial. Teachers have to become more a mediator than a "spoon feeder". First of all they need to take for granted that all children are modifiable. The importance of the concept of modifiability has already been explained in the background section in Module 1 on page 20. Below we will mention in what way teachers can help improving the inclusive education classroom.

1. *Mediation of intentionality and reciprocity*: this means that the teacher, rather than just giving the instruction (e.g. "take your book on page 16 and start doing the maths exercise from 1-6"), explicitates his/her intentions, why he<sup>4</sup> wants the children to do this particular task; then selects and possibly modifies the stimuli in order to ensure that they will be picked up by the pupil, in order to make sure that all children are engaged in the activity. Here the teacher's creativity is needed to motivate the children, to use whatever means to make it fascinating.
2. *Mediation of transcendence*: this means that you go beyond (transcend) the here-and-now. What we are doing now is connected to the past, to other things and could serve in the future. Thinking has to do with creating relationships, generalization, abstraction, insight, rules, etc. All this is the result of mediation of transcendence: widen a child's perspective, tell stories, point at relevance, compare, conclude, etc.
3. *Mediation of meaning*: this gives the "juicy taste" to learning, adding an extra affective, social, cultural meaning to a stimulus. A bunch of flower has no meaning in itself; its meaning is mediated by cultural transmission. You have to communicate why you value it.
4. *Mediation of feelings of competence*: this is perhaps the most important mediation criterion in inclusive education. To gain a positive self-image a child must receive subjective comments of appreciation as well as objective positive feedback as to how and why results have been obtained or how to improve. Even a wrong answer is partly right. Celebrate mistakes as opportunities for learning, in this way avoiding frustration. Teachers mediate feelings of competence to every child, also the slower learners, or different learners. They adapt their mediation according to every child's individuality; they rather compare a child with himself than with others. They always praise a child for the right part of thinking they did, or even for making the effort to participate.
5. *Mediation of regulation and control of behaviour*: our neurobiological state is to react impulsively and with reflex action, until our culture (parents, teachers) mediates us to wait, look and think before acting.
6. *Mediation of sharing*: if only parents and teachers would dialogue more with their children, thus giving words to thoughts, experiences, feelings, insights, it would raise collective intelligence.
7. *Mediation of individuation and psychological differentiation*: you will never teach an elephant how to fly into a tree, so why give everyone the same menu in a classroom? It means that teachers give the message that it is O.K. to be different, to have different speeds of learning, different styles, preferences, abilities, different goals and ways to achieve these goals; not everyone needs to know the same things at the same time.
8. *Mediation of goal seeking*: encourage dreams, create needs, achievements, but mediate how to get there, i.e., how define goals and to plan the steps to achieve them.
9. *Mediation of challenge*: create openness towards the new and unexpected, make learning fascinating, point and advantages of learning something difficult, but reassure.
10. *Mediation of optimistic alternative*: even in the worst outlook, when you don't know what's going to come next, point at a possible positive outcome. Mediating optimism creates inquisitiveness for relevant cues. Pessimists stop looking or investing effort.
11. *Mediation of awareness of change*: you have to tell a child that it is able to change its present way of functioning, and afterwards tell him how much he has changed. Give the same message through stories. People who perceive themselves as modifiable, will continue investing.
12. *Mediation of belonging*: give every child the message that it really belongs to this class, unconditionally, and it has nothing to do with the child's performance. Every child needs to feel welcome, however different it is. Mediate that people belong to different groups (family, friends, culture, etc.), each having their rules and belonging entails rights as well as responsibilities. So every child must have a positive contribution to class or school life. It is the mediation of belonging that creates in the child a feeling of identity and self-confidence in relation to the others.

Mediating teaching is compatible with Bruner's learning principles and the learning styles theory. A mediating teacher is more welcoming, more positive, more oriented to discovery learning, flexibility, allowing learning to be fun. In this way mediation is a way to become more inclusive.

See also: Toolbox N°2.9

4 We will further use the masculine grammatical form, for reasons of simplicity. It would be fairer to use she/he and her/his everytime. But it damages easiness of reading

## References

- Feuerstein, R., Rand, Y., Hoffman, M. and Miller, R. (1980) *Instrumental Enrichment*. Baltimore (MD): University Park Press
- Feuerstein, R., Klein, P. S., and Tannenbaum, A. (1991) *Mediated Learning Experience (MLE): Theoretical, psychological and learning implications*. London: Freund Publishing House.
- Feuerstein, R., Feuerstein, R.S., Falik, L., Rand, Y. (2003) *The Feuerstein Instrumental Enrichment Programme. Creating and enhancing cognitive modifiability*. Jerusalem: ICELP.
- Kozulin, A. (1998) *Psychological tools*. Cambridge, MA: Harvard University Press.
- Lebeer, J. (2003) The art of cognitive bricklaying: Feuerstein's Structural Cognitive Modifiability and Mediated Learning Experience, in J. Lebeer (ed.) (2003) *Project INSIDE. How to activate cognitive development of children with or at risk of developmental or learning problems inside the educational system?* Southsea (UK): Down Syndrome Educational Trust Ltd.
- Tebar Belmonte, L. (2003) *El perfil del profesor mediador*. Madrid: Santanilla.

## Differentiating according Feuerstein's concept of the cognitive map

Jo Lebeer

Feuerstein's concept of "the cognitive map" is an application of his theory of Structural Cognitive Modifiability and Mediated Learning Experience<sup>5</sup>. The "cognitive map" is different from the notion of brain mapping in neuropsychology or Tony Buzan's mind maps. In Feuerstein's terms the cognitive map is a tool to analyse and vary stimuli, i.e. educational materials. As depicted in the "mediation triangle" the mediator (teacher,...) influences the child to become more receptive and influence the stimuli to become more digestible and understood. This process of adapting the stimuli can be analysed according to seven parameters.

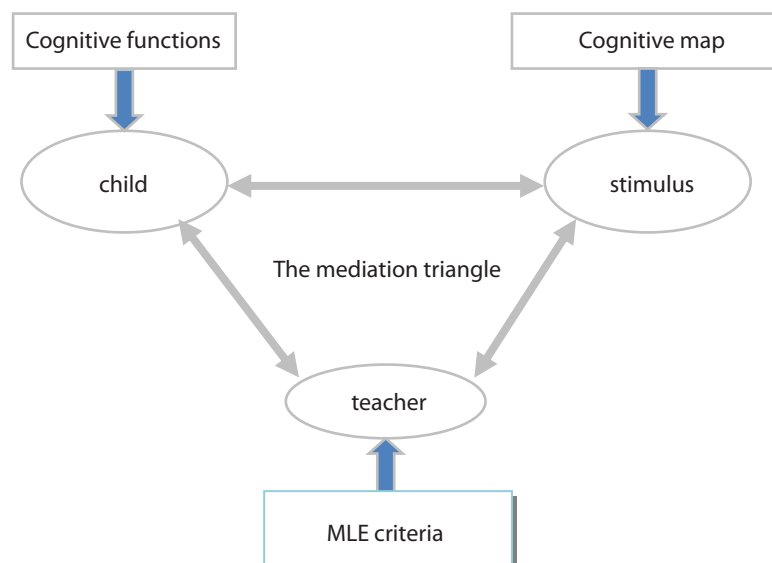


Figure 3 Feuerstein's mediation triangle. Child, mediator (teacher or parent or other child) and stimulus (anything a teacher brings, e.g. a concept, a working page, a book, a subject) constantly mutually influence each other. The teacher can change the stimulus in order that the child will be able to grasp it better. The variation of stimuli can be described according to the "cognitive map parameters"

1. **Content:** It refers to what you teach to the child and how to do it. Make the content appealing to the child's interest or level of development. A teacher might say "there is nothing very appealing in teaching for example additions < 10 or the concept of fractions or multiplication tables". But with a little creativity, it is very well possible. By offering a more appealing content, the child may be able to participate nevertheless. For instance teaching multiplication tables with packets of sweets, teaching fractions with pizza's, teach geometry with a drawing of a football field, teaching the "water cycle" by letting the child experiment (see also "discovery learning" by Bruner).

5 see module 1, background information on modifiability, page 40 and this module 2, previous paragraph



2. **Modality:** It has to do with the language of presentation, how you present what you want to teach. The modality should tune in to the child's particular individual preferences ("intelligence-type" or learning style) and characteristics. Obviously a blind child will be excluded when he has to indicate rivers on a map. A child with serious reading difficulties might feel excluded when the *only* modality is reading out loud a text. There is a variety of modalities needed, including pictures, drawings, spoken words, reading silently. Most children (and adults as well) react well to a variety of modalities: acting, music, doing. Music and theatre are universal languages. Multiplication tables are more easily memorised when singing. Number series and the operation of addition and subtraction might be better memorised when you allow children to move rhythmically (addition: number of steps forward). On the other hand, avoid using too many modalities with children who are easily distracted. For example, children with autism perform better in a single modality: they are good when they have to make the same type of sums listed one after the other; they might get confused when there are too many distractors, which could lead to an interpretation problem. Do not automatically think that drawing will make it easier: drawing can be highly complex. For children with a representational problem this might even be very hard. Many children, however, benefit enormously from pictorial support with oral or written instructions. Hence a teacher may vary his/her modalities of teaching. The *principal modalities are*: verbal (written or oral), pictorial (using pictures or drawings in which you can easily recognize the real object), photographic, numerical, musical, kinaesthetic, theatrical, tactile, tables and diagrams.
3. **Phase:** the mental act is a three-phase mental activity of thinking, which requires *input* (e.g. collecting information in a precise and orderly way, search systematically), *elaboration* (e.g. selecting the relevant information, comparing, making a hypothesis, planning a solution, etc.) and *output* (presenting and expressing the answer). It is important to reflect on which phases of the mental act the material you are presenting, appeals to most. Some materials require a lot of effort to gather all the information needed. Others require more effort to express the answer, e.g. when children have to draw answers. Some children who have difficulties in hand-eye coordination may lose too much time in trying to express the answer they elaborated well; they need a simplified "output".
4. **Mental operations** are internalised actions, so that they become mental actions on a stimulus, a task, and some kind of information. Examples of mental operations which are needed everywhere in school life are: identification, comparison, categorization, analysis and synthesis, seriation and sequencing, encoding and decoding, inferential – (if...then), analogical, deductive and inductive thinking; mathematical operations. Why is it important for a teacher to know this? To identify possible difficulties (barriers) a child may have to master certain concepts or skills. For example, to understand the concept of "number" or "quantity", a child needs to understand what is a category (i.e. to group different objects according to a common characteristic) and that any number is the name of a category. Many school tasks require analysis and synthesis (e.g. answering questions; understanding the grammar of a sentence; understanding numbers). If a teacher notices that some children have difficulties with analysis, it might be good to invest teaching analytical thinking in general across different subject matters.
5. **Complexity:** of a task is directly related to the number of elements that have to be taken into account and their relations between them. Tasks may vary from simple to complex. Complex is not the same as difficult. The degree of difficulty depends on familiarity, practice and exercise. As long as one is not an expert, everything is difficult in the beginning. A simple formula such as  $E = mc^2$  is difficult to understand because it requires the understanding of concepts such as energy, mass and speed of light. Learning to ride a bicycle is very complex; it is difficult in the beginning, but easy once it is automatized. Many times, it is sufficient to lower the level of complexity of a task, to allow some children to participate successfully. That means to reduce the number of items on a page, the number of superfluous or irrelevant data, the number of things to process simultaneously. E.g. when a page of maths has a mix of all kinds of exercises, it might be better for some children, who do not yet completely master these, to reduce the number of exercises, and make all the exercises similar; hence build in a series of in-between steps.
6. **Degree of abstraction** of a task is defined by the distance to reality. The opposite of abstract is concrete. A task may vary from very concrete to highly abstract. In most tasks in primary school, the initial teaching starts from the concrete experience to increasingly abstract levels. Many children need a lot more time to manipulate concrete objects in order to acquire insight in a concept. A concept is an abstraction in itself, so the goal is always to arrive at a higher mastery of abstraction. Nevertheless, many children may benefit from making a task less abstract. Varying the degree of abstraction of the same task in a class allows working with different children with high abstraction or low abstraction skills. For example, the concept of fraction can be taught using pizza's, cakes, dividing a group of sweets, while others will work already on abstract mathematical operations. Even using money to teach mathematical operations does not necessarily make it less abstract because insight into the number system is still needed.
7. **Efficiency** means speed of task solving with the least of effort involved. The efficiency of a task is determined by the learner's characteristics and mastery. Many pupils will perhaps already grasp a certain operation (e.g. how to subtract), but work very slowly because they are inefficient. Children who continue to count on their fingers have a delay in abstract thinking and are

inefficient. In that case it is e.g. more beneficial to do a lot of similar exercises using images or other representations, until the child really masters. Tasks may vary in themselves in degree of efficiency. Some tasks require too much irrelevant aspects to be done. For a child with coordination problems, this is a disaster. Eliminate all superfluous things requiring motor acts in that case. Or many learners will be much more efficient when they are allowed to use “memory aids”, such as: spelling rules charts, letter charts, number sequence charts. Some students (with difficulties in executive functioning or attention) may lose time in getting prepared in time, in finding their things, finding the right place, material, example, etc., while the rest of the class is already on its way. These students may be helped by encouraging cooperation from other students in these practical things.

See also: Toolbox N°2.7: a summary text can be found on page 68. A text with exercises for teachers and a PowerPoint can be found on the DVD.

## References

Feuerstein, R., Feuerstein, R.S., Falik, L. and Rand, Y. (2006) *The Feuerstein Instrumental Enrichment Programme, Creating and enhancing cognitive modifiability*. Jerusalem: ICELP Publications ISBN 965-7387-00-0.

## Cooperative learning

Ase Vermeire and Saar Callens

In a collaborative organization of activities the pupils work in small heterogeneous groups in the classroom. The goal is shared between them which means that all students try to achieve a common goal and that they help and motivate each other. This type of organization has a dual purpose: it aims to promote and facilitate students' learning and at same time they learn to work in teams.

### What is cooperative learning?

A successful teaching strategy, where students learn from and together with each other. Each student is responsible for a part of a task and all students work towards a shared goal. Interaction between students is an important part of cooperative learning (Förre et al., 2010).

### Why is cooperative learning important?

Förre et al., (2010) give four reasons why cooperative learning is important to be introduced as one of the learning methods in the classroom:

1. Students are challenged to learn in an active and constructive way;
2. Interaction between students increases;
3. Cooperative learning contributes to the realization of a good pedagogic climate;
4. Differences between students are seen as a chance to learn from each other.

### Why is cooperative learning effective?

Slavin (1995) advanced two main theories explaining the effectiveness of cooperative learning:

1. Cognitive theory

The content of the lessons gains more meaning when students actively work with the content of the learning material (Förre et al., 2010). When you use cooperative learning in your class, you need to behave as a mediator and stimulate the above-mentioned approaches. The student is a participant instead of a receiver.

2. Motivational theory

Group goals stimulate working together. Roseth et al.(2006) found significant effects of cooperative learning on middle school students. They stated that the strongest influence on achievement comes from interpersonal relations between the students. As they concluded: “if you want to increase student academic achievement, give each student a friend” (p.7).

Also Hamm and Fairclough (2007) concluded that friendship in schools is really important. It's not only important for the student's sense of worth, it also stimulates the student's sense of school belonging and helps in creating positive feelings toward school. Nevertheless, everybody has to be alert for negative interactions between peers in the school. When the tendency is “learning is not cool”, cooperative learning can have negative effects.

## Elements of cooperative learning

Students work together in small groups in a structured manner. According to Johnson and Johnson (1994), five prime elements are typical and necessary for cooperative learning:

1. Positive interdependence;
2. Individual and group accountability;
3. Face-to-face interaction;
4. Interpersonal and small-group skills;
5. Group processing.

We would add here the importance of the role of the teacher and of the kind of task and the way the task is differentiated by the teacher, in order to involve children with many different abilities.

## Cooperative learning and children with special educational needs

There are two main links between cooperative learning and effective inclusive schools (Förner *et al.*, 2010):

1. Both have a pedagogical climate of acceptance. Start from the qualities of everyone in the group as a starting point of development.
2. Children need to believe in themselves and enjoy their own skills. They need to feel that they have a meaning in a group and they are important. Differences between students are seen as a chance to learn from each other.

## Class activities that use cooperative learning:

Effective cooperative learning can be facilitated through

1. Careful attention to the physical and social organization of the classroom and the groups
2. The development of pupils' group-working skills
3. The creation and structuring of challenging tasks
4. The supportive involvement of teachers and other adults

(Baines *et al.*, 2009)

## References

- Baines, E., Blatchford, P., and Kutnick, P. (2009) *Promoting effective Group work in the Primary Classroom. A handbook for teachers and practitioners*. New York: Routledge.
- Förner, M., Kenter, B., and Veenman, S. (2010) *Coöperatief leren in het basisonderwijs* (3de druk ed.) [Cooperative learning in primary school]. Enschede: Ipskamp Deukkers.
- Hamm, J.V. and Faircloth, B.S. (2005) The role of friendship in adolescents' sense of school belonging. *New Directions for Child and Adolescent Development*, 2005 (107), 61-78.
- Johnson, D. and Johnson, R. (1994) *Learning together and alone: Cooperative, competitive and individualistic learning* (4th ed. ed.). Boston: Allyn and Bacon.
- Kennesaw State University, Bagwel college of education. (s.d.). Cooperative Learning. <http://edtech.kennesaw.edu/intech/cooperative-learning.htm>
- Roseth, C.J., Fang, F., Johnson, D.W. and Johnson, R.T. (2006) *Effects of cooperative learning on middle school students: A meta-analysis*. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA.
- Slavin, R. (1995) *Cooperative learning: Theory, research, and practice* (2nd edition.). Boston: Allyn, Bacon.

## How to train teachers in this module

<b>Awareness raising activities</b>	The activities and materials mentioned above and in the Toolbox offer a wealth of possibilities; one has to choose the most relevant
<b>Small group discussion</b>	Discussion, sharing
<b>Reflective methods Looking at examples and discussion</b>	Teachers have a wealth of knowledge, practical things, methods, tricks. In the first place, the training should tap on these – perhaps unknown – own resources Then, the answer often does not lie in “more methods” but “more awareness of a change in attitude and belief system”. Therefore, reflective methods are more useful.
<b>Doing activities meant for children followed by discussion</b>	e.g. the Brain hat, Japanese hat, Lego constructing, I am smart
<b>Demos</b>	Show Video samples of good practice
<b>Adapting learning materials</b>	Using the Cognitive Map principle, adapt learning materials, tests

## Sources for this module

	<b>Video materials</b>
<ul style="list-style-type: none"> <li>• The Janusz Korczak School in Łódź, Poland</li> </ul>	Documentary about an inclusive school in Poland <a href="https://www.dropbox.com/sh/j39qj7umpglvo0k/BHzSo0wXzt">https://www.dropbox.com/sh/j39qj7umpglvo0k/BHzSo0wXzt</a>
<ul style="list-style-type: none"> <li>• Inclusion at Austerdalen school –Norway</li> </ul>	in: Inclues – DVD accompanying the book Lebeer, J. (Ed.) (2006) In-clues. Clues to inclusive and cognitive education. Antwerpen/Apeldoorn: Garant Example of good practice. This primary village school in Norway shows how a young teacher deals effectively with a variety of children in her class; 24’; fragments of classroom functioning, the beginning of the day, interview with teacher and principal (English and subtitles) Available from Garant publishers Antwerp, Belgium <a href="http://www.maklu.be/MakluEnGarant/en/BookDetails.aspx?id=9789044121537">http://www.maklu.be/MakluEnGarant/en/BookDetails.aspx?id=9789044121537</a>
<ul style="list-style-type: none"> <li>• Etre et Avoir (French spoken with English subtitles)</li> </ul>	French award winning documentary about a village school where one teacher teaches six grades simultaneously (publicly available. Watch trailer) French spoken <a href="http://www.youtube.com/watch?v=S49qvE86Qs0&amp;feature=player_detailpage">http://www.youtube.com/watch?v=S49qvE86Qs0&amp;feature=player_detailpage</a>
<ul style="list-style-type: none"> <li>• Ik heet niet dom (My name is not “stupid”)</li> </ul>	Belgian (Dutch-spoken – English subtitled) movie about children with learning disabilities; goal is to create understanding by the teacher. Fragments legally downloadable: <a href="http://www.letop.be/projecten/filmpjes/default.asp">http://www.letop.be/projecten/filmpjes/default.asp</a> ; Or order whole film at <a href="http://www.letop.be/bestellen/">http://www.letop.be/bestellen/</a> for 13€ shipping costs included
<ul style="list-style-type: none"> <li>• The Mind of a Child</li> </ul>	Canadian documentary by Gary Marcuse <a href="http://www.facetofacemedia.ca">www.facetofacemedia.ca</a> on the work with children affected by poverty, racism, war, deprived circumstances, etc. of children from native Canadian inhabitants and Afro-Americans, based on the work of Reuven .
	<b>Books and papers</b>
<b>On differentiating practices</b>	
Bender, W. (2002)	Differentiating instruction for students with learning disabilities: Best teaching practices for general and special educators. Thousand Oaks: Corwin Press, Inc.
Booth, T. and Ainscow, M. (2002, revised version 2010);	Index for Inclusion. Bristol: Centre for Studies on Inclusive Education The essentials on how to create inclusive school culture and practice. A tool for collective reflection by school teams.
De Vroey, A. and K.Mortier	Polyfonie in de klas, Leuven: Acco (In Dutch) A well theoretically grounded book on inclusive education, with a lot of practical examples and tools how to make curriculum more inclusive
Hammeken, P.(2000)	450 strategies for success: a practical guide for all educators who teach children with disabilities, Minnetonka (MN): Peytral Pubc. <a href="http://www.peytral.com">www.peytral.com</a>
O’ Moore L. (2003)	Inclusion: Strategies for Working with Young Children. Minnetonka (MN): Peytral Pubc. <a href="http://www.peytral.com">www.peytral.com</a> Many practical ideas, worksheets, advice

Tomlinson, Carol Ann (2004)	How to Differentiate Instruction in Mixed Ability Classrooms. Alexandria (VA): Association for Supervision and Curriculum Development A wealth of practical ideas and background information.
University of Alberta	Differentiated Instruction: A Research Brief for Practitioners A reader's digest (literature research) by the University of Alberta, regarding how to differentiate lessons according to different abilities. <a href="http://education.alberta.ca/apps/aisi/literature/pdfs/Final_Differentiated_Instruction.pdf">http://education.alberta.ca/apps/aisi/literature/pdfs/Final_Differentiated_Instruction.pdf</a>
Van Alsenoy, Susan, (2012)	Learning without boundaries. Breaking down barriers that surround the education of learning differently people at home and abroad. Rockland (Maine): Maine Authors' Publishing Interesting recommendations for students with learning disability, who are called "different learners" but a lot of statements with lack of evidence
Van den Steen, L.	"Sticordi"-measures, Sprankel, Belgium (In Dutch) A list of measures which teachers can take in Flanders (BE), things to do or to say (or not to say) when dealing with students with learning difficulties or disabilities
<b>On mediating</b>	
Feuerstein, R., Klein, P. S., and Tannenbaum, A. (1991).	Mediated learning Experience(MLE). Theoretical, psychological and learning implications. London: Freund Publishing House. Theoretical background and applications of Mediated learning experience theory
Feuerstein, R., Feuerstein R.S., Falik, L. and Y.Rand (2006)	The Feuerstein Instrumental Enrichment Programme, Creating and enhancing cognitive modifiability, Jerusalem: ICELP Publications
Feuerstein, Reuven and Ann Lewin-Benham (2012)	What Learning looks like. Mediated Learning in Theory and Practice K-6. New York: Columbia University Teachers' College Press
Howie, D. (2011)	Teaching students thinking skills and strategies, London: Jessica Kingsley A book making the link between teaching transversal thinking skills and inclusive education, from a three-tier model
Lebeer J (2003),	The art of cognitive bricklaying: Feuerstein's Structural Cognitive Modifiability and Mediated Learning Experience, in Lebeer, J. (Ed.) (2003) Project INSIDE. How to activate cognitive development of children with or at risk of developmental or learning problems inside the educational system? Southsea (UK): Down Syndrome Educational Trust Ltd An operationalization of MLE criteria and cognitive functions based on Feuerstein
Mentis, Mandia, Dunn-Bernstein, Marilyn and Mentis, Martene (2008)	Mediated Learning: Teaching, Tasks and Tools to Unlock Cognitive Potential. Thousand Oaks, Ca: Corwin Press A practical teacher's guide on mediated learning in the classroom
<b>On multiple intelligences</b>	
Gardner, Howard	Gardner, H. (1983) Frames of Mind, The theory of Multiple Intelligences, New York: Basic Books Gardner, H. (2007) Five Minds for the Future. Boston: Harvard Business School Press. Translated into Arabic, Korean, Italian, Japanese, Danish, Chinese (CC), Chinese (SC), Norwegian, Portuguese, Polish, Russian, Spanish, Swedish, Turkish, Romanian, French, Indonesian, and Thai Gardner, H. (2006) The development and education of the mind: The collected works of Howard Gardner. London: Routledge. Translated into Italian, Spanish Gardner, H. (2006) Howard Gardner under fire. In Jeffrey Schaler (Ed.). Illinois: Open Court Publishing Gardner, H. (2006) Multiple Intelligences: New Horizons. New York: Basic Books. Translated into: Romanian, Chinese. Gardner, H. (2004) How education changes: Considerations of history, science and values. In M. Suarez-Orozco and D. Qin-Hilliard (Eds.), Globalization: Culture and education in the new millennium. Berkeley: University of California Press. Gardner, H. (1991) The Unschooled Mind: How children think and how schools should teach. New York: Basic Books.
<b>On learning styles</b>	
Conner, M. L.	Introduction to Learning Styles, Ageless Learner, 1997-2007. <a href="http://agelesslearner.com/intros/1styleintro.html">http://agelesslearner.com/intros/1styleintro.html</a>
Coffield, F., Moseley, D., Hall, E., and Ecclestone, K. (2004).	Learning styles and pedagogy in post-16 learning: A systematic and critical review. www.LSRC.ac.uk: Learning and Skills Research Centre. Retrieved January 15, 2008: <a href="http://www.Isda.org.uk/files/PDF/1543.pdf">http://www.Isda.org.uk/files/PDF/1543.pdf</a>
Conner, Marcia and Hodgins, Wayne (2000).	Learning Styles <a href="http://www.learnativity.com/learningstyles.html">http://www.learnativity.com/learningstyles.html</a>

Constantinidou, F. and Baker, S. (2002).	Stimulus modality and verbal learning performance in normal aging. <i>Brain and Language</i> , 82(3), 296-311
Sarasin, L.C. (1998).	Learning Style Perspectives: Impact in the Classroom. Madison, WI: Atwood Publishing.
Schmeck, R.R. (1998).	Learning Strategies and Learning Styles. New York: Plenum Press
Sharp, J.G., Bowker, R. and Byrne, J. (2008)	VAK or VAK-uous? Towards the trivialisation of learning and the death of scholarship. <i>Research Papers in Education</i> Vol. 23, Iss. 3
Tileston, D.W. (2011)	10 Best Teaching Practices: How Brain Research, Learning Styles, and Standards Define Teaching Competences. London: Sage
<b>On teachers' competences in inclusive education</b>	
Lebeer, J. (Ed.) (2006),	In-clues. Clues to inclusive and cognitive education. Antwerpen/Apeldoorn: Garant A book with the principal results of the European Comenius Network Project InClues ( <a href="http://www.inclues.org">www.inclues.org</a> ) containing a DVD with video fragments of inclusive education examples, interviews, presentations and articles
Mitchell, D. (2007)	What really works in special and inclusive education. London: Routledge  A collection of scientifically based evidence of what kind of practices really work
Burns, T and Shadoian-Gersing, V. (2010)	Educating Teachers for Diversity. Meeting the challenge, Paris: OECD (Organisation for Economic Development and Cooperation) ISBN 978-92-64-07973-1 (PDF) DOI 10.1787/20769679. Can be downloaded from the OECD website
<b>On teaching principles</b>	
Kaufhold, J. A. and Kaufhold, S. (2002)	The Psychology of Learning and the Art of Teaching. NY: Writers club Press
Sprinthall, N and Sprinthall, R. (1977)	Educational Psychology. USA: Addison-Wesley Pub
<b>On cooperative learning</b>	
Kagan, S. (1994)	Cooperative learning (10th ed.). San Juan Capistrano, CA: Kagan Cooperative Learning. <a href="http://www.kagancooplearn.com">www.kagancooplearn.com</a>
	<b>Relevant websites</b>
On learning styles	International Learning Styles Network, part of the Center for Study of Learning and Teaching Styles at St. John's University links you the latest research, local activities, and some of the most influential people in the learning-styles field CTL Learning Styles Web Pages from the Center for Technology and Learning (CTL), Indiana State University addresses why there are learning styles, Learning Styles in Higher Education, Types of Learning Styles, Using Styles to Teach, and Applying Computer Technologies. CTL also has a Teaching Styles web page Support4Learning links to all sorts of resources about learning styles and multiple intelligences Theory of Multiple Intelligences explains Howard Gardner's work, Harvard Project Zero, the traditional view of intelligence, how this view has impacted schools historically, what Multiple Intelligences theory proposes, and how MI affect the implementation of traditional education VARK: A Guide to Learning Styles specifically focuses of verbal, auditory, and kinaesthetic learning styles. <a href="http://nwlinc.com/~donclark/hrd/styles/perspective.html">http://nwlinc.com/~donclark/hrd/styles/perspective.html</a>
On cooperative learning	<ul style="list-style-type: none"> <li>• <a href="http://www.kaganonline.com">www.kaganonline.com</a></li> <li>• <a href="http://www.spring-project.org.uk">www.spring-project.org.uk</a></li> </ul>
On Bruner's instruction principles	<a href="http://www.centrorefeducacional.com.br/contrib.html">http://www.centrorefeducacional.com.br/contrib.html</a> <a href="http://tip.psychology.org/bruner.html">http://tip.psychology.org/bruner.html</a> <a href="http://www.infed.org/thinkers/bruner.htm">http://www.infed.org/thinkers/bruner.htm</a> <a href="http://www.psy.pdx.edu/PsiCafe/KeyTheorists/Bruner.htm">http://www.psy.pdx.edu/PsiCafe/KeyTheorists/Bruner.htm</a> <a href="http://copland.udel.edu/~jconway/EDST666.htm#dislrn">http://copland.udel.edu/~jconway/EDST666.htm#dislrn</a>

## Toolbox of activities for inclusive classroom practice



Toolbox 2.1	Welcoming activities
Toolbox 2.2	Removing barriers to achievement: effective classroom practices
Toolbox 2.3	Lesson: we are all smart
Toolbox 2.4	How to make a Japanese samurai hat
Toolbox 2.5	Learning styles and multiple intelligences
Toolbox 2.6	Feuerstein's cognitive map to differentiate materials
Toolbox 2.7	General inclusive support strategies
Toolbox 2.8	Feuerstein's mediation criteria and inclusion
Toolbox 2.9	Example of a structured lesson plan for language acquisition third grade
Toolbox 2.10	Sticordi measures: stimulation, compensation, remediation and dispensation: example for mathematics
Toolbox 2.11	Peer mediation
Toolbox 2.12	Cooperative learning
Toolbox 2.13	Co-teaching
Toolbox 2.14	Bruner's instruction principles
Toolbox 2.15	And now make your own Toolbox





## Toolbox 2.1 Welcoming activities

<b>Goals</b>	<ol style="list-style-type: none"> <li>1. to get to know each other in our group</li> <li>2. to convince that we have more in common than we think</li> <li>3. to convince that every one of us has some features to be a good friend</li> </ol>
<b>For whom?</b>	Children
<b>Methods</b>	<ol style="list-style-type: none"> <li>1. <b>Our common friend:</b> Children with teachers (who are part of the game) are sitting in a circle, so they could observe each and every member of the game. The teacher tells the bear his/her name and tells one of his/her features, e.g.: I am Mary, I am always curious. Then gives the toy to the child next to him/her. The child next to Mary, repeats the bear things about Mary first, then adds his/her own name and feature. Next child repeats things about the last child and adds his/her own, and so on. The toy is a listener so none of the children should feel embarrassed, even if he or she is shy. But they observe the toy and thus other children get knowledge about each other. This exercise can be changed by introducing animals: first the name of an animal that starts with the same letter as mine, and then the animal that can represent me: "I am Mary like a mammoth, but I am rather like a cat."</li> <li>2. <b>The Web:</b> One child tells what he or she likes to do, for example: I like dancing. If any child likes dancing, he or she has to "connect" with the child with the string. The teacher cuts off a piece of string and connects the children with it. And so on until every child is connected into one web of common interests. They can see now that according to our interests we can be one family, we are connected with it. The children write on papers features of a good friend, e.g.: "being funny" or "being honest".</li> <li>3. <b>The Sun of Friendship:</b> Then children make rays from their papers over the face of the sun. Children are reading what is on the rays, but they do not read from their pieces (we can just ask them to change their place over the sun). The teacher asks the children to listen carefully and think if they have features that have just been read. Of course they have! It means all of them can be a friend to someone.</li> </ol>
<b>Materials</b>	<ol style="list-style-type: none"> <li>1. any toy that can be a listener (teddy bear for example);</li> <li>2. a very long string and a pair of scissors;</li> <li>3. A big yellow circle lying on the floor (this is the face of the sun) and thin but long pieces of paper – one or two for each child.</li> </ol>
<b>Author(s)</b>	Adam Gogacz, Łódź, Poland
<b>Approximate time needed to teach</b>	10 minutes each





## Toolbox 2.2 Removing barriers to achievement: effective classroom practices

<b>Goals</b>	To think about possibilities to differentiate and involve students with different needs.
<b>For whom?</b>	Teacher-trainers, teachers, support teachers
<b>Methods</b>	Reflective discussion in small group
<b>Materials</b>	Presentation
<b>Author(s)</b>	Nursel Deniz, Noel Park Primary School, London
<b>Approximate time needed to teach</b>	30'
<b>Background</b> 	A reflection based on the "Ten good reasons for inclusive education" published by the Centre for Studies on Inclusive Education, and on Bruner's instruction principles (see page 45).
<b>Where to find more information?</b>	PowerPoint: see Toolbox 2.2 on DVD or online <a href="http://www.distinc.eu">www.distinc.eu</a> 10 Good Reasons for Inclusive Education : Centre for Studies on Inclusive Education CSIE, Bristol <a href="http://www.csie.org.uk/">http://www.csie.org.uk/</a>
<b>Video material</b> 	On the Includes-DVD, video section, there are interesting interviews with teachers and experts, as well as with pupils about inclusive education, which might serve as inspiration.

### Description of the activity

The trainer presents the first slide: a picture of an inclusive classroom.  
Discuss the setting, compare with your own situation: in what way this setting conduces to inclusive education?

Discuss four essential questions:

1. What is the essential learning in this lesson?
2. How do the students learn best?
3. What needs modifying?
4. How will students demonstrate their learning?

Write down your findings

Then discuss the ten good reasons for inclusive education, and reflect on your own situation: in what way does our school fulfil these ten good reasons?

Write down the results.



### Toolbox 2.3 Lesson: We are all smart!

<b>Goals</b>	Learn about the different intelligences, so that all children recognize their own strengths and ways of learning, and therefore feel valued and included.
<b>For whom?</b>	Children from grade 2 upwards Teachers
<b>Methods</b>	Work in small groups; let everyone participate and write something he/she has learnt on a post-it note; use a separate note for everything.
<b>Materials</b>	Post-it notes, pencils PowerPoint presentation
<b>Author(s)</b>	Nursel Deniz, Noel Park Primary School, London
<b>Approximate time needed to teach</b>	30'
<b>Background</b>	Gardner's multiple intelligences .
<b>Where to find more information?</b>	PowerPoint: see Toolbox 2.3 on DVD



#### Description of the activity

Children start with making a mind map of things they have learnt to do. They write each idea on a post-it note. Then the post-it notes are stuck on the blackboard.

The teacher invites the children to organize them into groups, according to Gardner's intelligences: Movement smart, word smart, music smart, number smart.

Message: we are all smart. We just have different ways of learning and strengths in different skills.

Next, the children are requested to note down: what things you are good at? What do you find easy to learn? What is more difficult?

Then display the slide with the different types of intelligence and let the children choose which one is most appropriate for them.

Message: we all learn differently.

**MOVEMENT SMART**  
Age 1  
I learnt to walk  
I learnt how to ride a bike  
I can juggle!

**WORD SMART**  
I can speak French


**NUMBER SMART**  
I know my times tables

**PICTURE SMART**  
I can paint by mixing colours

**MUSIC SMART**  
I can sing in tune  
I learnt how to bake a cake.

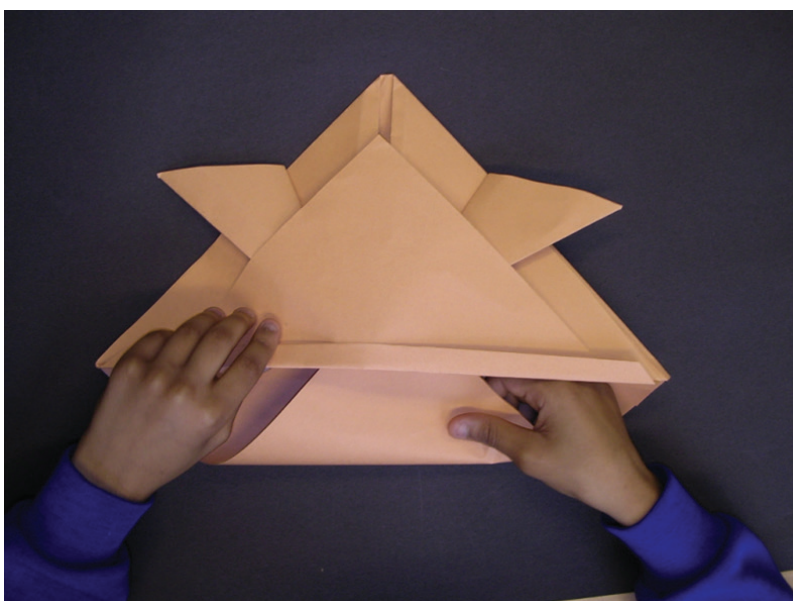
**? SMART**  
DISCUSS WHICH SKILLS YOU NEED TO DO THIS...

### Toolbox 2.4 Lesson plan: How to make a Japanese samurai hat?

<b>Goals</b>	Goals for teachers: <ul style="list-style-type: none"> <li>• Make teachers aware that there are different ways to give instructions and different preferred modalities of learning;</li> <li>• Demonstrate practically how important it is that, as teachers, we provide lessons which incorporate a <i>range</i> of learning styles, so that <i>all</i> children are able to access the lesson, regardless of their personal learning styles;</li> </ul> Goals for the children: <ul style="list-style-type: none"> <li>• Develop listening skills, working memory;</li> <li>• Develop visuomotor skills;</li> <li>• Develop metacognition: planning skills, checking, multiple information processing, strategic thinking, need for precision, verbalization;</li> <li>• Develop synthetic skills.</li> </ul>
<b>For whom?</b>	Teachers Children from grade 3 upwards
<b>Methods</b>	First verbal instruction for folding the paper into a samurai hat; Second instruction is multimodal ( verbal, visual, motor) and checking; Metacognitive Variations: think how to write down instruction steps; Let your friend make it according to your instructions.
<b>Materials</b>	Rectangular A2 size paper and scissors
<b>Author(s)</b>	Nursel Deniz, Noel Parks Primary School, London
<b>Approximate time needed to teach</b>	30 minutes
<b>Background</b>	 This awareness exercise has several theoretical foundations: Gardner’s multiple intelligence theory , Feuerstein’s mediation theory and cognitive map; Bruner’s instruction principles, learning styles theory,
<b>Where to find more information?</b>	Full verbal and visual instructions are available in a PowerPoint on accompanying DVD or online at <a href="http://www.distinc.eu">www.distinc.eu</a>

#### Description of the activity

First the teacher reads out instructions and gives time to the children to cut and fold, but does not give any further help. Then the teacher gives the same instructions, but with pictures of each step. The teacher organizes the instructions in numbered steps and waits until steps are well mastered. Fun is ensured when results are compared to the model! Finally, a discussion is held to create awareness of different modalities of instructions. With higher classes the children can formulate the steps afterwards themselves, work in couples and write down the steps. This exercise shows that the same activity, with little differences, can be used with teachers as well as with children; how one can work with multiple modalities and on multiple abstraction levels.



## Toolbox 2.5 Multiple Intelligences and Learning Styles

<b>Goals</b>	<ul style="list-style-type: none"> <li>• To be aware that we have different learning styles and different kind of intelligences;</li> <li>• To distinguish between intelligences and learning styles and to understand their relations;</li> <li>• To understand how to promote different learning styles in pupils;</li> <li>• To insert intentionally the development of multiple intelligences in teaching;</li> <li>• To valorise the different types of intelligences.</li> </ul>
<b>For whom?</b>	Teacher-trainers, teachers, support teachers
<b>Methods</b>	Individual activity – reflective exercises; Group reflection and conclusions.
<b>Materials</b>	Two PowerPoint presentations, available online and on the accompanying Distinc-DVD. Papers, pencils, board
<b>Author(s)</b>	Luísa Grácio, University of Evora, Portugal
<b>Approximate time needed to teach</b>	30 minutes
<b>Background</b> 	<p>Gardner's Multiple Intelligences (MI) model and the existence of different learning styles of children can be used to promote learning of different pupils. However, the concept of "learning styles" and "multiple intelligences" are not identical. It is generally accepted that using multi-modal presentations is beneficial for all children.</p> <p>The MI model is concretized and operationalized in Harvard Project Zero classrooms. A classroom which values multiple intelligences is more prone to become inclusive for a diversity of children.</p>
<b>Where to find more information?</b>	There are hundreds of papers and websites with different presentations of Gardner's multiple intelligence (MI) model. Many of these are interpretations. We prefer to guide the reader to the original author. Please consult the FAQ page of Gardner himself: <a href="http://www.howardgardner.com/FAQ/faq.htm">http://www.howardgardner.com/FAQ/faq.htm</a> Harvard project zero: <a href="http://www.pz.harvard.edu/">http://www.pz.harvard.edu/</a>

### Description of the activity

The individual and group activities are presented using the PowerPoint presentations.

- Individual activity:
  1. Write in separate post-its something you have learned
  2. Think about the sorts of things you are good at...
    - What do you find easy to learn?
    - What is more difficult?
- Group activity:
  - Look at all the post-it notes and organize them into groups
  - Reflect on the links between preferred learning styles and intelligences

After the individual and group activities the power point content about "different intelligences and learning styles" is presented. Implications for teaching are approached. Further questions are explored about what intelligence and style of learning are in what kind of activities your/their predominant intelligence is most valued, most helpful? What intelligence can you observe in those children who are not "performant" (enough) in the academic subjects? In what ways does your teaching style favour one or another intelligence? What can you do to allow children with other than logical-verbal intelligence to participate more? How can you adapt your activities in order to value other than logical-verbal intelligences?

## Toolbox 2.6 Feuerstein's "cognitive map": a tool to differentiate materials

<b>Goals</b>	<ul style="list-style-type: none"> <li>To become aware that learning materials (or any stimulus) can have different aspects, which make them more or less accessible;</li> <li>To learn to analyse learning materials according to seven parameters: content, modality, phase, operations, complexity, abstraction and efficiency;</li> <li>To increase the accessibility of a task by varying one or more of these parameters;</li> <li>To learn to differentiate learning materials according to specific needs of the pupils.</li> </ul>
<b>For whom?</b>	Teachers
<b>Methods</b>	Presentation of cognitive map parameters, using the PowerPoint; Small group work: analysis of learning materials people have brought; Small group work: adapting learning materials varying the task's parameters.
<b>Materials</b>	PowerPoint, see Toolbox 2.6 online and Distinc-DVD; Any learning materials teachers bring to the class.
<b>Author(s)</b>	Author of this toolbox: Jo Lebeer, Universiteit Antwerpen, Belgium Author of cognitive map: Reuven Feuerstein
<b>Approximate time needed to teach</b>	3 hours teaching + 2 hours of practice exercises
<b>Background</b> 	Feuerstein's concept of "the cognitive map" is an application of his theory of Structural Cognitive Modifiability and Mediated Learning Experience. It is a tool to analyse the stimuli (tasks, concepts, books, didactic materials,...) and to vary them according to the learners' individual barriers and needs. See background summary earlier in this module.
<b>Where to find more information?</b>	Feuerstein, R., Feuerstein, R.S., Falik, ., and Rand, Y (2006) <i>The Feuerstein Instrumental Enrichment Programme, Creating and enhancing cognitive modifiability</i> , Jerusalem: ICELP Publications

### Description of the activity

The seven parameters of Feuerstein's cognitive map are explained and illustrated using the PowerPoint presentation. When presenting any material, the teacher should consider:

1. Content: is the content adapted to the child's interests and development? How familiar is the child with it? Does it make the child curious? How challenging is it? Key concepts?
2. Modality: is the language of presentation (verbal, musical, pictorial, numerical, etc.): how motivating is this modality for this child to participate? Does the child have any particular difficulty with the chosen modality? Do I have to vary the modality to involve?
3. Phase: Does the task require a lot of input, elaboration or output? What sources of information does the child need to collect? What new concepts are involved? Does this material require a lot of elaboration of information? Which steps are involved?
4. Mental operations: does this task require categorization, analysis and synthesis, seriation and sequencing, encoding and decoding, inferential (if...then), analogical, deductive and inductive thinking?
5. Complexity: how complex is the task I am presenting? How can I make it less or more complex? Can I reduce the number of elements on a page?
6. Abstraction: do I have to make the task less abstract to make some children participate?
7. Efficiency: is the task directed at automatisisation, or is it new?

Teachers bring their own regular materials, analyse them in small groups and vary according to specific children's needs.

**Example:**

Take the following maths exercise:

$$\begin{array}{ll} 15 + ? = 20 & 52 + ? = 63 \\ 24 + ? = 42 & 79 + ? = 100 \\ 94 - ? = 77 & 53 - ? = 35 \\ ? + 57 = 60 & ? - 13 = 25 \end{array}$$

For some children this might be inaccessible: perhaps they don't yet master the concept of splitting numbers over the bridge of 10. Or perhaps it is just too complex to mix all different types of exercises. In this case, you can diminish complexity, e.g.:

1. Diminish complexity

$$\begin{array}{llll} 15 + ? = 20 & \text{Or} & 10 + 10 = ? & \text{Or} & 90 + ? = 100 \\ 25 + ? = 30 & & 20 + 10 = ? & & 80 + ? = 100 \\ 35 + ? = 40 & & 30 + 10 = ? & & 70 + ? = 100 \\ 45 + ? = 50 & & 40 + 10 = ? & & 60 + ? = 100 \end{array}$$

For some children, despite already knowing numbers until 100 and being able to make additions across 10, it might be too difficult because they still need materials. In that case, make it more concrete

2. Diminish abstraction level; make it more concrete

$$15 + ? = 20 \qquad 52 + ? = 63$$

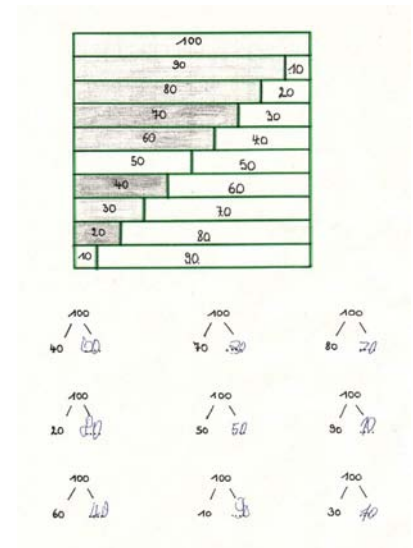
Work with an abacus, or blocks representing units and tens

3. Change the modality


Visualize the additions and the question marks as empty spaces to fill it, to "add" something

4. Change the content

Do the same exercise with money.



## Toolbox 2.7 General inclusive support strategies

<b>Goals</b>	To create awareness of teachers in dealing with students who learn differently.
<b>For whom?</b>	Teachers
<b>Methods</b>	Discussion text; let it read in small groups, then discuss in plenary and look for examples.
<b>Materials</b>	Text and PowerPoint
<b>Author(s)</b>	Susan Van Alsenoy, AWC Antwerp
<b>Approximate time needed to teach</b>	45 minutes
<b>Background</b> 	This is a collection of recommendations made by a support teacher with 30 years of experience in an inclusive setting. They are empirically based, and were originally developed for students who have specific learning disabilities, but they are relevant for all learners who experience barriers to learning.
<b>Where to find more information?</b>	Students Who Learn Differently Overseas <a href="http://studentswholearn.fawco.org/guidesheet.html">http://studentswholearn.fawco.org/guidesheet.html</a> <i>Learning without boundaries. Breaking down barriers that surround the education of learning differently people at home and abroad.</i> Rockland (Maine): Maine Authors' Publishing.

### Description of the activity

The following list of suggestions and strategies has been created to support all teachers in their efforts to teach students who learn differently better and more effectively. The ideas have been taken from the work of experts in the field of LD (learning differences/specific learning disabilities) the world over, and they are of benefit to all students, not just those with a specific learning difficulty or disability.



There are nine general considerations and 15 suggested strategies:

1. Teachers are urged to re-examine the notion of what is "fair." "Fair" does not mean that every student gets the same "treatment", but that every student gets what he or she needs.
2. It might be useful to have a child "diagnosed" if all efforts have proven insufficient. There might be a neurological condition.
3. Recognize and educate different intelligences.
4. Multisensory teaching.
5. Take into account increased processing time. Speak slowly.
6. Don't sanction performance inconsistency. Make every student feel safe and secure.
7. Be prepared to learn from the parents.
8. Communicate with other teachers.
9. Get support for yourself. Draw on colleagues' expertise.

### Key strategies

1. Teach study skills.
2. Provide structure in the lessons and teaching.
3. Help self-organization.
4. Make asking questions comfortable.
5. Break down learning into small tasks.
6. Use lots of visual aids.
7. Repeat in different ways.
8. Individualize your support
9. Acknowledge that listening and note-taking simultaneously can be difficult.
10. Mark positively – tick the good bits.
11. Allow the use of any learning tool necessary.
12. At all times avoid the use of sarcasm, continual and negative criticism.
13. Do not use playtime should to complete work.
14. Catch the student being good.
15. Most importantly, seek opportunities to praise and build self-esteem.

## Toolbox 2.8 Feuerstein's mediation criteria in function of inclusion

<b>Goals</b>	<ul style="list-style-type: none"> <li>• To become aware of the difference between instruction and mediating;</li> <li>• To become aware of the importance of mediation in shaping a child's mind and thinking skills;</li> <li>• To learn how to mediate to give good instructions;</li> <li>• To learn how to raise all children's motivation and participation;</li> <li>• To learn how to mediate feelings of competence to all children, whatever their performance level;</li> <li>• To teach children how to be tolerant to each other's differences;</li> <li>• To teach children how to regulate their own behaviour so that they become more "tuned in" to the task;</li> <li>• To teach children how to verbalize and share their experiences and thoughts;</li> <li>• To teach children planning and other thinking skills;</li> <li>• To teach children to be optimistic towards their capacities;</li> <li>• To create an atmosphere of belonging: every child counts;</li> <li>• To learn to analyse teaching styles according to mediated learning criteria.</li> </ul>
<b>For whom?</b>	Teachers
<b>Methods</b>	Presentation of cartoons and discussion; then define criteria; Small group work: analysis of mediating teaching styles on video; Small group work: reflective exercises how to adapt teaching styles.
<b>Materials</b>	PowerPoint, see Toolbox online or on Distinc-DVD
<b>Author(s)</b>	Mediation criteria: Reuven Feuerstein Adaptation to inclusive education: Jo Lebeer, Universiteit Antwerpen, Belgium
<b>Approximate time needed to teach</b>	Overview: 1 hour; to teach the five most important criteria, you need 3 hours. To teach all the criteria, you need at least 8 hours. To understand mediation, the best way is to practice a cognitive enrichment programme such as Instrumental Enrichment.
<b>Background</b>	 <p>Mediated Learning Experience is the basis of structural cognitive modifiability, i.e. the capacity of every child to become modified by the stimuli, to enlarge its thinking capacity, according to Reuven Feuerstein's theory. It is the particular quality of interaction whereby an intentioned "mediator" interferes between a child and a stimulus in the environment, in order to make the stimulus more accessible, more understood, more digestible, incorporated and elaborated.</p>
<b>Where to find more information?</b>	See background information, this section. Mentis, M. et al. (2008) <i>Mediated Learning: Teaching, Tasks and Tools to Unlock Cognitive Potential</i> . Thousand Oaks, Ca: Corwin Press
<b>Video material</b>	 <p>Watch "The Mind of a Child" video by Gary Marcuse (<a href="http://www.facetofacemedia.ca">www.facetofacemedia.ca</a>)</p>

### Description of the activity

The 12 criteria of mediation are explained and illustrated in an interactive way – using cartoon analysis and analysis of video fragments in a PowerPoint presentation with respect to their relevance for inclusive education. Participants learn to analyse teaching situations (using video material of well-known movies) with regard to their degree of mediation.





### Toolbox 2.9 Example of a structured lesson plan: making sentences

<b>Goals</b>	<ul style="list-style-type: none"> <li>To see how to structure a lesson around a specific objective;</li> <li>To embed end-of-year expectations in writing, with a focus on purpose and audience and the use of specific language to maximise impact on reader;</li> <li>To ensure teaching and learning uses a range of AfL (Assessment for Learning) and English as an Additional Language (EAL) pedagogical approaches, with an inclusive focus as the context;</li> <li>To promote the importance of talk for language and curricular learning.</li> </ul>
<b>For whom?</b>	Teachers Children 3 <sup>rd</sup> grade
<b>Methods</b>	Give illustration, then ask participants how to structure a lesson in such a way that everyone benefits
<b>Materials</b>	PowerPoint – see Toolbox online or Distinc-DVD Lego bricks
<b>Author(s)</b>	Nursel Deniz, Noel Park Primary School, London
<b>Approximate time needed to teach</b>	45'
<b>Background</b>	Bruner's instruction theory



#### Description of the activity

This is an example of a lesson plan for language acquisition in the 3<sup>rd</sup> grade, about learning to make good sentences, so that other people understand. How to convey this task? How to make it interesting. A suggestion is to start with a playful activity: connecting Lego bricks, then to abstract the concept of "connection". Think how to make different levels for different children.

#### WALT (We are learning to...):

- To think about what 'good, better and best' sentences look like.

#### WILF (What am I looking for?): (success criteria)


- 'Good' sentence (simple) with 1 idea, capital letter and full stop.
- 'Better' sentence (compound) with 2 ideas, joined by a connective.
- 'Best' sentence (complex) with 3 ideas, joined by 2 connectives.
- BIG Challenge (more advanced pupils).

#### Main activities

- Shared reading of 'I like ....' sentences and distribute among children.
- Make human sentences using sentence statements and connectives.
- Direct questions to ensure children understand how sentences represent ideas and are joined by connectives.
- Invite pupils to evaluate sentences as 'good, better, best' and justify choices.
- Reflect on results.



## Toolbox 2.10 STICORDI: Stimulation, Compensation, Remediation, and Dispensation

<b>Goals</b>	To have a reference list of measures in order to facilitate learning in students who experience barriers because of attention problems, reading problems, organization problems etc.
<b>For whom?</b>	Teachers
<b>Methods</b>	Hand out the lists and discuss cases
<b>Materials</b>	List
<b>Author(s)</b>	Luc Van den Steen, Artevelde Teacher Training College, Gent, Belgium
<b>Approximate time needed to teach</b>	1 hour
<b>Background</b>	 <p>STICORDI stands for Stimulation, Compensation, Remediation, and Dispensation. STICORDI measures are used in the Flemish educational system for students with learning difficulties or learning disabilities. It is a series of measures teachers can use to facilitate learning and inclusion for those learners who have a reasonable perspective to obtain the “standards” of elementary school, but who for one reason or another tend to fall out. It is a reference list. Teachers aim, for example, to stimulate self-confidence in pupils, provide more time for exams and tests, offer the possibility of using helpful resources, try to evaluate pupils on what really matters. The Sticordi measures, although they are associated with students with a specific difficulty, without intellectual impairment, could be easily extended to students with intellectual impairment, but also for gifted students. Extrapolating, they could also be seen as common sense and “universal design”.</p>
<b>Where to find more information?</b>	The complete list can be found on the accompanying DVD

### Description of the activity

**Stimulation (STI)** = stimulate the learner to improve, to gain competences.

**Compensation (CO)** = to replace the intended activity by another one with a modified task, but with a similar goal.

**Remediation (R)** = provide tasks or measures which aim at restoring a missing step, remediating a difficulty, more practice with difficulties.

**Dispensation (DI)** = exempting certain activities, or goals and replacing it by equivalent activities and goals, within the limits of the required standards of the curriculum objectives. The dispensation measures should not jeopardize the employability in the professional field or further education. First it should be ascertained with what tools a pupil might be able to solve tasks: e.g. do not sanction calculation errors in subjects other than mathematics; the pupil is exempt from dealing with complex numbers; limit operations up to 100 and the automatising of the basic skills.

## Toolbox 2.11 Peer mediation

<b>Goals</b>	Train children to mediate, i.e. to help other children in working on tasks in a mediating way.
<b>For whom?</b>	Teacher-trainers, teachers, support teachers, children, ...
<b>Methods</b>	Train children to mediate younger children in a systematic way by using video demonstrations and ordinary teaching materials
<b>Materials</b>	Articles by Shamir <i>et al.</i> – see Toolbox on Distinc – DVD Visual symbols: smileys, stop sign, others
<b>Author(s)</b>	Adina Shamir, Bar Ilan University, Israel
<b>Approximate time needed to teach</b>	To teach children: 7 lessons
<b>Background</b> 	The Peer Mediation with Young Children model (PMYC) is a training programme based on Vygotsky's sociocultural theory and Feuerstein's structural cognitive modifiability and mediated learning experience theory. The PMYC is constructed as a cross-age model where the more experienced child is the trainer of a younger peer. Vygotsky states that the interaction with a better-endowed partner, whether child or adult, is more effective than interaction with a same-level partner. Cognitive development takes place when learners displaying different levels of cognitive attributes cooperate to complete a given task. A peer-cooperation process helps the learners construct shared understanding. Peer mediation has multiple effects with regard to inclusive education: on the younger learners (to increase their level of understanding, learning skills and participation), on the older learners (positive effect on empathy and it also increases their level of understanding) and on teachers (it allows to them work with different children in a heterogeneous environment and they also learn to become a better mediator)
<b>Where to find more information?</b>	Shamir, A. and Tzuriel, D. (2004) Children's Mediation Teaching Style as a Function of Intervention for Cross-Age Peer-Mediation <i>School Psychology International</i> , Vol. 25(1): 59–78 Shamir, A., and Lazerovitz, T. (2007) A peer mediation intervention for scaffolding self-regulated learning among children with learning disabilities. <i>European Journal of Special Needs Education</i> , 22, 255-273
<b>Video material</b> 	The PMYC programme uses a video to illustrate mediation principles

### Description of the activity

The objective of the PMYC programme is to enhance a *mediating teaching style* among young third graders as a means of developing learning skills and cognitive modifiability of learners mediated by their peers. It is a comprehensive theoretical model which integrates cognitive and emotional components, reflecting MLE principles that promote 'learning how to learn' (see background on MLE on page 48). It can be applied to a variety of problem-solving tasks not related to content. Though structured, it allows considerable room for creativity in applying MLE principles and the mediator is perceived as more competent than the learner. The PMYC is composed of (1) direct *teaching* of the basic 5 MLE principles; (2) observation and discussion of a didactic film introducing the MLE principles and (3) *practising* the MLE principles with peers by using computer programmes, games, posters, stickers with visual symbols of the principles, verbal slogans and work sheets. Each mediation principle is assigned a visual symbol, a name, and a verbal slogan. Feelings of competence, for example, are represented by the visual symbol of a 'smiley' face. The intervention programme is carried out in seven lessons given over a period of three weeks.



## Toolbox 2.12 Cooperative learning

<b>Goals</b>	<ul style="list-style-type: none"> <li>To teach teachers how to work with small groups of children working on a specific task together</li> <li>To ensure that everyone in the cooperative group has a specific task, which is in line with his/her abilities</li> <li>To teach children to learn to work together on a common goal</li> </ul>
<b>For whom?</b>	Teacher-trainers, teachers, support teachers
<b>Methods</b>	Develop a cooperative lesson plan on the basis of lesson samples
<b>Materials</b>	Examples of lesson plans on "the Evaporation cycle", worksheets and teachers' notes
<b>Author(s)</b>	Social Pedagogic Research into Group-work (Spring Project)
<b>Approximate time needed to teach</b>	1 hour
<b>Background</b> 	See background text on page 53
<b>Where to find more information?</b>	<a href="http://www.spring-project.org.uk/index.htm">http://www.spring-project.org.uk/index.htm</a>
<b>Video material</b> 	<a href="http://www.youtube.com/watch?v=tBoWNlfgJs4">http://www.youtube.com/watch?v=tBoWNlfgJs4</a>

### Description of the activity

Teachers discuss the lesson plan example of the Evaporation Cycle and learn the principles of cooperative learning. On the basis of the teachers' notes and sample worksheets, they choose a theme, from any subject, and develop a strategy for how they can divide the class in smaller groups, working together with a finite task in which everyone has a role according to abilities, learning goals (which can be different for every child; it does not need to be the same goals for everyone), learning styles and multiple intelligences.

## Toolbox 2.13 Co-Teaching

Title	Prisma of co-teaching
<b>Goals</b>	<ul style="list-style-type: none"> <li>To understand the principle of working together with two teachers in a classroom;</li> <li>To show how teachers can work together with a very diverse group of learners;</li> <li>To show how a school community can optimize its resources so as to make co-teaching possible.</li> </ul>
<b>For whom?</b>	Teacher-trainers, teachers, support teachers
<b>Methods</b>	Presentation and discussion workshops
<b>Materials</b>	Powerpoint
<b>Author(s)</b>	Diane Fluijt
<b>Approximate time needed to teach</b>	2 hours
<b>Background</b> 	The concept of co-teaching is adapted to three important documents: Convention on the Rights of the Child (signed in the Netherlands at 1995), Salamanca Statement (1994) and the Canon of World Citizenship (2009). Several <b>educational professionals</b> are working together in a class as co-teachers. They work in a <b>structured way</b> ; the co-teachers are <b>equally responsible</b> for teaching <b>all pupils</b> . (Academieteam Co-Teaching Hogeschool Utrecht, 2012).
<b>Where to find more information?</b>	Powerpoint on Distinc DVD
<b>Video material</b> 	Included in PowerPoint

### Description of the activity

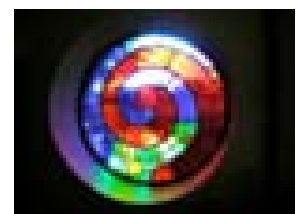
During the interactive activity attention will be paid to discuss Prisma Co-Teaching and challenges for your own environment.

Prisma Co-Teaching refers to the notion of cooperation.


In the Netherlands we have transformed the international concept of co-teaching, which mostly refers to classroom management, into Prisma Co-Teaching, which is based on five principles of ecological education. These principles are:

1. Solutions are to be found within the school system itself. Solutions should be based on the qualities and strengths of pupils and all of those involved in the school system.
2. The layers of socialization. The first layer consists of: pupil, family, peers and educational professionals. The school organization forms the second layer, which facilitates and protects the first layer. The third layer is an environment within the school which will stimulate individual development.
3. The possibility to explore one's creativity is both valuable in itself and as a tool for lasting development. Ownership and responsibility for development and school environment is guaranteed.
4. Similar to society. The school is a community similar to the pluralism of society in which differences between people are supposed to be accepted and valued as an opportunity to learn from each other.
5. The right to dream. Educational professionals keep on searching for ways of self-development, both for themselves and for their pupils. They should stimulate pupils in a positive way and have faith in their abilities.

The leading idea is that the form, content and organization of the Prisma Co-Teaching is related to the needs of the organization of a school. Prisma Co-Teaching is therefore flexible and dynamic. It appears that in integration classes learning results of all pupils increase and the pedagogical climate is excellent. It is an opportunity for professionals to become a co-teacher and hence 'be the change you want to see in this world'.



## Toolbox 2.14 Bruner's' instruction principles

<b>Goals</b>	<ul style="list-style-type: none"> <li>To relate Bruner's' instruction principles to inclusive practice in a class with different children;</li> <li>To understand that we can operate simultaneously in performing the same task with two or more modes of mental representation;</li> <li>To understand the symbolic representation (language) as a support/help and additional encouragement in some tasks.</li> </ul>
<b>For whom?</b>	Teacher-trainers, teachers, support teachers
<b>Methods</b>	<ol style="list-style-type: none"> <li>Show the presentation/explanations;</li> <li>Small group discussion, look for examples;</li> <li>Exchange;</li> <li>Reflection: Relations with the activity "construction of the Japanese warrior Hat".</li> </ol>
<b>Materials</b>	PowerPoint presentation
<b>Author(s)</b>	Luísa Grácio, University of Evora, Portugal
<b>Approximate time needed to teach</b>	1 hour
<b>Background</b> 	<p>Bruner's learning psychology belongs to the socio – constructivist approaches, i.e. that the student actively constructs his learning by discovery, which is mediated by language. This is highly contingent on socio-cultural influences. Based on Bruner's four principles, virtually any learning subject can be adapted to a wide variety of learners in the same class group. See more info on page 45</p>
<b>Where to find more information?</b>	Powerpoint available on DVD and online at <a href="http://www.distinc.eu">www.distinc.eu</a>

### Description of the activity

Bruner builds a theory of instruction based on four principles which, if well applied, improve learning of any child:

- Motivation** – the teacher must create conditions that predispose the pupil for learning: **will, reinforcement or external reward, construction of intrinsic motivation** (e.g., curiosity directed to the activity. Construction of disciplined curiosity, for example through games in the form of questions). **Construction of a sense of competence** – interest in what each one is "good". **Reciprocity** involves the need to work cooperatively with others.
- Structure** – Any subject or theme can be organized in an optimal way in order to be understood by virtually any student. **Mode of presentation** (enactive, iconic, symbolic); **economy of presentation** (depends on the amount of information that students need to retain for further learning).
- Sequence** – The teacher must keep in mind what is the best sequence to teach that matter to pupils. The degree of difficulty felt by children depends in part on the sequence in which content is presented.
- Reinforcement** – To achieve mastery of the knowledge the pupil needs to receive a feedback about what he/she is doing.

The principles are illustrated using an effective teaching task.

### Toolbox 2.15 Your own toolbox

Title	Your own contribution
<b>Goals</b>	
<b>For whom?</b>	Teacher-trainers, teachers, support teachers, children, ...
<b>Methods</b>	
<b>Materials</b>	
<b>Author(s)</b>	
<b>Approximate time needed to teach</b>	
<b>Background</b> 	
<b>Where to find more information?</b>	
<b>Video material</b> 	

Description of the activity

## ► Module 3 - Challenging Behaviours: “What do we know? What can we learn?”

Edited by Luísa Grácio, Z. Hande Sart and Ayşe Caner

Also with contributions from Elisa Chaleta, Maria José Saragoça, Adelinda Candeias, Nicole Rebelo, Burcu Ozveren, Marijke Wilssens and Fátima Leal

### Introduction

Module 3 includes the basic conceptual knowledge, effective, practical and applicable strategies, techniques and activities that will be helpful for teachers in dealing with challenging behaviours (CB) in the school environment.

Teaching is a challenging and complex profession given that they have to accomplish multiple tasks in a classroom with a large number of pupils with different backgrounds and developmental needs. One of the most difficult aspects of this profession is to deal with pupils having challenging behaviours. Unless teachers are equipped with the necessary knowledge, skills and attitudes in dealing with pupils having CB, not only they but all pupils in the classroom would have problems academically, socially and emotionally. Above all, challenging behaviours also put pressure on the relationship between teacher and pupil. This pressure may make teachers demotivated towards teaching and/or may lead to feelings of incompetence in teaching.

In the development of this module a more comprehensive perspective has been adopted by integrating a reflective and preventive approach to the problem, rather than reactive and punitive approaches. That is, this module is built on the idea of creating and maintaining a safe, supportive and positive environment that prevents and minimizes CB, and consequently fosters learning, and as well on the idea that teachers' beliefs, attitudes and actions are crucial in creating such an environment. Additionally, teamwork is very important. Schools and teachers should collaborate and build partnership not only with parents, specialists, and administrators but also with all stakeholders who are in the ecological system of pupils with CB.

### Goals

After understanding the philosophy and principles behind inclusive education in Module 1 and its implication to the practice, especially through diversification of educational actions and activities for different needs of pupils in Module 2, in Module 3 the overall goal is to understand challenging behaviour (CB) in classroom settings.

Children with CB have emotional, social, and control problems that are interfering with learning. Teachers can have a very positive influence on pupils' behaviours as well as on their learning by the methods, strategies and techniques that they use in the classroom. In this module, we will provide key concepts, knowledge, techniques, strategies and activities to improve competences that will be helpful in developing positive behaviours in your classrooms. While understanding and managing challenging behaviour, we will try to go beyond labelling and blaming reflecting critically about CB and linking this issue to existing knowledge in this field. We start by focusing on what we know about CB and the experiences about it in classrooms. In synthesis, the major aim is to learn more about CB, to analyse what we do, what we want and what we can change in our classrooms and schools in order to create a learning environment that accepts and celebrates differences in pupils.

Goals of this module are:

- To understand CB in children;
- To analyse and reflect on the perspectives and roles of teachers' beliefs, attitudes and actions in the face of CB;
- To conceptualize perspectives on CB;
- To develop techniques and strategies for managing pupils with CB;
- To identify desirable changes and developing action plans using three-tiered system of intervention based on positive behaviour support and functional behavioural assessment;
- To create a supportive environment;
- To promote reflective and preventive practices.

More detailed goals are outlined in Toolboxes with methods and materials as well as learning activities.



## Teacher competences we want to develop

Module 3 is constructed in order to develop teacher competences in three domains: (1) knowledge (knowing); (2) awareness (understanding) and (3) application in educational practice in inclusive settings (showing).

### To Know:

1. To know the concept of CB and its types;
2. To distinguish target characteristics that are typical and the ones that can become problematic;
3. To know the variety of causes of CB and what the teachers can and cannot control;
4. To know the connections between CB and learning difficulties;
5. To know the focus, actors and levels which are involved in CB and their relevancies for understanding and intervention;
6. To know certain models focused on learning and behaviours such as Recovery Behaviour, Whole Brain Behaviour Management (WBBM) and School Wide Positive Behaviour Support (SWPBS);
7. To know how to create positive teacher-student relationship;
8. To know how to create positive peer relationship;
9. To know prevention and interventions strategies regarding CB:
  - 9.1. What to teach and strategies for developing positive behaviours in classroom;
  - 9.2. Principles and strategies to enhance the child's emotional and social competences;
  - 9.3. Principles and strategies to enhance the child's self-regulation and self-control competences (behavioural, emotional, cognitive and academic);
10. To know when to refer to other professionals;
11. To know the teacher's role regarding CB is important and may make the difference in the CB resolutions.

### To Understand and /to be Aware:

1. To understand most of CB is learned and is modifiable;
2. To be aware the importance of the teacher's actions in resolving CB is crucial;
3. To be aware that teachers need solution-focused support from other teachers in dealing with CB in their classroom environment and also emotional support;
4. To understand the importance to create a culture of teachers support in the school system;
5. To be aware of the connection between CB and learning difficulties;
6. To be aware of the differences between CB and disorders;
7. To be aware of how teachers' beliefs, expectations, feelings and actions affect them in the face of CB;
8. To understand how teachers' positive beliefs regarding the child can influence the process of dealing and resolving CB;
9. To understand the existence of areas that teachers can control over and make changes accordingly;
10. To understand the importance of creating and maintaining a safe, supportive and positive classroom environment;
11. To understand the difficulties experienced by the teachers and by the pupils and the existence of certain ways and solutions to overcome these difficulties;
12. To be aware of the fact that diagnoses are only valid when done by experts in mental health field.

### To Show in Practice:

1. To be able to show an attitude beyond labelling and blaming in face of CB;
2. To show a positive attitude toward yourself regarding as a teacher and toward children;
3. To identify factors that teacher can and cannot control that have some influences on success of the pupils;
4. To be able to focus and work on what teachers can control to overcome difficulties and promote pupil's competences and learning;
5. To be able to use metacognition strategies as a methodology to become a more effective teacher;
6. To create ways to overcome the difficulties resulting from CB in the classroom;
7. To implement strategies for positive behaviour management in the classroom;
8. To apply prevention and intervention strategies to prevent or deal with CB:
  - 8.1. Set the stage by establishing routines, rules and procedures in the classroom;
  - 8.2. Deliberately and consistently teach positive rules and ways of controlling behaviours over a certain period of time;
  - 8.3. Have positive and motivating attitudes in order to help pupils learn and overcome some failures;
  - 8.4. Begin to work with one or two target behaviours at a time and not to overwhelm;

9. To recognize that changes in behaviours take certain time;
10. To define success as decreases (over time) in frequency and intensity of the targeted behaviours and able to show these through records;
11. To design behavioural intervention strategies that are developmentally and age appropriate;
12. To teach deliberately and systematically emotional and social skills to pupils, such as emotional literacy, empathy or perspective taking, friendship, communication skills, anger-management, interpersonal problem solving, and how to be successful at school;
13. To keep in mind that the ability to manage emotions and behaviour is a prerequisite for school readiness and academic success and can lead to meaningful friendships;
14. To be able to cooperate with parents since they can facilitate and help the child's emotional and social development;
15. To use appropriate methods of control, reinforcement and punishment techniques;
16. To keep in mind that as teachers we can use the same disciplinary practices to manage the challenging behaviour of pupils with disabilities that they use to manage the behaviour of pupils without disabilities;
17. To create opportunities and activities to help children develop self-regulation and self – control competences (behavioural, emotional, cognitive and academic);
18. To learn for yourself and teach the child to recognize that failure is OK, it is part of learning. Failure and practice go together; we learn from our failures;
19. To use peers as support for behaviour change;
20. To implement some guiding principles to intervene when faced with CB;
21. To work cooperatively with families, others teachers and professionals;
22. To keep in mind that you have a wide range of knowledge and competences and that you are able to look for solutions;
23. To be able to keep in mind that if you need it is your right to ask for help.

## Content of module 3

### 1. Understanding Challenging Behaviours (CB) in Children

Topics	Key ideas	Suggested activities
<b>Challenging Behaviour (CB) in children</b>	Definition of CB in the realm of psychological development: CB as a developmental struggle or delay in social, emotional and academic areas.	Activities for teachers: Description of CB observed frequently observed in the classroom "My Behaviour Your Behaviour What can we do?" Toolbox N°3.1 Show the presentations on "Challenging Behaviours– Understanding Behaviours in the realm of Psychological Development". Toolbox N°3.1A Reflective Exercise and Discussion Question: What about in your class?
<b>Patterns and Target Characteristics of CB</b>	Pattern of CB variation depends of the target characteristics being considered and the age of the children. Target characteristics are descriptions of a child's behaviour (transient in nature, persistent or episodic). There are variations in the severity of target characteristics of CB. Target characteristics should be the focus of intervention. Changes of CB are related with appropriate educational interventions.	Show presentation on "Patterns and Target Characteristics of Children with Challenging Behaviour". Toolbox N°3.1B  Group discussions about: -What are some target characteristics and its nature? -What is the relation with learning and teaching -What is modifiability?  Show presentation on "Understanding Challenging Behaviour – Summary" Toolbox N°3.1C
Topics	Key ideas	Suggested activities
<b>Severe forms of CB</b>	Differences between problems and disorders. Psychological psychiatric diagnoses are combinations and clusters of target characteristics/signs. Criteria for valid diagnosis: (1) symptoms and signs observed for a specified duration within certain magnitude and frequency; (2) only valid when given by experts in mental health profession.	Watch the video about severe forms of challenging behaviour. Group discussions about: -What is the difference between difficulties and disorders? - What differences and complementarities between evaluations made by teachers and other technical? Show presentation on "Understanding Challenging Behaviour – Summary" Toolbox N°3.1C
<b>Connection of challenging behaviour with learning difficulties</b>	Links: Usually children with challenging behaviours also show learning difficulties. Most children with learning difficulties display some challenging behaviour very early in their lives. Effects: some of the children with severe challenging behaviour become so frustrated with learning that they give up and act out as a way of dealing with school failure. These children are not learning up to their potential and are behind their peers in reading, writing and/ or in mathematics.	Show presentation on "Understanding Challenging Behaviour – Summary" Toolbox N°3.1C

Topics	Key Ideas	Suggested Activities
<b>Causes of challenging behaviour: Beyond labelling Beyond blaming</b>	Existence of a variety of causes of challenging behaviour (individual experiences-school, family, emotional life, learning experiences and values; pathologies). Probable causes of disruptive and challenging behaviours can be explained within the ecological approach from the work of Bronfenbrenner (1979). The mixture of genetic vulnerabilities and environmental stresses may cause challenging behaviours in children. Some of the target characteristics are transient in nature; some of them are persistent or episodic depending on the balance of risk factors and protective factors. Brain is plastic.	Show presentation on "What are the probable causes of challenging behaviour: Beyond Labelling Beyond Blaming" Toolbox N°3.1D. Group discussions about: - How different sets and behaviours can negatively or positively affect the behaviour and learning of children. Debate on given examples of concrete experiences of teachers. -Protective and risk factors.
<b>Functions of challenging behaviour</b>	challenging behaviour has a function and is continued by the child if the child perceives it as a successful adaptation to the environment. Most common functions are: gain social attention; escaping or avoidance of tasks; access to preferred activities or objects; sensory feedback; demand for power/control over their lives; reduction of excitement and anxiety.	Group reflection: "Are challenging behaviours somehow useful for the child?"
Topics	Key Ideas	Suggested Activities
<b>Assessment and Intervention in challenging behaviour</b>	Assessment and understanding: The description of the episode must be done in terms of observable behaviours Establishing the context of its occurrence is crucial: -Identify relevant environmental factors related to the activation of challenging behaviour -Identify the answers that are given to the challenging behaviour (teachers, peers, parents, community) and their suitability. -Identify the role of challenging behaviour (see Functions of CB). -Gather information about family and social context and perception as they act in dealing with behavioural episode (CB). Intervention: Use proactive solutions -Extinguish the undesirable behaviour of the person at home, school and community. -Increase the skills of parents, teachers and others to deal with challenging behaviours. -Ensure consistency between what the child needs and the adult/teacher can provide. - Enhance teachers and child's competences.	Watch the movie "Impact of a father" Discussion of it and comparison with the impact of a teacher. Group Activity: Construction and partition of solutions to deal with challenging behaviour. Group Activity: Survey of methods used by teachers to deal with inappropriate behaviours and registration of them. Analysis and discussion.

## 2. Analysing and reflecting on the perspectives and roles of teachers' beliefs, attitudes and actions in the face of challenging behaviour

Topics	Key Ideas	Suggested Activities
<b>General perspectives and roles of teachers</b>	<p>The teachers' beliefs influence attitudes and actions on pupils' behaviours and learning: Pygmalion effect</p> <p>There are links between expectations, educative actions and pupils' behavioural and academic results.</p>	<ul style="list-style-type: none"> <li>• Show presentation on "Our Roles as Teachers" Toolbox N°3.2A</li> <li>• Activities for teachers: Role of expectations and their effects on individual behaviour as well group behaviours</li> <li>• "Expectations and Behaviours". Toolbox N°3.2</li> <li>• Activities for teachers to raise awareness about the teacher and his/her work "The teacher as a person and his/her impact on children". Toolbox</li> <li>• Activities for teachers: Discussion about real situations experienced in the context of classroom and its effects: "Good examples of beliefs and teaching practices". Toolbox N°3.4</li> </ul>
<b>What we can and cannot control</b>	<p>Variables which influence pupil achievement are both internal and external.</p> <p>There are factors that teachers can control and cannot control.</p> <ul style="list-style-type: none"> <li>• There are orientations about how to act upon factors that teacher cannot control.</li> <li>• Teachers make difference. There is a positive influence of teachers and their actions.</li> </ul>	<p>Activity for teachers: Group discussion about what teachers can and cannot control.</p>

### 3. Conceptualizing perspectives on challenging behaviour

Topics	Key-Ideas	Suggested Activities
<p><b>Models focused on learning, on the teacher and on the school:</b></p> <p><b>Educational model focused on learning and behaviours (Rogers, Recovery Behaviour, 2003)</b></p>	<p>Focus on what can be worked with the child in the school context.</p> <p>Structures planned by the teacher to provide for the pupil.</p> <p>Work with plans for the challenging behaviour and for the learning of new behaviours.</p>	<ul style="list-style-type: none"> <li>Show PowerPoint "Perspectives on CB". Toolbox N°3.5A</li> <li>Activity for teachers:</li> <li>Reflection and discussion in pairs about the teacher as a person and professional. Toolbox N°3.3 "The teacher as a person and its impact on children".</li> </ul>
<p><b>Teacher-centred model [Whole Brain Behaviour Management (WBBM); Derrington and Goddard, 2008]</b></p>	<p>Take into account the individuality of teachers as persons and professionals.</p> <p>Process and holistic developmental based on a philosophy of empowerment with a focus on individual needs and circumstances of the teacher.</p> <p>Existence of Key-Domains for effective management behaviour.</p> <p>Useful methodologies for improvement of teachers' development: self-dialogue, introspection, meta-cognitive approach and peer coaching.</p>	
<p><b>School Wide Positive Behaviour Supports (SWPBS) Turnbull, A. (2002)</b></p>	<p>There are different levels or systems of positive intervention conducted in schools. The school climate has a role in problem behaviours. It is important to have a system of risk prevention on three levels: universal, classroom and individually.</p>	
Topics	Key-Ideas	Suggested Activities
<p><b>Promotion of competences and strategies of teacher to overcome difficulties</b></p>	<ul style="list-style-type: none"> <li>Focus, actors and levels involved in CB are relevant in the intervention.</li> <li>There are difficulties experienced by the teachers and pupils and ways to overcome these difficulties.</li> <li>Use of meta-cognition strategies as a methodology to become a more effective teacher.</li> </ul>	<ul style="list-style-type: none"> <li>Toolbox N°3.2 Toolbox N°3.3; Toolbox N°3.4</li> </ul>

#### 4. Establishing set for creating positive environment

<p><b>General principles of what a teacher should do</b></p>	<p>Classroom environment conducive to learning for all.                  Creating positive teacher-pupil relationship.                  Creating positive peer relationships:                  Toolbox N°3.6; Toolbox N°3.7; Toolbox N°3.8 and PowerPoint presentations entitled as "establishing set for creating positive classroom environment for all"; "creating positive teacher-student relationship"; "creating positive peer relationships"; can be found on the DVD.</p>	<ul style="list-style-type: none"> <li>• Show the presentation on "Establishing set for creating positive classroom environment for all". Toolbox N°3.6A</li> <li>• Show the presentation on "Creating Positive Peer Relationship". Toolbox N°3.6B</li> <li>• Creating Positive Teacher –Pupil Relationship". Toolbox N°3.7A</li> <li>• Activities for teachers "Influence of Teacher-Pupils Relationships". Toolbox N°3.7</li> <li>Show the presentation PowerPoint "                         <ul style="list-style-type: none"> <li>• Activities for pupils "Pyramid of Friends". Toolbox N°3.6</li> <li>• Group discussion: What do you do to create positive peer relationship in your classroom? Give some specific examples.</li> </ul> </li> </ul>
Topics	Key Ideas	Suggested Activities
<p><b>Establishing Routines</b></p>	<ul style="list-style-type: none"> <li>• Setting the stage: Establishing routines: rules and procedures.</li> <li>• Routine methods and techniques (responses) to be used when the established rules and procedures are violated.</li> </ul>	<ul style="list-style-type: none"> <li>• Show the presentation on "Developing Routines in Classrooms: Rules and Procedures". Toolbox N°3.8A</li> <li>• Show the presentation on "Responding to Violations of Rules and Procedures!" Toolbox N°3.8B</li> <li>• Activity for teachers. Toolbox N°3.8 "Five Steps Method".</li> </ul>

## 5. Developing techniques and strategies: Identifying desirable changes and developing actions based on positive behaviour support and functional behaviour

<b>How to act</b>	<p>Nuclear procedures: Use and adaptation of the same disciplinary practices that are used to manage the behaviours of pupils without challenging behaviour in the classroom. Some specific orientations (e.g., Behaviour Contracts; records).</p> <p>Orientations and Guidelines:</p> <ul style="list-style-type: none"> <li>-Begin to work with a few behaviours at a time and not to overwhelm.</li> <li>-Recognize that behavioural changes take time;</li> <li>-Define success as decrease (over time) in frequency and intensity of targeted behaviours.</li> </ul>	<ul style="list-style-type: none"> <li>• Activities for pupils and teachers:</li> <li>• “Decision Making Guide” Toolbox N°3.10 for pupils</li> <li>• “Surface Management Strategies”. Toolbox N°3.15 for teachers</li> </ul>
<b>Topics</b>	Key Ideas	Suggested Activities
<b>Development of emotional and social skills</b>	<p>The ability of children to manage their emotions and behaviours and to make meaningful friendships is an important prerequisite for school readiness and academic success.</p> <p>It is crucial to teach deliberately skills such as emotional literacy, empathy or perspective-taking, friendship and communication skills, anger-management, interpersonal problem solving, and how to be successful at school.</p>	<ul style="list-style-type: none"> <li>• Show the presentation on “Feuerstein’s Instrumental Enrichment- Basic programme”. Toolbox N°3.9A</li> <li>• Activities for pupils:</li> <li>• Socio-emotional competence training via the Feuerstein’s Instrumental Enrichment- Basic programme. Toolbox N°3.9</li> <li>• Teach Deliberately Basic Social Skills Toolbox N°3.11</li> <li>• Stop, Think and Go. Toolbox N°3.12</li> </ul>
<b>Development of self-regulation and self-control (behaviour, emotional, cognitive and academic)</b>	<p>Development of self-regulation of thoughts, emotions and behaviours in children can be promoted.</p> <p>The teacher should teach pupils to develop self-control in the diverse areas.</p>	<ul style="list-style-type: none"> <li>• Show the presentation on “Developing techniques and strategies for managing pupils with challenging behaviours”. Toolbox N°3.13A</li> <li>• Show the presentation on “The Carrousel of challenging behaviour”. Toolbox N°3.15A</li> <li>• Activities for pupils:</li> <li>• Child’s self-control of thoughts, feelings and actions”. Toolbox N°3.13</li> <li>• “Teaching constructive self-talk: what and how to do it” Toolbox N°3.14</li> <li>• The Carrousel of challenging behaviour Toolbox N°3.15</li> <li>• Your own contribution Toolbox N°3.17</li> </ul>

## Background and Key Concepts

This module is conceptualized through five main subsections. First of all, we will begin addressing challenging behaviour in pupils in order to understand this problem more profoundly. We examine key concepts such as the definition of challenging behaviour in the realm of psychological development, patterns and target characteristics of challenging behaviour, connection between challenging behaviour and learning difficulties. The subsection concludes with assessment and intervention in challenging behaviour. Secondly, we will analyse and reflect on the perspectives and roles of teachers’ beliefs, attitudes and actions in the face of challenging behaviour in the ecology of the school system. Thirdly, we will introduce some perspectives which can be helpful in conceptualizing challenging behaviour. These perspectives are Educational model focused on learning (Recovery Behaviour, Rogers, 2003), a teacher-centred model (Whole Brain Behaviour Management (WBBM), Derrington and Goddard, 2008), and School Wide Positive Behaviour Supports (SWPBS – Turnbull, 2002). Fourthly, we emphasize the importance of creating and maintaining safe, supportive and positive classroom environment that is conducive to learning for all by considering the importance of teacher-pupil as well peer-to-peer relationships. These aspects are linked to Module 2, especially to the section where peer mediation and cooperative learning is discussed. Lastly, we will present ways to *develop techniques and strategies for managing pupils with challenging behaviours* by emphasizing how to act, establish routines and what to do when established rules and procedures are violated, with the emphasis on the development of emotional, social skills as well as self-regulation and self-control in pupils.



## Children's Challenging Behaviour: Teachers' understanding and intervention

Luísa Grácio

Challenging behaviour is an observable behaviour that can affect the environment and often has a negative influence on child and those around. The concept of challenging behaviour (CB) refers to behaviour difficulties or problems that can be displayed by children, teenagers or adults. This concept appears to characterize the behaviour as a challenge instead of labelling people as a problem. From this point of view, challenging behaviours are seen through the view of developmental psychology, and perceived as developmental struggles or delays in social, emotional and academic areas.

The causes of challenging behaviour are diverse, resulting from genetic vulnerabilities and environmental stress (e.g. pathologies, variety of individual, schooling, family experiences, emotional life, learning experiences and values). The probable causes for disruptive and challenging behaviours can be explained through an ecological approach, based on Bronfenbrenner's findings (1979). He considers that several contexts of a child's life can affect him/her at various levels; hence the cause for a problematic behaviour can be related to the child's exposure to negative environments (e.g., home, school, parents and siblings and the interaction occurring in these environments between the child and others, the relationship between the child, the family and school, the parents' workplaces, values and lifestyle).

Challenging behaviours fulfil a function or purpose and are kept by the individual as long as they show themselves to be successful adaptation to the environment. The most common functions include: gaining social attention, escape or avoid tasks, access to favourite activities or objects, obtaining sensory reactions, searching for power and/or control over their lives and diminishing excitement and anxiety.

The pattern for challenging behaviours changes considerably according to the considered target characteristics and the age of individuals. Individuals with challenging behaviours are not all alike and the challenging behaviour of a person is only a visible part of that individual.

With regard to intervention in this area we should focus on the behaviours' target characteristics because they describe the behaviour to change. Target characteristics can be very diverse: lack of attention, impulsivity, aggression, anti-social behaviour or self-injuring actions. Some target characteristics are transitory while others may be persistent or episodic, showing variable gravity.

The presence of several target characteristics simultaneously in a child can increase the risks for disruptive behavioural disorders such as hyperactivity attention deficit disorder, opposition or behaviour disorders. It is no longer about problems but disorders. These are serious forms of problems and their diagnoses are only valid when made by mental health experts. Diagnoses are defined as the combinations and groups of target characteristics/signs that form a wider category of difficulty. In order for a child to be diagnosed, the symptoms and signs should be observed through a specified period of time and show a certain magnitude and frequency.

Children with challenging behaviour are more likely to develop emotional, social and academic difficulties in their growth and these difficulties can appear simultaneously. Such difficulties can also be observed in children with learning difficulties. Many children with challenging behaviours frequently present learning difficulties. These children aren't using their full potential for learning, and lag behind their peers in reading, writing and/or mathematics. Most children with learning difficulties show challenging behaviours earlier ages in their lives. Research shows that 90 per cent of children with severe forms of challenging behaviour have problems in school (Barkley, 1998), which shows the importance of early intervention in this area.

Some children with severe challenging behaviour become so frustrated with learning that they give up and call for attention as a way to deal with academic failure (Bloomquist, 2006).

As we have seen the child's behaviour at school can be affected by different home backgrounds, parenting styles, family dysfunction and structural poverty among others.

Nevertheless, such causes are not inevitable. As accepted for intelligence, behaviour is not fixed. If behaviour is learned, leading to challenging conduct, then children have the potential for "un-learning, and developing new learning – by providing adequate on-going support" (Rogers, 2004:32). Teachers can teach new behaviours to children in order to develop an adequate sense of self and learning and try new relationships at school. To achieve this purpose, it is necessary that teachers spend time with their pupils "teaching alternative patterns of behaviour" (Rogers, 2004:44).

It's important to start by describing the episode from the observable behaviour and to establish the context of its occurrence, as well as to intervene according to what has been observed. Hence, intervention happens in two stages: one for assessment and another for the intervention itself. In the evaluation stage one has to:

- a) Describe the episode from the observable behaviour and establish the context when it occurred;
- b) Identify the role played by the challenging behaviour (understand its function);
- c) Gather information about the family and social context and how the members deal/act regarding the behavioural episode;
- d) Identify environmental factors relevant for the challenging behaviour activation;
- e) Identify the responses provided regarding challenging behaviour (by teachers, colleagues, parents, community) and their adequacy.

When it comes to intervention, it's crucial to begin by ensuring the coherence between the child's needs and what the adult/teacher can offer by following certain guidelines:

- a) Start by working with some behaviours at any given time;
- b) Acknowledge that behavioural changes require time;
- c) Define success as the decrease (through time) of the frequency and intensity of target behaviours;
- d) Keep records on the process;
- e) To deal with challenging behaviour teachers can use the same disciplinary practices they use to deal with other pupils' behaviour;
- f) Behaviour intervention should be made up of appropriate strategies from the development point of view.

Educational intervention can be made through two types of plans: reactive and proactive. Reactive plans describe what the teacher should do and how to react facing a challenging behaviour. Proactive plans, on the other hand, report to what the teacher should do on a daily basis to prevent or minimize challenging behaviour. There are factors beyond our control such as the children's lives and variables influencing academic success. The variables influencing pupils' success are both internal and external to the child. Care must be taken so that our explanations for the children's behaviour do not serve as excuses (e.g. the child can't change and there's nothing the school can do). So don't blame the child, the family or yourself. We cannot predict the pupils' future, but we can positively influence them. It is also important to account for the desirability of extinguishing undesirable behaviour, not only at school, but also at home and the community.

See also: Toolbox N°3.1 and PowerPoint presentations entitled as "understanding behaviours in the realm of psychological development", "patterns and target characteristics of children with challenging behaviour" can be found on the DVD.

## References

- Bloomquist, M. L. (2006) *Skills training for children with behaviour problems (Ed. rev.)* New York: The Guilford Press.
- Bronfenbrenner, U. (1979) *The Ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
- Rogers, B. (2004) *How to Manage Children's Challenging Behaviours*. London: Sage.

## Ecological perspective on challenging behaviour

Z. Hande Sart

As we discussed in our former text entitled as "Children's Challenging Behaviour: Teachers' Understanding and Intervention", a child's behaviour can be conceptualized as developmental struggles in the realm of psychological development [(gradual and orderly accumulation of abilities and skills in self-control, social, emotional and academic areas, Bloomquist, 2006). Some of these struggles may have negative influences on the child as well on others around the child. During these struggles, a child may show inattention, hyperactivity, impulsivity, aggression such as hitting, kicking, and antisocial behaviours such as throwing objects to others. Some of these struggles are transient in nature, some are persistent or episodic (Sameroff, 2009). Some of these struggles may increase the risks for disruptive behavioural disorders related with acting out behaviours such as Attention-Deficit/Hyperactivity Disorder (ADHD), Oppositional Defiant Disorder (ODD), Conduct Disorder (CD). Struggles that are transient or persistent or episodic cannot be explained in isolation nor only by events and/or conditions immediately surrounding the individual, especially by knowing the fact that we all surrounded by the certain systems that involve interactions. Therefore, in this module, while understanding the variety of causes of CB, we want to introduce the ecological approach from the work of Urie Bronfenbrenner (1979). His theory seen as an approach to human development in which the developing person, the environment, and especially the evolving interaction between these two are taken into account.

Bronfenbrenner (1979) defines development as "a lasting change in the way in which a person perceives and deals with his environment" (p. 3). He views the environment as a series of nested structures, each contained within the next. These structures include the microsystem, mesosystem, exosystem, and macrosystem. The innermost level of the environment is the microsystem. Bronfenbrenner (1979) defines the microsystem as "an immediate setting containing the developing person" (p. 3). This setting is "a place where people can readily engage in face-to-face interaction" such as the home, a day care centre, or school. The second level of the environment is the mesosystem, which "comprises the interrelations among two or more settings in which the developing person actively participates

(such as, for a child, the relations among home, school, and neighbourhood peer group, or for an adult, among family, work, and social life)" (Bronfenbrenner, 1979: 25).

So let's start with teachers. According to Bronfenbrenner, they are in the microsystem of children and their interrelations are in the meso-system. For example, the teacher's role in understanding the causes of CB in pupils has a privileged role in the classroom where pupils with challenging behaviour will be able to form mutual communication with "other" children. If we accept that classrooms are microcosm of our society, it should be realized that mutual communication in the classroom will be effective in diminishing the factors of exclusion. The third level of the environment is the exosystem in Bronfenbrenner's theory. The exosystem refers to "one or more settings that do not involve the developing person as an active participant, but in which events occur that affect, or are affected by, what happens in the setting containing the developing person" (Bronfenbrenner, 1979:25). Examples of this system may include the parents' work place, legislations and activities in the community. The outmost level of the environment is the macrosystem. This system denotes "consistencies, in the form and content of lower-order systems (micro-, meso-, and exo-), that exist, or could exist, at the level of the subculture or the culture as a whole, along with any belief systems or ideology underlying such consistencies" (Bronfenbrenner, 1979:26). In the educational system, the ecological levels may include individual, class, school, community, and society. Focus on the individual level is as important as the focus on other levels in the system. Of course, the pattern of challenging behaviour varies considerably depending on the target characteristics or struggles being considered at the phase of assessment and intervention, as well as the age of the child during this phase. But this is not enough for assessment needed to plan effective interventions. Therefore starting from the child's genetic make-up to stressors in the immediate environment, which include home, school, and neighbourhoods moulded by culture, values, lifestyles and laws, should be the focus, while understanding the functions as well as causes of challenging behaviour in children. Figure 4 Adapted from Bronfenbrenner's systems theory. below shows a series of nested structures, each contained within the next while having an ecological perspective on CB.

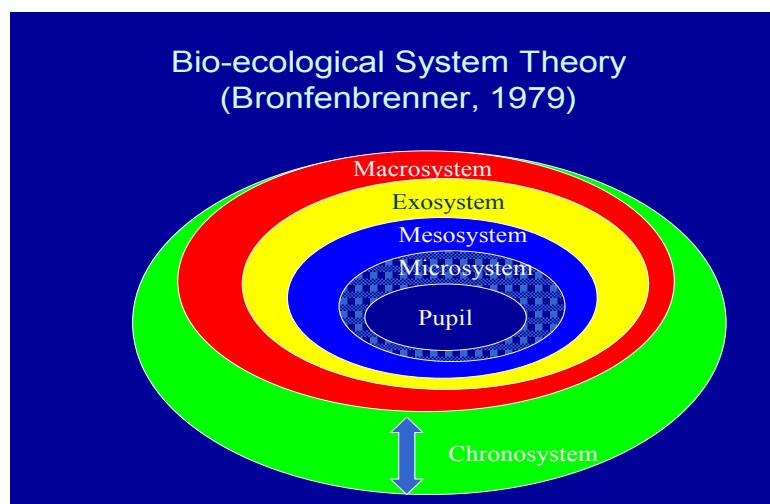


Figure 4 Adapted from Bronfenbrenner's systems theory.

See also: Toolbox N°3.1 and PowerPoint presentations entitled as "probable causes of CB", "summary for CB" can be found on the DVD.

## References

- Bloomquist, M. L. (2006) *Skills training for children with behaviour problems (Ed. rev.)*. New York: The Guilford Press.
- Bronfenbrenner, U. (1979) *The Ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
- Sameroff, A. J. (2009) Conceptual issues in studying the development of self-regulation. In S. L. Olson and A. J. Sameroff (Eds.). *Regulatory Processes in the Development of Behaviour Problems: Biological, Behavioural, and Social-Ecological Perspectives*. Cambridge: Cambridge University Press.

## General Perspectives on Behaviour Management: School, learning and teachers

Elisa Chaleta, Luísa Grácio; Maria José Saragoça

There are three important models about challenging behaviours (CB), their understanding and ways of dealing with them. These models are focusing on school (e.g. School Wide Positive Behaviour Supports – SWPBS, Turnbull, 2002), on learning (e.g. Rogers, 2003; 2004) and on the teacher (e.g. Whole Brain Behaviour Management – WBBM, Derrington and Goddard, 2008). In this text we will address these two last models.

The Educational model (programme) focusing on learning and behaviour (Rogers, 2003, 2004) recognizes on the one hand the multiple solicitations addressed to teachers as well as the difficulties they face. In this sense, it advocates the existence of support for the teachers themselves. On the other hand, it emphasizes the behaviour and learning skills that children should learn. In order to do so, it focuses on the importance of the construction of a planned teaching structure by the teacher directed towards the development of positive behaviour and learning behaviours. According to Rogers (2003:19) the more important features of the programme are:

1. Early intervention support for the pupil as this increases the likelihood of the targeted behaviours being generalized;
2. Provision of a framework for structural and emotional support of the class teacher;
3. Protection of the due rights of all pupils to feel safe, to learn and to have fair treatment;
4. Utilization of pupil peers through classroom meetings and peer support;
5. Emphasis on the whole-school nature of the programme.

Teaching of pro-social skills and appropriate behaviours are the primary goals. That involves the determination of what behaviours need to be targeted. Therefore the teacher should observe the frequency, generality, durability and intensity of the behaviours that are problematic and should specify them. Rogers (2003) considers these skills must be modelled and represented in pictorial form so that the pupils can rehearse them.

Teaching occurs within a structure where several methodologies are planned (e.g. mirroring, one-to-one sessions, peer support). The intervention plans aiming at the support for learning new behaviours should be simple, achievable, workable and address a specific behaviour at a time. As the child progresses the performance objectives, the targets for intervention will also change. This requires a continuous or dynamic assessment of the child's progress by the teacher.

An amount of time should be devoted for learning social and behavioural skills. Through the whole process the teacher should act as a "tutor", being aware that individual sessions can stigmatize the child and that they should strengthen the child's participation in the classroom.

Starting from the notion that these children have a right to learn and participate in the school context, we must also recognize that they can be a serious challenge to the teacher. Hence the intervention requires a team to support the teacher and focus on what can be worked with the child in school context. In this model, the teacher's responsibility for the pupils widens to the whole school space, going beyond the classroom (Rogers, 2004).

In summary, this model focused on learning considers the need of support to the pupil and to the teacher and aims to change the challenging behaviour through a process that intervenes in a markedly educational and non-punitive way.

The Teacher-centred model (WBBM-Whole Brain Behaviour Management, Derrington and Goddard, 2008) is based on the socio-constructivist perspective and prescribes a holistic empowerment and process of development of the teacher focused on its individual needs and circumstances. The teacher is as a central element in the process (not the child, contrary to previous models). One of its principles is that teachers aren't a homogeneous group with identical personal and professional needs. The teacher, as an individual, is recognized as playing a key role to the successful management of child's behaviour. This management depends on the organization of the teacher's internal models that include perceptions, beliefs and feelings that influence the relationship and behaviour management in the classroom (Derrington and Goddard, 2008).

This model implies a development process of the teacher in the long term so perceptions and beliefs can be examined, challenged and transformed. Therefore it proposes a profound reflexion on their beliefs, feelings and behaviours, the understanding of the complexity of behaviour management, the identification of the changes they need to fulfil, the exploration of their skills spectrum for an effective behaviour management and the development of higher personal responsibility in the creation of a harmonious environment in the classroom (Derrington and Goddard, 2008).

The contributions of neuropsychology mark a new vision on the interconnection between cognition and emotion in the construc-

tion of human thought and are present in this perspective (Damásio, 1994; 2003). The teacher's thoughts, feelings and behaviours are interconnected and constitute key elements that have a huge impact in the management of pupils' behaviours. Learning techniques and strategies aren't effective enough if difficulties pertaining relational conflicts, stress and anxiety remain in the classroom. These difficulties can result from a lack of trust in oneself or from the perpetuation of maladjusted habits and methods that make teachers vulnerable to the class and generate unsatisfactory results. The teachers' awareness of their way of thinking, feeling and acting and the subsequent change can be developed based on the meta-cognition model that involves the cognitive components, feelings and motivation (Efklides, 2006).

Each teacher has an individual profile with strengths and potential for development. Those showing higher expectations for their pupils' behaviour and success are those that, usually, achieve better results (Derrington and Goddard, 2008).

Generally, the methodology privileged in this model requires self-reflection and self-dialogue from the teacher in order to become more aware of herself/himself and her/his skills from a meta-cognitive perspective. Also peer coaching is used to broaden the teacher's skills and to implement changes through an equitable and reciprocal relationship.

See also: Toolbox N°3.2 and PowerPoint presentation entitled as "our roles as teachers" can be found on the DVD. Toolbox N°3.3; Toolbox N°3.4

## References

- Damásio, A. (1994) *Descartes' error: emotion, reason and the human brain*. London: Pan Macmillan.
- Damásio, A. (2003) *Looking for Spinoza – joy, sorrow and the feeling brain*. New York: Harcourt Brace.
- Derrington, C. and Goddard, H. (2008) *Whole-brain" behaviour management in the classroom. Every piece of the puzzle*. New York: Routledge.
- Rogers, B (2003) *Behaviour recovery*. Melbourne: ACER Press.
- Rogers, B. (Ed.) (2004) *How to manage children 's challenging behaviours*. London: Sage.

## Prevention of Risks: School-wide positive behaviour<sup>6</sup>

Z. Hande Sart

School-wide Behaviour Support is a framework for designing and applying intervention strategies which are reflective, proactive and preventive rather than reactive strategies that depend mainly on punishments. These punishments fail to teach the expected behaviours (Sugai and Horner; 2002) and are unsuccessful in reducing CB. Reactive strategies, although in some cases can be suitable, entails several limitations and dangers. For instance, there is a possibility that, after applying reactive strategies, more aversive reactions from pupils who are our target may be observed as well.

Therefore, we need a set of strategies that establish regular and predictable environments that are conducive to learning for all: to create systems that acknowledge what pupils accomplish rather than what pupil cannot accomplish; to develop an environment which fosters emotional, social development of pupil as well as their academic development.

While designing intervention programmes that increase pupil success, we should focus on three types of interventions namely: (1) universal interventions which mean targeting all pupils which are preventive and proactive (80-100 per cent); (2) targeted groups interventions targeting pupils at risk (5-10 per cent); and (3) intensive and individual interventions targeting individual pupil (1-5 per cent).

Depending on the nature of problems as well as the intensity and frequency, we will choose at what level we will intervene. However, in this model we strongly believe in the importance of preventive approaches, even in the face of challenging behaviours. Pupils at risk will show the early signs of the risks before these risks are escalated. If we see these early signs as well as regardless of any early signs, if we find universal approaches, we are sure that every pupil can benefit. The figure below shows the targeted pupils (all, some students at risk, or individuals) in each level of intervention starting with universal intervention to intensive, individual intervention in the context of academic systems and behavioural systems. Therefore, while designing school-wide systems for pupils' success, preventive and proactive ones targeting all pupils will be more efficient and effective.

Designing School-Wide Systems for Student Success in Academic as well as Behavioural Domains

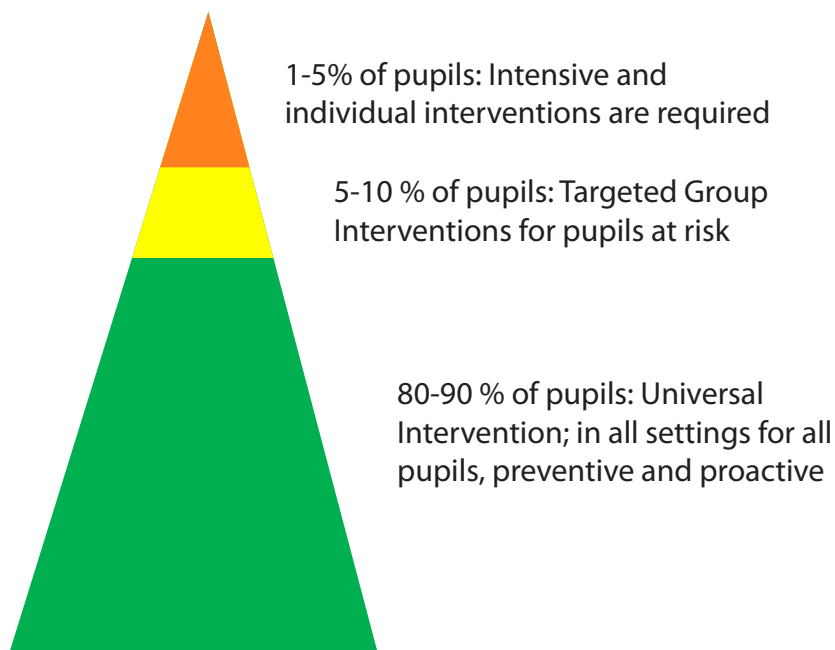


Figure 5 is adapted from: *School-wide Behaviour Support: Proactive Strategies for Creating Effective Learning Environments* by Robert E. March, Ph.D. Kimberli Breen, MS, CAS. Retrieved from: [http://schools.nyc.gov/documents/d75/pbs/EBS\\_Overview.pdf](http://schools.nyc.gov/documents/d75/pbs/EBS_Overview.pdf)

See also: Toolbox N°3.5; and PowerPoint presentation entitled as "perspectives on CB" can be found on the DVD.

<sup>6</sup> Shortened from "School-wide Behaviour Support: Proactive Strategies for Creating Effective Learning Environments" by Robert E. March, Ph.D. Kimberli Breen, MS, CAS



## References

- Sugai, G., and Horner, R.H. (2002) Introduction to the special series on positive behaviour support in schools. *Journal of Emotional and Behavioural Disorders*, 10, 130-141.
- Turnbull, A. (2002) A blueprint for school-wide positive behavioural support: Implementation of three components. *Exceptional Children*, 63 (3), 377-402.

## Creating Positive and Inclusive Classroom Environment Conducive to Learning

Ayşe Caner

As McEwan (2000) rightly asserted "Inclusive and welcoming management and curricular practices are a necessity. They are the most powerful means by which to ensure that all pupils have an equal opportunity to be successful regardless of the languages they speak, the beliefs they hold, the disabilities that challenge them, their gender, or the colour of their skin" (p. vii). A significant body of research indicates that when pupils feel safe, known, and valued, they perform better and behave more responsibly (Jonson and Jonson, 2010). Therefore, it is indispensable for teachers to create a safe, supportive, positive and inclusive classroom environment that facilitates social, emotional and academic development of all pupils.

Creating positive and supportive teacher-pupil relationship and peer relationship is a must, and it is a prerequisite of establishing and maintaining such environment. Importance of positive teacher-pupil relationship on pupils' academic achievement, motivation, school attitude, self-concept, has been widely acknowledged in the literature. Therefore, to create positive relationships with their students, effective teachers should know what to do.

Furthermore, the quality of teacher-pupil relationship also influences the quality of peer relationship, which is also vital for creating safe, caring and supportive classroom environment. Hughes, Cavell and Wilson (2001) claim that peers' liking for and perception of their friends is based, in part, on their observations of teacher-pupil interactions. Teachers, then, should not only work on developing positive relationship with their pupils, but also extend extra effort to create positive peer relationships in inclusive classrooms.

As Jones and Jones (2010) state "Positive peer relationships provide a framework for the development of lifelong social skills and positive self-esteem" (p. 100). Based on the research findings available in the literature, Jones and Jones further report that primary school age pupils' academic aspirations and performance, feelings and behaviours are significantly influenced by their peers. Pupil achievement is also directly affected by peer relations through cooperative learning, and research indicates that cooperative learning can also play an important role "in establishing an equitable climate for learning" (McEwan, 2000:200). Therefore, teachers who are willing to create such a positive and supportive classroom community should implement activities, methods and strategies for creating positive and supportive peer relationships in their classrooms.

Quality of classroom environment, largely based on the positive and supportive relationships, will certainly create safe, caring and supportive classroom climate that is conducive to learning. Yet, creating such relationships is not enough. Teachers should also consider establishing and maintaining routines in their classrooms that will minimize if not prevent non-productive behaviour and contribute to improve productive and responsible behaviour and learning of all pupils (Jones and Jones, 2000). One of the major reasons for behaviour problems is the absence of classroom routines that can prevent major distractions and interruptions in the classroom. Then, the key to create a well-managed and organized classroom, that is safe, positive and conducive to learning, is to develop and teach the rules and routines in the first weeks of the school year. Teaching pupils how to act responsibly and how to behave effectively and productively in and out of the classroom, by helping them recognize and monitor their own behaviour, is important. There is no doubt that pupils need limits and structure, yet as DiGiulio (2000) states "Pupils hear and internalize teachers' expectations not through dictates and mandates, but by the virtue of the communication and discussions of basic understandings" (p. viii). Such approach requires involving pupils in the process of developing rules and procedures by explaining the rationale behind them. After establishing the rules and procedures, teachers should monitor, review and reteach the rules and procedures patiently, persistently as well as consistently.

All these efforts by teachers to create a safe, supportive and positive classroom environment that fosters social, emotional and academic development of all pupil, do not unfortunately prevent and eliminate some unproductive and disruptive behaviours of pupils. Some pupils may still violate the rules and procedures and rights of other pupils. It will be crucial then that effective teachers to have a rich repertoire in dealing with general methods of responding to disruptive and defiant pupil behaviour. If the goal of a teacher is to help pupils to act more productively and responsibly, then punishment is not an effective method for accomplishing the goal. Punitive responses are generally ineffective in generating desired pupil behaviour because they do not teach pupils alternative ways of proper behaviour and do not meet pupils who need support and assistance in developing new skills (Jones and Jones, 2010). Thus, interventions like problem solving that help pupils alter their unproductive behaviour by acquiring new skills should also be used.

Overall, establishing and maintaining a safe, caring, supportive and inclusive classroom environment that is conducive to social, emotional and academic development of all pupils regardless of their diverse background is the ultimate goal of effective teachers. Creating positive relationships, rules and procedures, and using intervention strategies that help pupils develop productive and pupil behaviour are the major keys of accomplishing the ultimate goal.

See also: Toolbox N°3.6; Toolbox N°3.7; Toolbox N°3.8 and PowerPoint presentations entitled as “establishing set for creating positive classroom environment for all”; “creating positive teacher-student relationship”; “creating positive peer relationships”; development of routines in classrooms”; responding to violations and rules and procedures”; developing techniques and strategies for managing students with CB can be found on the DVD.

## References

- Burden, P. (1995) *Classroom management and discipline: Methods to Facilitate cooperation and instruction*. White Plains, NY: Longman.
- DiGiulio, R. (2000) *Positive classroom management*. Thousand Oaks, CA: Corwin Press Inc.
- Hughes, J.N., Cavel, T.A., Willson, V., (2001) Further support for the developmental significance of the quality of the teacher-student relationship. *Journal of Psychology*, 39(4), 289-301.
- Jones, F.V., and Jones, S.L. (2010) *Comprehensive classroom management*. Boston: Allyn and Bacon.
- McEwan, B. (2000) *The art of classroom management*. Upper Saddle River, NJ: Merrill.

## Development of social and emotional competences

Adelinda Candeias

Social and emotional competence is a child’s ability to experience, regulate and express emotions, to form close and secure interpersonal relationships, and to explore his or her environment and learn, all in the context of family, community, and culture. It involves skills such as self-confidence, curiosity, motivation, persistence and self-control which affect growth, trust and future learning (Ford, 1995).

### Importance of Social and Emotional Development for Learning and School Success

The earliest years lay the foundation for future success in school and beyond. Children who do not attain basic social and emotional milestones do not do well in school. These children are at a higher risk for learning and behavioural problems.

Key Social and emotional skills children need:

- Confidence;
- Capacity to develop good relationships with peers and adults;
- Concentration and persistence on challenging tasks;
- Ability to effectively communicate emotions;
- Ability to listen to instructions and be attentive;
- Ability to solve social problems.

### How to assess that?

To understand social and emotional development is important that teachers, parents and psychologists know how to identify and assess social and emotional competences. To identify competences we need tools that identify real world behaviour based in real observation from different observers. This is the only way to improve ecological and functional characterization from social and emotional competences in real situations. For that we propose Social Competence Assessment Form developed for Portugal in 2001-2005 by Candeias and Cols, and based in the former tool, Social Competence Nomination Form, from Ford (1982).

The instrument consists of six hypothetical social events that require a wide range of behavioural and cognitive skills. Each event is accompanied by a list with the names of all classmates. The children are asked to name three other children in their class, for each situation, which is most relevant regarding the targets specified in each situation. After making the appointments, the subjects are asked to assess their own competence in that situation and how to cope with that complex situation. The ratings are expressed on a five-point scale from very good to poor. Teachers and parents also use this scale to rate the effectiveness of pupils in behavioural situations. For each set of results an average is obtained in the six situations in order to obtain an overall index of social competence. So, we could have one index of social and emotional competence based on a panoramic perspective (360 degree view), from the child himself, and his/her peers, teacher and parents.

### How to include social and emotional contents in the curricula?

In the first place that requires that the educational institutions focus is on the educational process instead of focusing on results.



Referring to Sternberg's and Subotnik's (2006) book *Optimizing pupil success in schools with the other three R's: Reasoning, resilience, and responsibility*, we need to assume that reasoning, resilience, and responsibility can promote achievement and the realization of full academic potential, especially for pupils who are labelled as under-performers. Traditionally we are familiarized with the first three R's: *reading*, *'riting*, and *'rithmetic*, but we should put the focus on the other three: *reasoning*, *resilience*, and *responsibility*. The latter three R's complement and enhance the first three: It's not either/or, but rather, both/and (Sternberg, 2008).

### How to Teach for the Other 3 R's (Sternberg, 2008)

1. Emphasize excellence for all—not just those at the top, bottom, or middle of the distribution—and recognize diverse forms of excellence.
2. Provide pupils with opportunities to learn through multiple modalities.
3. Value subject matter not only as important in its own right but also as a vehicle for teaching pupils to think critically.
4. Value creative thinking applied to a knowledge base, recognizing that knowledge forms the backbone for creativity.
5. Teach pupils to apply their learning to practical, real-world problems.
6. Promote pupils' *dialogical thinking*—the ability to understand things from multiple viewpoints and to appreciate diversity.
7. Promote pupils' *dialectical thinking*—the understanding that what is "true" now may not be true in the future and may not have been true in the past.
8. Teach pupils to take personal responsibility for mistakes and learn from them.
9. Teach pupils to care about people other than themselves and to think about the effects of their actions on others and on institutions, both in the present and in the future.
10. Teach pupils to use their knowledge ethically, promoting universal values like sincerity, integrity, honesty, reciprocity, and compassion.

See also: Toolbox N°3.6 and PowerPoint presentations entitled as "establishing set for creating positive classroom environment for all"; "creating positive peer relationships" Toolbox N°3.7; and PowerPoint presentations entitled as "creating positive teacher-student relationship"; Toolbox N°3.8 and PowerPoint presentations entitled as "development of routines in classrooms"; responding to violations and rules and procedures" can be found on the DVD.

### References

- Candeias, A. A. and Almeida, L. S. (2005) Competência social: A sua avaliação em contextos de desenvolvimento e educação. *Revista de Psicologia, Educação e Cultura*, 2 (9), 359-378.
- Candeias, A. A. (2001) *Inteligência Social: Estudos de conceptualização e operacionalização do construto*. Tese de Doutoramento (Documento policopiado). Évora: Universidade de Évora.
- Ford, M. (1982) Social cognition and social competence in adolescence. *Developmental Psychology*, 18 (3), 323-340.
- Ford, M. (1995) Intelligence and personality in social behaviour. In D. Saklofske and M. Zeidner (Eds.), *International handbook of personality and intelligence* (pp. 125-140). New York: Plenum Press
- Feuerstein, R., Feuerstein, R.S., Falik, L., Rand, Y. (2003), *Creating and enhancing cognitive modifiability. The Feuerstein Instrumental Enrichment Programme*, Jerusalem: ICELP Press
- Sternberg, R. J. and Subotnik, R. F. (Eds.). (2006). *Optimizing student success in schools with the other three R's: Reasoning, resilience, and responsibility*. Greenwich, CT: Information Age.

## Development of Self-Regulation and Self Control as a Way to Prevent and Overcome Challenging Behaviour

Luísa Grácio

Throughout the development process, children develop self-regulation mechanisms concerning thoughts, affections and action, as well as social norms. Hence, the social environment can change the development of these mechanisms in children. Self-regulation implies will (volition), i.e., the voluntary control of one's actions, both internal and external suffering both physiological and neurological influences, such as the ones originated from the children's experiences in its environment. The knowledge of the brain's plasticity brings focus on the role played by the children's experiences and teaching in its self-regulation processes. Aspects such as thoughts, impulses, attention, effort spent, strategies used to learn, expression of emotions and general behaviour are influenced by the regulation and self-control the child has or hasn't developed.

It's essential for the teacher to support children in learning to regulate their thoughts, emotions and behaviours in an adaptive way, recognizing it has the same importance as academic subjects. Concerning challenging behaviours, it's essential to help and promote the development of self-control skills because these will work as a break, allowing the child to halt the inadequate reaction or behaviour.

Self-control evolves through developmental stages and differs from child to child. Generally, up to the age of two the child develops the regulation to maintain the proximity to the parents and to gain answers to its needs. From two to five years old appears the self-control of potentially dangerous behaviour. From six to eleven years the child becomes capable of controlling behaviours, feelings and impulses. This fact makes this the ideal stage to work on these aspects. Lastly, in adolescence, the control on the internal world according to the environmental constraints or individual plans or projects is acquired.

Self-control is complex because it implies the following skills: thinking, planning and organizing; separating feelings and thoughts; considering alternative options and persist when faced with frustration or boredom. Why are these skills so important to develop, and what is their connection with the prevention or action of challenging behaviour? Because their promotion allows the child to:

- i) control its emotions and thought;
- ii) choose well and decide when and how to express its feelings;
- iii) think, talk and act considering consequences (which implies being able to stop, think and plan an appropriate response instead of acting impulsive and inappropriately);
- iv) adapt and being flexible when dealing with different situations.

Some of the problems of the lack of self-control are related to the impulsiveness that makes the child act without thinking or planning its action. This kind of behaviour affects not only academic performance but also hinders relationships with others. Self-control difficulties can show different forms: impulsiveness, difficulty in the development of tasks by order or sequence, answering questions without thinking first, lack of attention, easy distraction, disturbance of others, difficulty in remaining seated or calm, hyperactivity or disruptive behaviour.

Behaviour control is a developmental continuum that goes from external control to an internal control. The existence of an external locus of control is shown when children don't see themselves as responsible for their behaviour, blaming other for their failures, considering their successes as owed to external aspects. An internal locus of control exists when the child considers itself responsible for its behaviour, blaming itself for its failures and attributes its successes to its effort and performance.

The teacher can promote the development of self-control, helping children to develop the ability to manage and control their feelings and behaviour, creating specific opportunities for these learning. When faced with under developed self-control and self-regulation skills or less adequate behaviours it is important to:

- i. Promote moments of pause and help the child assess the issue or problem, i.e., think before acting.
- ii. Explore different forms of answer, anticipating possible consequences and creating the opportunities for choice and decision making. Help the child to accept the responsibility for its actions and consequences. Having the opportunities to choose and decide helps children feel they control their own conduct.
- iii. Promote independence and autonomy. Create opportunities for the child to explore its environment, decide, accepts responsibilities and deal with consequences.
- iv. Help delaying immediate gratification. When using the rule "not now" one should identify what the child would like to do but can't.

- v. Teach and encourage to plan behaviour. The teacher should help the child to describe behaviour, visualize and describe the several stages and method needed, gather the necessary resources, complete the stages and verify the results obtained, comparing them to the initial goal.
- vi. Teach and fulfil self-instruction tasks. Teach to think out loud. The teacher fulfils the task saying loud what he is doing. Afterwards the pupil fulfils the tasks saying loud the instructions. On a second phase the pupil says quietly the instructions as he fulfils the task. Finally, in a last phase the child only uses the internal discourse.
- vii. Help developing a positive thinking. Teach the child that he can thing differently and positively.
- viii. Teach the child to attribute in an internal and controllable way what happens. Increase internal control locus and reduce external. In order to do so, it's crucial to help the child to understand he doesn't need having anyone to blame for his bad results, and that through its action and efforts, with help and support from the teacher, he can achieve good results.

In short, for the teacher to effectively help the child to develop self-regulation and self-control of his/her behaviours, the teacher should constitute an example in that domain, give positive and consistent feedbacks on what is acceptable/unacceptable and create a structure and routine that facilitated the child's adaptation to an environment intended to be balanced and harmonious.

See also: Toolbox N°3.10; Toolbox N°3.11; Toolbox N°3.12; Toolbox N°3.13 and PowerPoint presentations entitled as "Developing techniques and strategies for managing students with CB" can be found on the DVD; Toolbox N°3.14; Toolbox N°3.15; Toolbox N°3.16 and PowerPoint presentations entitled as " carousel of challenging behaviour"; Toolbox N°3.17 for contributions.

## References


- Moreira, M. (2004) *Ser professor: Competências básicas I. Comunicação, consciência corporal, disciplina, autocontrolo e auto-estima*. Porto: Porto Editora
- Vohs, K.D. and Baumeister, R.F. (Eds.) (2010). *Handbook of self-regulation. research, theory and applications*. New York: Guilford Press.

## How to train teachers in this module

<b>Awareness raising activities</b>	Activities and materials mentioned in the Toolbox offer a wealth of possibilities; one has to choose the most relevant. You can also adapt or create new ones.
<b>Activities tailored to define CB and prevent CB</b>	The activities and materials mentioned here will provide examples as well as strategies and skills necessary to create a safe and a welcoming school environment that is preventive for CB and is conducive to learning for all.
<b>Small group discussion Reflective methods</b>	Discussion, sharing from experiences and reflections. Reflective methods are promoted during the training. More opportunities should be created for learning through activities.
<b>Looking at examples and discussion</b>	Teachers have a lot of experiences and practices that they can share with each other and relate to the knowledge discussed here. Through examples and discussion teachers can understand better the functioning of CB and try new ways of dealing with pupils with CB.
<b>Presentations</b>	To increase knowledge, presentations can be beneficial.
<b>Demos</b>	Show videos for analysis, discussion and reflection.
<b>Adapting learning materials</b>	Improving educational responses requires not only the introduction of new practices and activities but also for the enrichment and development of existing practices, activities and materials.

## Sources for this module

 Video materials	
Disruptive Behaviours	ADHD Simulation <a href="http://www.youtube.com/watch?v=oCbrQp3Mlwca&amp;feature=related">http://www.youtube.com/watch?v=oCbrQp3Mlwca&amp;feature=related</a>
Impact of a Father	<a href="http://www.youtube.com/watch?v=TPn3ULrTQAY">http://www.youtube.com/watch?v=TPn3ULrTQAY</a>
Creating a Positive Learning Environment	<a href="http://www.youtube.com/watch?v=lisjQEhoZYc">http://www.youtube.com/watch?v=lisjQEhoZYc</a>
Designing Effective Learning Environments	<a href="http://www.youtube.com/watch?v=e4pyVblOTOY">http://www.youtube.com/watch?v=e4pyVblOTOY</a>
Positive Discipline Strategies	Positive Discipline Strategies Yield Quick Results <a href="http://www.youtube.com/watch?v=K5kETSAn0j8">http://www.youtube.com/watch?v=K5kETSAn0j8</a> Dealing with challenging behaviours <a href="http://www.youtube.com/watch?v=e1Ak0oAOAuk">http://www.youtube.com/watch?v=e1Ak0oAOAuk</a> How to Manage Disruptive Behaviour in Inclusive Classroom: <a href="http://www.teachervision.fen.com/classroom-discipline/resource/2943.html">http://www.teachervision.fen.com/classroom-discipline/resource/2943.html</a>
Surface Management Strategies	<a href="http://iris.peabody.vanderbilt.edu/parmod/par05c_surfacemanag.htm">http://iris.peabody.vanderbilt.edu/parmod/par05c_surfacemanag.htm</a>
The Power of Expectations	<a href="http://www.youtube.com/watch?v=aYxO7XrOZB8">http://www.youtube.com/watch?v=aYxO7XrOZB8</a>
Classroom Expectations	<a href="http://www.youtube.com/watch?v=sY1Z4XI-NWw">http://www.youtube.com/watch?v=sY1Z4XI-NWw</a>
ABCNews – What Makes Great Teachers – 02-26-2010.ASF 3:22	<a href="http://www.youtube.com/watch?v=7bIQ4-3XSxU&amp;feature=related">http://www.youtube.com/watch?v=7bIQ4-3XSxU&amp;feature=related</a>
What Great Teachers Do Differently: Part One	<a href="http://www.youtube.com/watch?v=VXCl2fMsdTU">http://www.youtube.com/watch?v=VXCl2fMsdTU</a>
What Great Teachers Do Differently: Part Two	<a href="http://www.youtube.com/watch?v=IWxwziQEa8w&amp;feature=relmfu">http://www.youtube.com/watch?v=IWxwziQEa8w&amp;feature=relmfu</a>

Effective Teacher: Professional Skills and Abilities Video	<a href="http://www.youtube.com/watch?v=jC3D7O-ByLEandfeature=related">http://www.youtube.com/watch?v=jC3D7O-ByLEandfeature=related</a>
Teaching Social Skills in Middle School	<a href="http://www.youtube.com/watch?v=6NGrzKLu6rl">http://www.youtube.com/watch?v=6NGrzKLu6rl</a>
Teaching Social Skills to ASD Children and Teens Using "Friendly Actions"	<a href="http://www.youtube.com/watch?v=-ll-rbkRbv4">http://www.youtube.com/watch?v=-ll-rbkRbv4</a>
Behaviour – Classroom Rules and Procedures	<a href="http://www.youtube.com/watch?v=5qTElCo5Rog">http://www.youtube.com/watch?v=5qTElCo5Rog</a>
Bill Rogers – Cracking the Challenging Class (Programme 2)	<a href="http://www.youtube.com/watch?v=WKfZgm4k_jEandfeature=relmfu">http://www.youtube.com/watch?v=WKfZgm4k_jEandfeature=relmfu</a>
Stanley Teaches Alpie to Stay Under Control	<a href="http://www.youtube.com/watch?v=aOrJ4_028Xw">http://www.youtube.com/watch?v=aOrJ4_028Xw</a>
Self – Regulation and Kindergarten	<a href="http://www.youtube.com/watch?v=wJRtbcChy0Yandfeature=related">http://www.youtube.com/watch?v=wJRtbcChy0Yandfeature=related</a>
Self-regulation – Stickman Struggles with Anger	<a href="http://www.youtube.com/watch?v=kv45507sWtEandfeature=related">http://www.youtube.com/watch?v=kv45507sWtEandfeature=related</a>
A Brief Message About Self-Control. mp4	<a href="http://www.youtube.com/watch?v=VYL5bJwpH0gandfeature=related">http://www.youtube.com/watch?v=VYL5bJwpH0gandfeature=related</a>
My Child Failed Now What? – How to Improve Grades	<a href="http://www.youtube.com/watch?v=7VzkKLVtn8w">http://www.youtube.com/watch?v=7VzkKLVtn8w</a>
Positive Attitude is Everything – Very Funny Attitude Video – Inspirational	<a href="http://www.youtube.com/watch?v=pTgOLLmTQl0andfeature=related">http://www.youtube.com/watch?v=pTgOLLmTQl0andfeature=related</a>
Shad Helmstetter – "The Story of Self-Talk"	<a href="http://www.youtube.com/watch?v=rvzfnm9uk-0">http://www.youtube.com/watch?v=rvzfnm9uk-0</a>
Ruth Miskin – Powerful Behaviour Management – Oxford School Improvement	<a href="http://www.youtube.com/watch?v=ZIPGEtbPA-0andfeature=related">http://www.youtube.com/watch?v=ZIPGEtbPA-0andfeature=related</a>
	<b>Books, Chapters and Articles</b>
Bloomquist, M. L. (2006)	Skills training for children with behaviour problems. (Revised ed.). New York: The Guilford Press.
Bronfenbrenner, U. (1979)	The Ecology of Human Development: Experiments by Nature and Design. Cambridge, MA: Harvard University Press.
Burden, P. (1995)	Classroom Management and Discipline: Methods to Facilitate Cooperation and Instruction. White Plains, N.Y.: Longman.
Burke, K. (1992)	What Do We Do With the Kid Who--: Developing Cooperation, Self-Discipline, and Responsibility in the Classroom. Palatine, ILL.: Skylight Pub.Co.
Candeias, A. A. and Almeida, L. S. (2005)	Competência social: A sua avaliação em contextos de desenvolvimento e educação, Revista de Psicologia, Educação e Cultura, 2 (9), 359-378.

Candeias, A. A. (2001)	Inteligência Social: Estudos de conceptualização e operacionalização do construto. Tese de Doutoramento (Documento policopiado). Évora: Universidade de Évora.
Campbell, S.B. (2002)	Behaviour problems in preschool children: Clinical and developmental issues, 2nd edition. New York: Guilford Press.
Damásio, A. (1994)	Descartes' Error: Emotion, Reason and the Human Brain. London: Pan Macmillan.
Damásio, A. (2003)	Looking for Spinoza – Joy, Sorrow and the Feeling Brain. New York: Harcourt Brace.
Davis-Kean, P.E. (2005)	The Influence of Parent Education and Family Income on Child Achievement: The Indirect Role of Parental Expectations and the Home Environment. <i>Journal of Family Psychology</i> , 19 (2), 294-304.
Derrington, C. and Goddard, H. (2008)	Whole-Brain" Behaviour Management in The Classroom. Every Piece of the Puzzle. New York: Routledge
DiGiulio, R. (2000)	Positive classroom management. Thousand Oaks, CA: Corwin Press, Inc.
Edit Maior, E. (2011)	Assessing and consulting challenging behaviour in children with autistic spectrum disorder, in: Lebeer, J., Candeias, A.A., and Grácio, L. (Eds.) (2011), With a different glance. <i>Dynamic Assessment and Functioning of Children Oriented at Development and Inclusive Learning</i> . Antwerpen/Apeldoorn: Garant, 191-198
Feuerstein, R., Feuerstein, R.S., Falik, L., Rand, Y. (2003)	Creating and enhancing cognitive modifiability. The Feuerstein Instrumental Enrichment Programme, Jerusalem: ICELP Press
Flavell, J. H. (1976)	Metacognitive aspects of problem solving. In L.B. Resnick (ed), <i>The Nature of Intelligence</i> , pp. 231-235. Hillsdale, NJ: Erlbaum
Fontana, D. (1994)	Managing Classroom Behaviour. Leicester British Psychological Society, 2nd Edition
Ford, M. (1982)	Social cognition and social competence in adolescence. <i>Developmental Psychology</i> , 18 (3), 323-340.
Ford, M. (1995)	Intelligence and personality in social behaviour. In D. Saklofske and M. Zeidner (Eds.), <i>International handbook of personality and intelligence</i> , 125-140). New York: Plenum Press.
Hughes, J.N., Cavel, T.A., Willson, V., (2001)	Further support for the developmental significance of the quality of the teacher-student relationship. <i>Journal of Psychology</i> , 39(4), 289-301
Hylander, I. (2011)	Conceptual change in school based psychological consultation in: Lebeer, J., Candeias, A.A., and Grácio, L. (Eds.) (2011), With a different glance. <i>Dynamic Assessment and Functioning of Children Oriented at Development and Inclusive Learning</i> . Antwerpen/Apeldoorn: Garant, pp. 165-180
Hopkins, D. (1985)	A Teacher's Guide to Classroom Research. Milton Keynes: Open University.
Horner, R. H. (2000)	Positive behaviour supports. <i>Focus on Autism and Other Developmental Disabilities</i> , 15(2), 97-105
Jones, V., Jones, L. (2010)	Comprehensive Classroom Management. Boston: Pearson Ed. Inc. Allyn and Bacon
Kramer, A.B. (2002)	The Pygmalion Effect: A Self-fulfilling Prophecy. Retrieved <a href="http://www.momescapade.com/portfolio/Artifacts/PDFs/the_pygmalion_effect.pdf">http://www.momescapade.com/portfolio/Artifacts/PDFs/the_pygmalion_effect.pdf</a>
Lewis, R. (2009)	Understanding Pupil Behaviour. Classroom Management Techniques for teachers. USA/Canada: Routledge
Marland, M. (1993)	The Craft of the Classroom: A Survival Guide to Classroom Management in the Secondary School. London: Heinmann Educational Publication.
Mash, E. J., and Wolfe, D. A. (2002)	Abnormal child psychology. (2 ed.). Belmont, CA: Wadsworth.
McEwan, B. (2000)	The art of classroom management. Upper Saddle River, NJ: Merrill.
Moreira, M. (2004)	Ser professor: Competências básicas I. Comunicação, consciência corporal, disciplina, autocontrolo e auto-estima. Porto: Porto Editora
Nelson, J., Escobar, L., and Ortolano, K. (2001)	Positive discipline. (2 ed.). Roseville: Prima Publishing.
Otten, K. L., and Tuttle, J. L. (2011)	How to reach and teach children with challenging behaviour. San Francisco: Jossey-Bass
Pintrich, P.R. (2000)	Pintrich, P. R. (2000). The role of goal orientation in self-regulated learning. In M. Boekaerts, P. P. Pintrich, and M. Zeidner (Eds.), <i>Handbook of selfregulation</i> (pp. 451–502). San Diego, CA: Academic.
Posner, M.I. and Rothbart, M.K. (2000)	Developing mechanisms of self-regulation. <i>Development and Pshychopatology</i> , vol2, (03), 427-441
Rashotte, L. (2006)	Social Influence. Retrieved in <a href="http://www.blackwellpublishing.com/sociology/docs/BEOS_S1413.pdf">http://www.blackwellpublishing.com/sociology/docs/BEOS_S1413.pdf</a>

Rogers, B. (2003)	Behaviour Recovery. Melbourne:ACER Press
Rogers, B. (Ed.) (2004)	How to Manage Children's Challenging Behaviours. London: Sage
Rutter M. (2000).	Resilience reconsidered: Conceptual considerations, empirical findings, and policy implications. In: Shonkoff JP, Meisels SJ, editors. <i>Handbook of early childhood intervention</i> . 2. New York: Cambridge University Press; pp. 651–682.
Sameroff, A. J. (2009)	Conceptual issues in studying the development of self-regulation. In S. L. Olson and A. J. Sameroff (Eds.). <i>Regulatory Processes in the Development of Behaviour Problems: Biological, Behavioural, and Social-Ecological Perspectives</i> . Cambridge: Cambridge University Press
Spence, S. H. (2003)	Social Skills Training with Children and Young People: Theory, Evidence and Practice. <i>Child and Adolescent Mental Health</i> , 8 2: 84-96. (Free abstract) <a href="http://onlinelibrary.wiley.com/doi/10.1111/1475-3588.00051/full">http://onlinelibrary.wiley.com/doi/10.1111/1475-3588.00051/full</a>
Steere, Bob F. (1988)	Becoming an Effective Classroom Manager: A Re-source for Teachers. Albany: State University of N.Y., P.R.
Sternberg, R. J. (2008).	Excellence for all. <i>Educational Leadership</i> , 66 (2), 14-19.
Sternberg, R. J., and Subotnik, R. F. (Eds.). (2006)	Optimizing pupil success in schools with the other three R's: Reasoning, resilience, and responsibility. Greenwich, CT: Information Age.
Sugai, G., and Horner, R.H. (2002)	Introduction to the special series on positive behaviour support in schools. <i>Journal of Emotional and Behavioural Disorders</i> , 10, 130-141
Turnbull, A. (2002)	A blueprint for school-wide positive behavioural support: Implementation of three components. <i>Exceptional Children</i> , 63 (3), 377-402.
Underwood, M. (1987)	Effective Classroom Management. London: Longman.
Vohs, K.D. and Baumeister, R.F. (Eds.). (2010).	Handbook of Self-Regulation. Research, Theory and Applications. New York: Guilford Press.
Webster-Stratton, C. and Reid, J. (2004)	Strengthening Social and Emotional Competence in Young Children—The Foundation for Early School Readiness and Success Incredible Years Classroom Social Skills and Problem-Solving Curriculum. <i>Infants and Young Children</i> , 17, 2, 96–113. <a href="http://journals.lww.com/iycjournal/Fulltext/2004/04000/Strengthening_Social_and_Emotional_Competence_in.2.aspx">http://journals.lww.com/iycjournal/Fulltext/2004/04000/Strengthening_Social_and_Emotional_Competence_in.2.aspx</a>
Wragg, Edward,C. (1993)	Class Management. London: Routledge.
York, J. Kronberg, R. and Doyle, M.B. (1993)	Creating Inclusive School Communities, Pilot Draft. Minneapolis: Institute on Community Integration. Inclusion MATTERS! Special School District of St. Louis County/Inclusion Facilitators
Zimmerman and Moyle (2009)	Zimmerman, B. J. and Moyle, A.R. (2009). Self-Regulation. Where Metacognition and Motivation intersect. IN. D.J. Hacker, J. Dunlosky and A.C. Graesser.(Eds). <i>Handbook in metacognition in Education</i> . New-York: Taylor and Francis. Ebook ISBN: 0-203-87642-3. Pag. 299-315.
	<b>Relevant websites</b>
Exercises for CB	<a href="http://www.do2learn.com">www.do2learn.com</a>
School wide Behaviour Support	School-wide Behaviour Support: Proactive Strategies for Creating Effective Learning Environments "by Robert E. March, Ph.D. Kimberli Breen, MS, CAS: <a href="http://schools.nyc.gov/documents/d75/pbs/EBS_Overview.pdf">http://schools.nyc.gov/documents/d75/pbs/EBS_Overview.pdf</a>
Developing Peer Support in the Inclusive Classroom:	<a href="http://specialed.about.com/od/integration/a/awareness.htm">http://specialed.about.com/od/integration/a/awareness.htm</a> (From Sue Watson, former About.com Guide)
Developing Peer Relationship	<a href="http://pbiscompendium.ssd.k12.mo.us/ResourcesSchools/SSD/Inclusion/peer.htm">http://pbiscompendium.ssd.k12.mo.us/ResourcesSchools/SSD/Inclusion/peer.htm</a>
Developing Positive Pupil-Teacher Relationships	<a href="http://wik.ed.uiuc.edu/index.php/Positive_Pupil-Teacher_Relationships">http://wik.ed.uiuc.edu/index.php/Positive_Pupil-Teacher_Relationships</a>
Examples of Classroom Rules with Illustrations	<a href="http://pbiscompendium.ssd.k12.mo.us/ResourcesSchools/SSD/Inclusion/routinesadd1.htm">http://pbiscompendium.ssd.k12.mo.us/ResourcesSchools/SSD/Inclusion/routinesadd1.htm</a>

Activities to Help to Stop Before Act:	<a href="http://www.do2learn.com">www.do2learn.com</a>
Activities to Work on Children Emotions	<a href="http://www.ehow.com/list_6396499_activities-do-children-feelings.html">http://www.ehow.com/list_6396499_activities-do-children-feelings.html</a>
Social and emotional competences	<a href="http://www.collaboratingpartners.com/social-emotional-competence-about.php">http://www.collaboratingpartners.com/social-emotional-competence-about.php</a> . <a href="http://www.collaboratingpartners.com/social-emotional-competence-about.php">http://www.collaboratingpartners.com/social-emotional-competence-about.php</a> . <a href="http://www.ascd.org/publications/educational-leadership/oct08/vol66/num02/Excellence-for-All.aspx">http://www.ascd.org/publications/educational-leadership/oct08/vol66/num02/Excellence-for-All.aspx</a> . <a href="http://www.collaboratingpartners.com/social-emotional-competence-about.php">http://www.collaboratingpartners.com/social-emotional-competence-about.php</a> <a href="http://www.ascd.org/publications/educational-leadership/oct08/vol66/num02/Excellence-for-All.aspx">http://www.ascd.org/publications/educational-leadership/oct08/vol66/num02/Excellence-for-All.aspx</a>
Feuerstein's Instrumental Enrichment – Basic programme (FIE-basic)	<a href="http://www.icelp.info">www.icelp.info</a>
Children' self-control	<a href="http://www.biblicalparenting.org/pr-tip4.asp">http://www.biblicalparenting.org/pr-tip4.asp</a>
A colour wheel behaviour management system	Jerry Webster, about.com Guide
Self-Regulation Skills	<a href="http://www.cfchildren.org/advocacy/social-emotional-learning/k-5-self-regulation-skills.aspx">http://www.cfchildren.org/advocacy/social-emotional-learning/k-5-self-regulation-skills.aspx</a> <a href="http://www2.mcrel.org/scaffolding-early-literacy/about-sel/research-and-resources.asp">http://www2.mcrel.org/scaffolding-early-literacy/about-sel/research-and-resources.asp</a> <a href="http://www.collaboratingpartners.com/social-emotional-competence-about.php">http://www.collaboratingpartners.com/social-emotional-competence-about.php</a> <a href="http://www.ascd.org/publications/educational-leadership/oct08/vol66/num02/Excellence-for-All.aspx">http://www.ascd.org/publications/educational-leadership/oct08/vol66/num02/Excellence-for-All.aspx</a>




## Toolbox of activities for challenging behaviours



Toolbox 3.1	My Behaviour Your Behaviour: What can we do?
Toolbox 3.2	Expectations and Behaviours: Their Effects on others. The Role of Expectations of a group
Toolbox 3.3	The teacher as a person and her/his impact on children
Toolbox 3.4	Good examples of beliefs and teaching practices
Toolbox 3.5	What is your solution?
Toolbox 3.6	Pyramids of friends
Toolbox 3.7	Influence of Teacher-Pupil Relationships on Pupils
Toolbox 3.8	Five Steps Method
Toolbox 3.9	Socio-emotional competence training via the Feuerstein's Instrumental Enrichment- Basic programme
Toolbox 3.10	Decision Making Guide
Toolbox 3.11	Teach Deliberately Basic Social Skills
Toolbox 3.12	Stop Think Go
Toolbox 3.13	Child's self-control of thoughts, feelings and actions
Toolbox 3.14	Teaching constructive self-talk: what and how to do it
Toolbox 3.15	Surface Management Strategies
Toolbox 3.16	The carrousel of challenging behaviour
Toolbox 3.17	Your own contribution

### Toolbox 3.1 My Behaviour, Your Behaviour, What can we do?

<b>Goals</b>	To demonstrate common challenging behaviours we observe in our classes To share feelings while demonstrating these challenging behaviours and behaviour management strategies used in our classes
<b>For whom?</b>	Teachers-trainers, teachers, support-teachers
<b>Methods</b>	Reflective discussions and role playing
<b>Materials</b>	Paper, Pencil, Lists of Challenging Behaviours observed mostly in classes
<b>Author(s)</b>	Z. Hande Sart
<b>Approximate time needed to teach</b>	30'
<b>Background</b>	 <p>This activity based on the most frequently observed challenging behaviours stated by the teachers. Teachers reflect their feelings after they demonstrate the behaviour they choose. Examples for CB: talk to your friend next to you; cry quietly in your seat; stand up and walk in the classroom; keep telling you are bored and this class is boring; bother others (throw pencils, erasers etc. to your friends)</p>
<b>Where to find more information?</b>	PowerPoint: see Toolbox 3.1 (titled as; challenging behaviours: understanding behaviours in the realm of psychological development; patterns and characteristics of children with CB; what are the probable causes of CB; understanding CB-summary) on DVD



#### Description of the activity

1. Each participant will ask to write a challenging behaviour they frequently observe in their classes on a piece of paper.
2. Put these papers in a box and each teacher will pick a paper from this box and read it. Each paper has a statement written on it.
3. Teachers will act like pupils and demonstrate the challenging behaviours written.
4. If the trainer is satisfied with the teachers act, s/he will stop acting, if not they will keep demonstrating the behaviours.
5. Time to share feelings. The trainer will ask how teachers feel while demonstrating these common challenging behaviours they state. Please write them.
6. Time to share behaviour management strategies. The trainer will ask what strategies teachers use to deal with challenging behaviours in their classrooms. Please write them (important for wrapping up the training see Toolbox: 3.15).

#### Cautions:

Please do not interpret the feelings. Use "I" statements while talking about the behaviour you demonstrated.


### Toolbox 3.2 Expectations and Behaviours: Their effects on others and the roles of expectations of a group

<b>Goals</b>	Experience the pressures of role expectations Understand the effects of expectations on individual behaviour Explore the effects of expectations on the performance of the group
<b>For whom?</b>	Teacher-trainers, teachers, support teachers
<b>Methods</b>	Role-playing. Reflective discussions.
<b>Materials</b>	Adhesive tag or label for each participant. Each label must have one of the following phrases: "Enjoy me; Teach me; Criticize me; Praise me; Laugh at me, Respect me; Ignore me; Make fun of me; Have mercy on me; Help me".
<b>Author(s)</b>	Luísa Grácio, Nicole Rebelo, adapted from: Luft, J.; Harrington, I. (1955) The Johari Window, a Graphic Model for Interpersonal Relations, Los Angeles, University of California, (UCLA), Western Training Laboratory for Group Development.
<b>Approximate time needed to teach</b>	10' to role-play 15' for reflection and debate 10' for conclusions
<b>Background</b> 	Expectations: role and effects Relations between expectations, feelings and behaviours Feelings and actions triggered by the expectations and behaviours of others
<b>Where to find more information?</b>	Davis-Kean, P.E. (2005) The Influence of Parent Education and Family Income on Child Achievement: The Indirect Role of Parental Expectations and the Home Environment. <i>Journal of Family Psychology</i> , 19(2), 294-304. Rashotte, L. (2006). Social Influence. Retrieved from <a href="http://www.blackwellpublishing.com/sociology/docs/BEOS_S1413.pdf">http://www.blackwellpublishing.com/sociology/docs/BEOS_S1413.pdf</a>
<b>Video material</b> 	<a href="http://www.youtube.com/watch?v=aYxO7XrOZB8">http://www.youtube.com/watch?v=aYxO7XrOZB8</a> Classroom Expectations <a href="http://www.youtube.com/watch?v=sY1Z4XI-NWw">http://www.youtube.com/watch?v=sY1Z4XI-NWw</a>

#### Description of the activity

1. All participants should have a label on the forehead or back. The facilitator puts on the forehead or back of all participants a label. The members of the group will act with other members as they see the label on your forehead or back. Labels should be guessed by each one based on the reactions received from others.
2. After 5 or 8 minutes, each member will tell if have guessed the words of your own label, what it means and what he felt about the reactions of others to him.
3. Debate about the conclusions, feelings and learning that can be draw from this exercise. What conclusions can we draw from this exercise?
4. Discuss about implications to the classroom. For instance: What we feel and learn from it that we can bring to your classroom practices?

### Toolbox 3.3 The teacher as a person and his/her impact on children

<b>Goals</b>	<ol style="list-style-type: none"> <li>1. Raise awareness about the teacher and his work as linked to his person and circumstances</li> <li>2. Understand the Teacher's positive or negative impact on pupils</li> <li>3. To raise awareness about teachers feelings and emotions in the face of children with challenging behaviours</li> <li>4. Understand the need of support for the teacher as something natural</li> <li>5. Understand the professional development as something also of its own responsibility</li> </ol>
<b>For whom?</b>	Teacher-trainers, teachers, support teachers
<b>Methods</b>	Reflection and discussion in pairs Debate in Group : Sharing, reflecting and concluding
<b>Materials</b>	Blackboard, Paper, pencils
<b>Author(s)</b>	Luísa Grácio
<b>Approximate time needed to teach</b>	20'
 <b>Background</b>	WBBM approach (Whole-Brain Behaviour Management, Derrington and Goddard, 2008) – Thoughts, feeling and behaviours of teachers
<b>Where to find more information?</b>	Power Point: see Toolbox 3.3 (titled as our roles as teachers) on DVD Derrington, C. and Goddard, H. (2008) <i>Whole-Brain" Behaviour Management in The Classroom. Every Piece of the Puzzle</i> . New York: Routledge
 <b>Video material</b>	ABCNews – What Makes Great Teachers – 02-26-2010.ASF 3:22 <a href="http://www.youtube.com/watch?v=7blQ4-3XSxUandfeature=related">http://www.youtube.com/watch?v=7blQ4-3XSxUandfeature=related</a>

#### Description of the activity

A) Reflection and discussion in pairs about the following questions:

1. Who is the teacher?
2. What's the teacher's impact on its pupils?
  - 2.1. At what levels?
  - 2.2. With what consequences?
  - 2.3. Is the teacher's impact on pupils always deliberately controlled by the teachers? Why?
  - 2.4. What is the value of that impact (Positive or Negative)? Is that impact always positive? Why?
4. Discuss about difficulties that teachers experience and feel when they deal with challenging behaviours and the causes of these difficulties:
  - 4.1. What kind of difficulties does the teacher experience and feels when dealing with challenging behaviours? Why?
5. Discuss about the effectiveness of the existing strategies to deal with challenging behaviours.
  - 5.1. Are the existing strategies to deal with challenging behaviours effective for all the teachers? Why?

B) Final Debate: Group's conclusions and implications for teachers' actions.


### Toolbox 3.4 Good examples of beliefs and teaching practices teacher as a person and his/her impact on children

<b>Goals</b>	<ol style="list-style-type: none"> <li>1. Share examples of good beliefs and practices</li> <li>2. Identify and understand key aspects of successful situations</li> <li>3. Understand how the thoughts, expectations, feelings, and behaviours of teachers impact the pupil's behaviours and results</li> </ol>
<b>For whom?</b>	Teacher-trainers, teachers, support teachers
<b>Methods</b>	Individual anonymous written reflections about real situations of teachers' expectations about pupils. Group discussions, conclusions and implications for teaching.
<b>Materials</b>	Paper and pencil
<b>Author(s)</b>	Lúisa Grácio
<b>Approximate time needed to teach</b>	30'
<b>Background</b> 	Expectations and its effects on pupils behaviours and learning Pygmalion effect WBBM approach – Thoughts, feeling and behaviours of teachers
<b>Where to find more information?</b>	PowerPoint: see Toolbox 3.4 (titled as our roles as teachers) on DVD Derrington, C. and Goddard, H. (2008) Whole-Brain" Behaviour Management in The Classroom. Every Piece of the Puzzle. New York: Routledge Kramer, A.B. (2002) The Pygmalion Effect: A Self-fulfilling Prophecy. Retrieved <a href="http://www.momescapade.com/portfolio/Artifacts/PDFs/the_pygmalion_effect.pdf">http://www.momescapade.com/portfolio/Artifacts/PDFs/the_pygmalion_effect.pdf</a>
<b>Video material</b> 	What Great Teachers Do Differently: Part One 1:50 <a href="http://www.youtube.com/watch?v=VXCI2fMsdTU">http://www.youtube.com/watch?v=VXCI2fMsdTU</a> What Great Teachers Do Differently: Part Two 1:29 <a href="http://www.youtube.com/watch?v=IWXwziQEa8w&amp;feature=relmfu">http://www.youtube.com/watch?v=IWXwziQEa8w&amp;feature=relmfu</a> Effective Teacher: Professional Skills and Abilities Video 3:07 <a href="http://www.youtube.com/watch?v=jC3D70-ByLE&amp;feature=related">http://www.youtube.com/watch?v=jC3D70-ByLE&amp;feature=related</a>

#### Description of the activity

- I Teachers anonymously write reflections. Each teacher writes an episode about a situation of a child who he/she has high expectations about against all that have been told by others about that child. Then he/she describes what he/she did, felt and then what happened. Then he thinks what could have happened if he had shared those expectations with others. Examples of reflective questions :
  - Think of a situation in which, against what you had been told or the data you had access to, you thought and expected a pupil to be successful in something. Please describe it.
    1. What have you done?
    2. What happened?
    3. How did you feel?
    4. What do you think would have happened if you had shared the idea that the pupil could not improve?
- II The written descriptions would be put together and distributed randomly by each participant to report them in the plenary debate.
- III Discussion and group conclusions and implications for teaching.


### Toolbox 3.5 What is your solution?

<b>Goals</b>	To generate proactive solutions to possible behaviour problems.
<b>For whom?</b>	Teacher-trainers, teachers, support teachers
<b>Methods</b>	Reflective group discussions
<b>Materials</b>	Paper and pencil
<b>Author(s)</b>	Z. Hande Sart, Burcu Ozveren
<b>Approximate time needed to teach</b>	20 minutes
<b>Background</b> 	Examples; <b>Situation:</b> Two pupils talking to each other in the back Reactive action: Separating them Proactive solution: Teacher walking back to get close to pupils Pointing out the expectations chart without verbal comments <b>Situation:</b> A pupil getting impatient and hyper Reactive action: Giving time-out Proactive solution: Ask for pupil help, make him/her clean the board, sharpen pencils, giving the hand-outs etc.
<b>Where to find more information?</b>	<a href="http://www.do2learn.com">www.do2learn.com</a>

#### Description of the activity

The participants will be asked to list some of the behaviour problems in their classrooms. They will discuss how they respond to these behaviour problems. They will generate proactive solutions to these behaviours before it becomes a problem.


### Toolbox 3.6 Pyramid of Friends

<b>Goals</b>	Create positive peer relationship in an inclusive classroom; To make pupils feel part of an inclusive classroom.
<b>For whom?</b>	Pupils
<b>Methods</b>	Teacher will help pupils to fill out the each step of the pyramid
<b>Materials</b>	Pencil and a paper with a picture of a pyramid
<b>Author(s)</b>	Ayşe Caner: Adapted from Sue Watson, former About.com Guide <a href="http://specialed.about.com/od/integration/a/awareness.htm">http://specialed.about.com/od/integration/a/awareness.htm</a>
<b>Approximate time needed to teach</b>	30'
<b>Background</b>	 <p>Creating positive peer relationship is important for creating positive classroom environment. It is especially important in inclusive classroom settings where pupils need extra help and support from their peers. Thus teachers should extend on-going efforts for implementing such activities for creating supportive and caring inclusive classroom environment.</p>
<b>Where to find more information?</b>	PowerPoint: see toolbox 3.6 creating positive peer relationships <a href="http://specialed.about.com/od/integration/a/awareness.htm">http://specialed.about.com/od/integration/a/awareness.htm</a>

#### Description of the activity

Use a pyramid to let pupils put the most important person on the bottom line of the pyramid and keep identifying people for each step of the pyramid. For example, the smaller top line could be used to identify a support person – speech and language etc.).

### Toolbox 3.7 Influence of Teacher-Pupil Relationship on Pupils


<b>Goals</b>	1. Understand positive and negative influences of teachers' attitudes and behaviours on pupils; 2. Realize the importance of teacher-pupil relationships on pupils through their own experiences.
<b>For whom?</b>	Teachers-trainers, teachers, support-teachers
<b>Methods</b>	Reflective discussion
<b>Author(s)</b>	Ayşe Caner
<b>Approximate time needed to teach</b>	10-15'
<b>Background</b> 	Positive teacher-pupil relationships' influence on pupils' academic achievement, motivation, school attitude, self-concept as well as on peer relationships, is widely acknowledged in the literature. Therefore, it is indispensable for teachers to extend extra efforts to create such positive relationship with their pupils.
<b>Where to find more information?</b>	PowerPoint: see toolbox 3.7 creating positive teacher student relationships <a href="http://specialed.about.com/od/integration/a/awareness.htm">http://specialed.about.com/od/integration/a/awareness.htm</a> <a href="http://wik.ed.uiuc.edu/index.php/Positive_Pupil-Teacher_Relationships">http://wik.ed.uiuc.edu/index.php/Positive_Pupil-Teacher_Relationships</a>

#### Description of the activity

- 1 State the importance of positive teacher-pupil relationship on pupils' academic achievement, motivation, school attitude, self-concept.
- 2 After stating the above information, ask the teachers to share their own experiences by raising the following questions:
- 3 Based on your past experiences as pupils, did your teachers have any positive and/or negative influence on you in terms of above mentioned areas? If they did, please explain how?
- 4 Based on your experiences as teachers, do you think that you have any positive and/or negative influence on your pupils in terms of above mentioned areas? If you think you do, please explain how and in what ways (please be specific).



### Toolbox 3.8 Five Steps Method: Steps in responding to pupils' violations of rules and procedures

<b>Goals</b>	To strengthen knowledge and skills in using five steps method
<b>For whom?</b>	Teachers-trainers, teachers, support-teachers
<b>Methods</b>	Role Play
<b>Materials</b>	Paper-pencil
<b>Author(s)</b>	Ayşe Caner, Adapted from Jones and Jones (1997: 329)
<b>Approximate time needed to teach</b>	10-15'
<b>Background</b>	 <p>Steps to be followed:</p> <ol style="list-style-type: none"> <li>1. Non-verbal cue (approach closer to student, eye-contact, etc.)</li> <li>2. Verbal cue (remind the classroom rules)</li> <li>3. Remind the consequence student is choosing (ask student develop a plan if s/he continues to talk)</li> <li>4. Student goes to a chosen area in the classroom to develop a plan Student is asked to go somewhere else to develop a plan (e.g. counsellor's office)</li> </ol>
<b>Where to find more information?</b>	Jones, V., Jones, L. (2007). <i>Comprehensive Classroom Management</i> . Boston: Pearson Ed. Inc. Allyn and Bacon PowerPoint: see toolbox 3.8 titled as: "establishing set for creating positive classroom environment for all"; "development of routines in classrooms"; "responding to violations of rules and procedures"; "developing techniques and strategies for managing students with CB" can be found on the DVD

#### Description of the activity

Select two teachers as one to be a teacher and one to be a pupil who is talking to the pupil sitting next to him/her by violating the classroom rule "listen to your teacher/classmates" or "listen to someone while speaking".

Ask them to role-play the classroom situation in which the teacher employs each step as the pupil fails to respond to each of the first three steps, and finally agrees to develop a plan. Have the pupil develop a plan.

### Toolbox 3.9 Socio-emotional competence training via Feuerstein's Instrumental Enrichment – Basic programme (FIE-basic)

<b>Goals</b>	<ul style="list-style-type: none"> <li>• Activate basic cognitive functions and meta-cognition (e.g. control of impulsivity, good focussed perception, need for precision, comparing, relating things, etc.)</li> <li>• Enrich vocabulary</li> <li>• Develop social-emotional competences</li> </ul>
<b>For whom?</b>	<ul style="list-style-type: none"> <li>• Children starting from age 5 until about 12</li> <li>• In particular, children experiencing barriers to learning with cognitive and/or social-emotional dysfunctioning</li> <li>• Older children and adults with cognitive dysfunctioning and/or autistic spectrum disorder</li> </ul>
<b>Methods</b>	Children work on paper worksheets, on which they are confronted with a problem situation. Guided by the teacher, they have to look for solutions, compare and discuss them. The teacher mediates thinking processes towards developing insight, vocabulary and thinking principles. The teacher mediates reflective insight of the applicability of these into daily life. Children learn to dialogue. The programme is taught in a constant dialogical way, hence preferably it is applied in smaller groups (3-12 children), 2-3 times a week
<b>Materials</b>	<p>The FIE basic programme has 10 thematic “instruments”, each containing a set of 15-30 worksheets. The instruments which are the most relevant for prevention (and remediation) of challenging behaviour are:</p> <ol style="list-style-type: none"> <li>1. Identifying emotions</li> <li>2. From empathy to action</li> <li>3. Learning to think to prevent violence</li> </ol> <p>The other instruments focus on the development of cognitive skills which are indirectly involved in challenging behaviour, by improving self-regulatory skills:</p> <ol style="list-style-type: none"> <li>4. Organization of dots</li> <li>5. Orientation in space</li> <li>6. Compare and discover the absurd</li> <li>7. From unit to groups</li> <li>8. Tri-channel attentional learning ( the only one of the 10 instruments using tactile learning with identifying wooden shapes)</li> <li>9. Learning to ask questions for reading comprehension</li> <li>10. Know and identify</li> </ol>
<b>Author(s)</b>	<p>Programme authors: Reuven and Raphael S. Feuerstein          Author of this summary: Jo Lebeer</p>
<b>Approximate time needed to teach</b>	<ul style="list-style-type: none"> <li>• Each worksheet is at least 1 lesson of 1 hour. To teach the 3 socio-emotional instruments: approx. 60 hours classroom practice with children will be needed.</li> <li>• To know how to apply the programme: the total programme requires 15 training days, divided in 2 to 3 modules. Training must be authorized by the international Feuerstein Institute</li> </ul>
<b>Background</b> 	<p>The programme is based on Feuerstein's theory of Structural Cognitive Modifiability and Mediated Learning Experience. See Background text in Module 2 (page 48) “Feuerstein’s mediated learning theory and its implication for inclusive education”.</p> <p>See also background texts in this module: Candeias (socio-emotional competencies), Sart (Ecological perspective on challenging behaviour); Grácio (Development of self-regulation and self-control as a way to prevent and overcome challenging behaviour)</p>
<b>Where to find more information?</b>	<p>www.icelp.info          Feuerstein, R., Feuerstein, R.S., Falik, L., Rand, Y. (2003) <i>Creating and enhancing cognitive modifiability. The Feuerstein Instrumental Enrichment Programme</i>, Jerusalem: ICELP Press</p>

### Description of the activity

We describe here a sample page out of one of the ten instruments, i.e. "From empathy to action". Children are confronted with this target image, representing a problem situation. Children are mediated to verbalize what happened and what is the problem. Then four different stories are presented to the children in pictorial form, representing four different reactions and emotions. Children must analyse them and answer questions about what emotion is appropriate (or not) to the situation, and what kind of reaction if adequate. For example, in the first picture the "friend" starts laughing; in the second he cries; in the third he helps the friend who fell due to the broken chair; and in the fourth he starts repairing the chair without doing anything about the boy. The different emotions and reactions are codified with a colour and indicated on the stories. Afterwards the children reflect on possible relevance in daily life and at school.

Similarly, in the instrument "Learning to think to prevent violence", the children must analyse a target picture representing a conflict situation, then analyse alternatives and fill out text balloons for dialogues.



Figure 6 FIE-basic From Empathy to Action  
Figure 7 below Prevention of Violence



© R. and R.S. Feuerstein, Jerusalem 2003.sample from Instrumental Enrichment –Basic. Above: Instrument „From empathy to action. Right: instrument “learning to think to prevent violence”. Reproduced with permission.

### Toolbox 3.10 Decision Making Guide

<b>Goals</b>	Provide a visual diagram to help pupils map out the positive and negative consequences of a choice in their behaviour
<b>For whom?</b>	Teacher-trainers, teachers, support teachers, children
<b>Methods</b>	Paper and pencil
<b>Materials</b>	Decision-making guide
<b>Author(s)</b>	Z. Hande Sart Adapted from www.do2learn.com
<b>Approximate time needed to teach</b>	25'
<b>Background</b>	See PowerPoint presentation entitled as "Developing techniques and strategies for managing pupils with CB on DVD
<b>Where to find more information?</b>	www.do2learn.com



#### Description of the activity

1. Teacher or parent lists the "issue" in the box and the top of the guide.
2. Help pupil to select the options that are available to address the issue and list them in the options boxes.
3. Have pupils list the pros and cons for all the available options.
4. Review the pros and cons with the pupil making any addition or omissions.
5. Help the pupil to choose the best option to address the issue by circling it with a green marker.
6. Have the pupil fill out a contract or goal sheet to incorporate the selected option (if necessary).

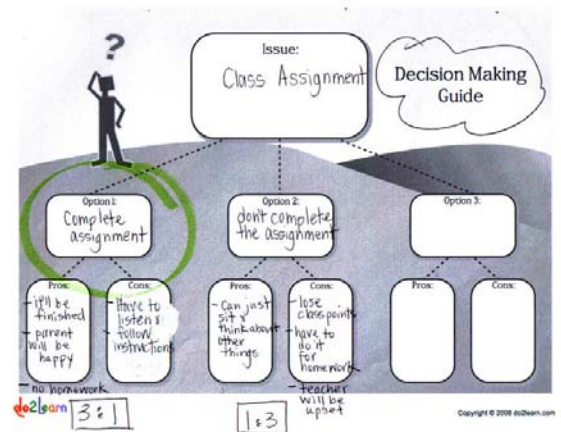


Figure 8 decision making guide


### Toolbox 3.11 Teaching Deliberately Basic Social Skills

<b>Goals</b>	To the teacher: Understand the importance of teaching deliberately basic social skills To pupils: Learn social basic competences
<b>For whom?</b>	Children
<b>Methods</b>	<ul style="list-style-type: none"> <li>• Discussion and reflection</li> <li>• Taught directly through behaviour recovery plans</li> <li>• Taught indirectly, through normal classroom establishment</li> <li>• Games and activities that can be used to highlight aspects of co-operative social skills</li> <li>• Role-Playing and reflection</li> </ul>
<b>Materials</b>	Clear rules. Charts of rules. Use of games and activities for this purpose
<b>Author(s)</b>	Luísa Grácio and Nicole Rebelo. Adapted from Rogers, B. (2003) <i>Behaviour Recovery</i> . Melbourne: ACER Press
<b>Approximate time needed to teach</b>	Daily
<b>Background</b>	 <p>– It is very important that all children learn to socialise, to follow rules and to behave appropriately. These aspects are in some way prerequisites for learning achievement. As children with CB often have difficulties in their relations with others it is crucial to teach them to use social learning cues, and to gain skills and adapted behaviours to have outside and inside the school and the classroom. This is also a way to prevent CB and discipline problems</p>
<b>Where to find more information?</b>	Rogers, B (2003) <i>Behaviour Recovery</i> . Melbourne: ACER Press
<b>Video material</b>	 <p>Teaching Social Skills in Middle School – 3:02 <a href="http://www.youtube.com/watch?v=6NGrzKLu6rl">http://www.youtube.com/watch?v=6NGrzKLu6rl</a>  Teaching social skills to ASD children and teens using “friendly actions” 5:16 <a href="http://www.youtube.com/watch?v=-ll-rbkRbv4">http://www.youtube.com/watch?v=-ll-rbkRbv4</a>  Behaviour – Classroom Rules and Procedures 3:35 <a href="http://www.youtube.com/watch?v=5qTElCo5Rog">http://www.youtube.com/watch?v=5qTElCo5Rog</a>  Bill Rogers – Cracking the Challenging Class (Programme 2) 5:08 <a href="http://www.youtube.com/watch?v=WKfZgm4k_jEandfeature=relmfu">http://www.youtube.com/watch?v=WKfZgm4k_jEandfeature=relmfu</a></p>

#### Description the activity

1. Discuss about the direct learning through behaviour recovery plans and indirectly learning, through normal classroom establishment.
2. Think about games and activities that can be used to highlight aspects of co-operative social skills.
3. Share practices and materials used in classroom to enhance the pupils learning of each of social competences mentioned above
4. Examples of social competences that should be taught in classroom:
  - Movement through others' personal space (basics such as looking ahead, thinking about where one is going/what one is doing).
  - Respectful language ('please', 'thanks', 'can I borrow?', 'pardon', 'excuse me', (when moving through personal space ...). To use language that considers others (no put-downs or slagging off).
  - How to make a point fairly in a class discussion.
  - Basic co-operation skills (sharing, asking, turn waiting...).
  - Basic assertion skills (age-related). How to make your point, or establish your needs, without turning others off.
  - How to express feelings like frustration and anger without being aggressive.
  - How to focus on a learning task.
  - How to get teacher attention.
  - How to behave inside and outside the classroom.

### Toolbox 3.12 Stop! Think! Go!

<b>Goals</b>	Pupils will stop and think before they act out in the classroom.
<b>For whom?</b>	Teacher-trainers, teachers, support teachers, children
<b>Methods</b>	Reflective group discussion
<b>Materials</b>	Red, Yellow and Green labels
<b>Author(s)</b>	Z. Hande Sart and Burcu Ozveren (adapted from www.do2learn.com)
<b>Approximate time needed to teach</b>	30 minutes
<b>Background</b>	 <p>It is very important that children should know where to stop and where to act. Therefore to teach this activity, traffic lights are used because traffic lights are on the streets and easily recognized by children. There you can use two examples as background for reflective discussions later on.</p> <p><b>Example 1:</b></p> <ol style="list-style-type: none"> <li>1. Ask two volunteers to role-play (fight in the classroom)</li> <li>2. Once they start fighting hold the red sign, and tell them to stop whatever they are doing. Wait until they both see the sign and stop</li> <li>3. Then hold the yellow sign and ask them what the problem is and make them try to solve the problem by talking. (Problem solving strategies can be used at this point)</li> <li>4. When they solve the problem and settled down, hold the green sign and let them go</li> <li>5. Don't forget to praise the good behaviour!!!</li> </ol> <p><b>Example 2:</b></p> <ol style="list-style-type: none"> <li>1. Ask couple volunteers for role-playing (running in the classroom)</li> <li>2. Make pupil go outside the classroom and tell them to come in to the classroom by running</li> <li>3. When they come in, hold the red sign and wait until all the pupils stop</li> <li>4. Once they all stopped hold the yellow sign and ask them why they were running and explain how running can be dangerous in class. Make sure they all understand what running may cause in class</li> <li>5. When you agree on not to run in class, hold the green sign and let them go.</li> </ol>
<b>Where to find more information?</b>	www.do2learn.com A Colour Wheel Behaviour Management System By Jerry Webster, About.com Guide

#### Description of the activity

1. Talk about the traffic lights and what each colour means. (Red: Stop; Yellow: Ready; Green: Go)
2. Discuss what may happen if there are no traffic lights (there would be a lot of accidents, crash, and injured people) and stress the importance of it to have safe traffic.
3. Explain how the same system can be used in classroom to have a safe learning environment.
4. Teach pupils how to react when they see the red, yellow and green label in class. (These labels can be named as "act-lights" or anything that the teacher and pupils agreed on). Red Sign – Stop whatever you are doing at the moment.  
Yellow Sign – Think about your behaviour and discuss if it is appropriate or not.  
Green Sign – Decide on best thing to do and act it.
5. Discuss some of the behaviours that may cause problems, injuries etc. in the classroom (Hitting, kicking, running, shouting) where labels can be used. Practise and role-play couple situations until pupils get used to how to use the labels. Use this chart as an example.

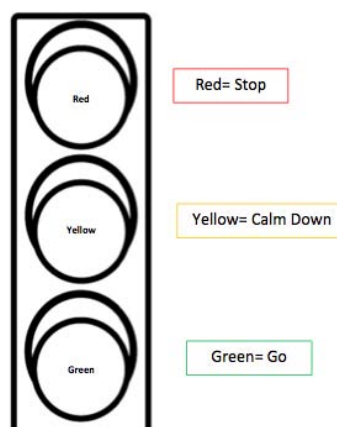




Figure 9 Stop! Think! Go!



**Toolbox 3.13 Child's self-control of thoughts, feelings and actions**

<b>Goals</b>	To Pupils: 1-Learn to control thoughts 2 – Learn internal locus of self-control and self-efficacy beliefs 3 – Learn to control Feelings 4 – Learn to control Behaviours/actions 5 – Consider alternatives 6.Learn to persist (attention / effort) even in moments of frustration and annoyance 7 – Learn to think, organize planning
<b>For whom?</b>	Pupils
<b>Methods</b>	Methods of teaching: Direct teaching; Teachers Guidance; Positive reinforcement, encouragement; Specific feedback (about what to think, feel , do) Pupils should fill activities worksheets for instance about good thoughts as a game
<b>Materials</b>	Worksheets; games construction or activities
<b>Author(s)</b>	Lúisa Grácio and Fátima Leal
<b>Approximate time needed to teach</b>	Variable
<b>Background</b> 	Thematic: Self-Regulation; Self –Control. The importance of the self-regulation of pupils is crucial to their learning and for the good functioning of the classroom. The self-regulation involves cognitive, metacognitive and affective processes, and presupposes that pupils are able of anticipate and evaluate their performance toward the realization of tasks (Zimmerman and Moyle, 2009). The learner must control his cognition, motivation and behaviour, guided by his goals and context features (Pintrich, 2000). Sometimes pupils aren't aware of the importance of this conditions and it is necessary to have the help of a responsible adult able to promote self-regulation in pupils, toward the attainment of greater success levels. Therefore, the teacher has an indispensable role in the classroom with pupils with disruptive behaviour, and it is very important that he is prepared for these challenging situations. There is a link between the thoughts, feelings, actions and learning. What we think about us, about what we are doing and about our capacity to learn and our feelings during learning influence what we will do (or not do) to learn. So it is very important to teach pupils to: i) control bad thoughts; ii) recognize evil thoughts about themselves, their actions and learning activities; iii) have good thoughts about themselves, their actions and learning activities; iv) separate thoughts from feelings; v) express their feelings appropriately; v) think about the consequences of their actions; vi) have adequate behaviours inside and outside the classroom.
<b>Where to find more information?</b>	<a href="http://www.biblicalpharenting.org/pr-tip4.asp">http://www.biblicalpharenting.org/pr-tip4.asp</a> Moreira, P. (2004) <i>Stop! Disciplina e autocontrolo</i> . Porto: Porto Editora (pp. 105-110) Pintrich, P. R. (2000) The role of goal orientation in self-regulated learning. In M. Boekaerts, P. P. Pintrich, and M. Zeidner (Eds.), <i>Handbook of selfregulation</i> (pp. 451–502). San Diego, CA: Academic. Zimmerman, B. J. and Moyle, A.R. (2009) Self-Regulation. Where Metacognition and Motivation intersect. In D.J. Hacker, J. Dunlosky and A.C. Graesser.(Eds.) <i>Handbook in metacognition in Education</i> (pp. 299-315). New-York: Taylor and Francis. Ebook ISBN: 0-203-87642-3.
<b>Video material</b> 	<ul style="list-style-type: none"> <li>• Mr. Stanley teaches Alphie to stay under control 3:08 <a href="http://www.youtube.com/watch?v=aOrJ4_028Xw">http://www.youtube.com/watch?v=aOrJ4_028Xw</a></li> <li>• Self – Regulation and Kindergarten 10:16 <a href="http://www.youtube.com/watch?v=wJRtbcChy0Y&amp;feature=related">http://www.youtube.com/watch?v=wJRtbcChy0Y&amp;feature=related</a></li> <li>• Self-regulation – Stickman Struggles with Anger 1:38 <a href="http://www.youtube.com/watch?v=kv45507sWtE&amp;feature=related">http://www.youtube.com/watch?v=kv45507sWtE&amp;feature=related</a></li> <li>• A Brief Message about Self-Control.mp4 2:44 <a href="http://www.youtube.com/watch?v=VYL5bJwpH0g&amp;feature=related">http://www.youtube.com/watch?v=VYL5bJwpH0g&amp;feature=related</a></li> </ul>

**Description of the activity:**

Teachers teach directly how children should think and behave.

In daily situations where the child's thoughts and behaviour are close to the desired ones, the teacher gives positive reinforcement, encouragement and specific feedback.

Sheets illustrating adequate thoughts and behaviours can be used by children as a cue to regulate their own behaviours. Games about that should be played as well.

### Toolbox 3.14 Teaching Constructive Self Talk: What and How to do it.

<b>Goals</b>	To teachers: 1. Knowing the self – talks the child use when he fails; 2. Teach appropriate self-talk when the child fails; 3. Teaching constructive self-talk.
<b>For whom?</b>	Pupils
<b>Methods</b>	Dialogue; Model, rehearse, use of positive self – talk Sessions one-to-one where teachers can explain and model the child kinds of thinking. Moments in class time
<b>Materials</b>	None or taped affirmations, headphones, cue card picture, pictures; paper and pencil
<b>Author(s)</b>	Luísa Grácio adapted from Rogers, 2003
<b>Approximate time needed to teach</b>	Daily for some minutes; Sessions one to one where teachers can explain and model the child kinds of thinking; Moments in class time.
<b>Background</b> 	<b>Self – Regulation: Self-talk.</b> We “talk” with ourselves about what we are, what we can do, why something happens (attributional beliefs) and doing so we built patterns of thinking and most of them are unconscious but can influence us in several ways. The self-talk affects: mood, emotional status, behaviour, effort, coping behaviour, tolerance of frustration, behavioural outcome and self-esteem. A key feature of pessimistic or demanding self-talk is the lack of reframing. There is no re-directing, just repeating the same explanation (e.g., “I always get things wrong”; “Teachers should not tell me what to do”). Realistic self-talk adds a qualification: “OK I failed, but I don’t always fail. What can I do make it better? What can I do to fix it up?” (Rogers, 2003:57) Children can be taught that thinking is a special kind of behaviour. Some feelings make us feel worse and others help us to feel better. If children learn to say things like: “This is hard but if I do my plan is easier” they will feel better and do better (Rogers: 58). Developmental trends: the degree to which the child can comprehend concepts like self-talk affecting behaviour varies. • With younger children (5 – 7 years) is better go straight on to teaching positive self-guiding messages. • Older children can comprehend ideas (like “When I think I can’t do something I often don’t even try”; “When I think I don’t care I often feel like it doesn’t matter “When I think angry I ...”) so it is possible the discussion about negative thoughts.
<b>Where to find more information?</b>	Rogers, B. (2003) <i>Behaviour Recovery</i> . Melbourne: ACER Press Specifically you can see annex PM 13, 14 p. 177, Rogers (2003).
<b>Video material</b> 	<ul style="list-style-type: none"> <li>• My Child Failed Now What? – How to improve grades 4:39 <a href="http://www.youtube.com/watch?v=7VzkKLVtn8w">http://www.youtube.com/watch?v=7VzkKLVtn8w</a></li> <li>• Positive Attitude is Everything – Very Funny Attitude Video – Inspirational 0:42 <a href="http://www.youtube.com/watch?v=pTgOLLmTQI0andfeature=related">http://www.youtube.com/watch?v=pTgOLLmTQI0andfeature=related</a></li> <li>• Dr. Shad Helmstetter – “The Story of Self-Talk” 7:11 <a href="http://www.youtube.com/watch?v=rvzfnm9uk-0">http://www.youtube.com/watch?v=rvzfnm9uk-0</a></li> </ul>

#### Description of the activity


Situations: Sessions one to one where teachers can explain and model the child kinds of thinking moments in class time.

Examples:

- 1) Pupils self-talk aloud about what they are thinking. Teacher asks them what might happen if he often says these things. The pupil may be shown a picture of a child thinking negatively and/or positively.
- 2) Teacher reframes the desired behaviour and says aloud which self-guiding statement is adequate.
- 3) Later the child sub-vocalize those statements. Teacher models how the “helping thought” can be said quietly. Teacher encourages the child to rehearse.
- 4) Cue card picture containing the self-talk as a picture (or written) can be used.
- 5) Teacher needs to:
  - Model the self-talk behaviour aloud (model the self-talk behaviour out aloud (‘Sean, watch me. I’m putting my hand up and waiting. Like in our plan I’m saying, ‘I can put my hand up without calling out’. You have a go, OK?’).
  - Ask or encourage the child to copy (rehearse).
  - Model the target behaviour while sub-vocalising.
  - Ask the child to copy the pattern, engaging in his target behaviour while sub-vocalising.
  - Check with the child, asking him what was sub-vocalized and encourage him to say this next time in class
  - Give the child messages that need to be simple and directional expressed as “I can...” or with “when/then” statements and expressed as if the situation is actually happening (e.g., “I share with the others, I listen others speak, I can move quickly to my desk, without disturbing others; I can speak in a quiet voice; When I make a mistake it is OK, I can work out a way to fix it; for instance I can ask my teacher or my plan helper”, Rogers, 2003:76).
  - You can use taped affirmations that the child listens to several times at certain points during the day. These taped affirmations can be recorded by the teacher and the child, and listened to on headphones. Allied to the picture cue they become a powerful self-reinforcer that may become more characteristic of what the child will say in stressful situations.



### Toolbox 3.15 Surface Management Strategies

<b>Goals</b>	Observe some behaviour management strategies
<b>For whom?</b>	Teacher-trainers, teachers, support teachers, children, ...
<b>Methods</b>	Reflective discussions and role playing
<b>Materials</b>	List of challenging behaviours observed in the classroom as well list of behaviours set by teachers at the beginning of the training for module
<b>Author(s)</b>	Z. Hande Sart , Burcu Ozveren
<b>Approximate time needed to teach</b>	30'
<b>Background</b>	 <p>A reflection based on what covered on Toolbox 3.1 as well strategies they can use to overcome CB in their classes</p>
<b>Where to find more information?</b>	<p>Web sources: <a href="http://www.do2learn.com">www.do2learn.com</a>  <a href="http://iris.peabody.vanderbilt.edu/parmod/par05c_surfacemanag.htm">http://iris.peabody.vanderbilt.edu/parmod/par05c_surfacemanag.htm</a>            See Power Point Presentation Developing Routines in the Classroom on DVD</p>

#### Description of the activity

Each participant will pick a paper from the box and read it. Each paper has a statement written on it. Participants will act like pupils and demonstrate the behaviour problems written on their papers. Some behaviours can be used as examples: talk to your friend next to you; cry quietly in your seat; stand up and walk in the classroom; keep saying you are bored and this class is boring; bother others (throw pencils, erasers etc. to your friends); use inappropriate language.

The leader will apply surface management strategies to deal with the behaviour problems in the classroom. The participants will observe the leader as they keep acting out. If the participant is satisfied with the teachers act, s/he will stop acting, if not they will keep demonstrating the behaviours. At the end of the activity, the leader and the participants will discuss which strategies were used, whether they were effective or not and what else could be done.

### Toolbox 3.16 The carousel of challenging behaviour

<b>Goals</b>	<ul style="list-style-type: none"> <li>• Explain clearly what happened in a concrete experience with challenging behaviour;</li> <li>• Listen to the challenges that other professionals explain and ask appropriate questions to get a clear insight in their situation</li> <li>• Make professionals aware about their possible role in supporting and coaching each other</li> <li>• Learn from different viewpoints, experiences and practices and use these as a frame of reference in reflecting on their own situation</li> </ul>
<b>For whom?</b>	Teacher-trainers, teachers, support teachers
<b>Methods</b>	<ul style="list-style-type: none"> <li>• Discussion in pairs</li> <li>• Answering reflective questions</li> </ul>
<b>Materials</b>	Short PowerPoint presentation containing the method and the questions for discussion in pairs
<b>Author(s)</b>	Marijke Wilssens, Artevelde University College Ghent in cooperation with University of Antwerp
<b>Approximate time needed to teach</b>	1 hour
<b>Background</b>	No specific background necessary.
<b>Where to find more information?</b>	Presentation on carousel of challenging behaviour on DVD

#### Description of the activity

- All teachers go sitting on chairs in 2 concentric circles.
- In pairs (1 teacher from the inner circle facing 1 of the outer circle), discuss the questions that follow
- When the person in the middle circle talks about complex challenging behaviour, the person in the outer circle listens and can give advice or support from his own positive experiences afterwards and vice versa.
- After  $\pm$  10 minutes a (music) sign will be given: then the outer circle of the carousel is turning to the left direction, the inner circle is turning to the right direction.
- The discussion in pairs restarts until the next (music) sign is given.
- After turning around several times, the final sign is announcing it's time to summarize what each person has learnt from this exchange..

### Toolbox 3.17 Your Own Contribution

<b>Goals</b>	
<b>For whom?</b>	Teacher-trainers, teachers, support teachers, children, ...
<b>Methods</b>	
<b>Materials</b>	
<b>Author(s)</b>	
<b>Approximate time needed to teach</b>	
<b>Background</b> 	
<b>Where to find more information?</b>	
<b>Video material</b> 	

Description of the activity

## ▶ Module 4 - Preventing and overcoming difficulties in early reading

Edited by: Nalan Babür and Ria Van den Eynde

Also with contributions from: Vitor Cruz, Marion East, Mim Hutchings, Didem Özerman Ulcay, Stephen Pearce, Leen Stoffels, Ase Vermeire, Marijke Wilssens

### Introduction

Learning to read and write is the most crucial academic task during the elementary school years. Even though reading and writing abilities continue to develop throughout the life span, the early years (from birth through age eight) is the most critical time period for the child's success in school and later in life. It has been long debated that reading problems in early years of schooling exert considerable direct influence on young children's academic success (e.g., Adams and Bruck, 1995). Even though the importance of early intervention is recognized, many children who have reading difficulties are not provided with appropriate services. Researchers showed that many students, who are experiencing reading difficulties, if not all, can benefit from a well-designed early literacy instruction (e.g., Mather, 1992; Vellutino et al., 1996). Young children with reading difficulties can be taught to read if a variety of instructional techniques are employed and appropriate instruction is provided based on the needs of the students. Research shows that systematic and intensive interventions do work and are necessary (Bos et al., 1999; Mather et al., 2001; Pressley & Rankin, 1994). However, teachers do not have the time and necessary training to provide appropriate interventions for students with reading difficulties (Bos et al., 1999). Therefore, it is crucial for both classroom teachers and special education professionals to be prepared to use the most effective and appropriate strategies in their classrooms to meet the needs of students with reading difficulties.

Module 4 is developed to equip the teachers with the basic conceptual knowledge, effective, practical and applicable strategies, techniques and activities to deal with difficulties in initial reading and reading fluency.

### References

- Adams, M. J., & Bruck, M. (1995, Summer). Resolving the 'great debate.' *American Educator*, p. 7, 10-20.
- Bos, C.S., Mather, N., Friedman Narr, R, & Babur, N (1999). Interactive, collaborative professional development in early literacy instruction: Supporting the balancing act. *Learning Disabilities Research & Practice*, 14, 215-226.
- Mather, N. (1992). Whole language reading instruction for students with learning disabilities: Caught in the crossfire. *Learning Disabilities Research & Practice*, 7, 87-95.
- Mather, N., Bos, C., & Babur, N. (2001). Perceptions and knowledge of preservice and inservice teachers about early literacy instruction. *Journal of Learning Disabilities*, 34(5), 472-482.
- Pressley, M., & Rankin, J. (1994). More about whole language methods of reading instruction for students at risk for early reading failure. *Learning Disabilities Research & Practice*, 9, 157-168.
- Vellutino, F.R., Scanlon, D.M., Sipay, E.R., Small, S.G., Pratt, A., Chen, R., & Denckla, M.B. (1996). Cognitive profiles of difficult to remediate and readily remediated poor readers: Early intervention as a vehicle for distinguishing between cognitive and experiential deficits as basic causes of specific reading disability. *Journal of Educational Psychology*, 88, 601-638.

### Goals

The goals of Module 4 are to enable teachers:

- To be aware of their misconceptions related to early reading
- To understand the characteristics of struggling readers
- To describe the early stages of reading acquisition (preschool and primary classes)
- To describe and identify major cognitive process associated with the area of reading
- To describe and identify major skills within the area of reading
- To describe what reading fluency is and understand how it develops
- To develop strategies to remediate initial reading difficulties and reading fluency
- To understand the link/relationship between behaviour problems and reading problems

## Teacher competences we want to develop

### To know

1. Know what factors influence the acquisition of reading skills;
2. Know how and when literacy skills start emerging in children's lives;
3. Explain, compare, and contrast the theories of reading acquisition;
4. Know techniques that can be applied not only individually, but also with the whole class;
5. Determine whether students are appropriately integrating all the components (e.g., phonological awareness, word recognition, vocabulary, fluency, reading comprehension, and motivation) of accurate and fluent reading.

### To understand and to become aware

1. Understand how students learn;
2. Be aware of his/her own belief system on students who display reading difficulties;
3. Understand how a child process information when determining what to do for the child's specific academic problems;
4. Be aware of what kind of factors/weakness affect and are related to the child's reading problems;
5. Understand how student's background influences his/her learning in the classroom;
6. Understand what cognitive processes are related to learning and learning difficulties.

### To show in practice

1. Accept differences and variability among children;
2. Be able to draw attention of the child to her/his strengths;
3. Make the child feel accepted and valued;
4. Appraise the student's effort;
5. Demonstrate positive attitude and have realistic expectations for students with reading problems;
6. Know alternative ways to teach a child with reading problems;
7. Refrain from judgmental and preformed negative impressions toward students with reading difficulties;
8. Identify, determine and apply prevention and intervention strategies on the basis of the area of the need (e.g., difficulties with reading/decoding);
9. Use practical instructional methods when helping children to develop reading skills;
10. Be able to modify the classroom setting in a way that would enhance children's learning;
11. Demonstrate appropriate use of informal classroom assessments when evaluating student's academic performance;
12. Be a good role model in order to enhance interest in reading among children;
13. Become confident in helping all children to develop their skills in reading.

## Content of Module 4

Part I: Understanding children's literacy development		
Topics	Key ideas	Suggested Activities
<b>Relationship between language and reading</b>	<ul style="list-style-type: none"> <li>Relationship between language and reading</li> <li>Five parameters of language (phonology, morphology, semantics, syntax, pragmatics, phonological awareness, and phonemic awareness)</li> <li>Early literacy experiences               <ul style="list-style-type: none"> <li>The critical importance of representation: Discuss with teachers how the link between the cognitive process of representing and decoding skill develops.</li> <li>Stories and "storying": storytelling, listening to stories, poems and rhymes and "storying" shape understanding of language in children.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Lecture and power point presentations</li> <li>Show the presentation on "Language acquisition and reading"</li> <li>Discuss concepts related to early stages of reading and early literacy experiences</li> <li>Show the presentation on "Early literacy experiences"</li> <li>Discuss with teachers the importance of story reading as a tool to improve narrative skills.</li> <li>Toolbox 4.4 Language experience approach. This activity is suitable for a "whole language approach." This activity can be used to enhance language skills while experimenting with stories.</li> </ul>
<b>Early literacy (pre-reading) development and its relationship with reading development</b>	<ul style="list-style-type: none"> <li>Concepts of early reading: The aspects of written language. What are the skills that children need to master during the preschool years</li> <li>Four major skills in reading development: A good reading programme should emphasize the skills written below.               <ul style="list-style-type: none"> <li>Pre-reading</li> <li>Vocabulary</li> <li>Word recognition</li> <li>Reading Fluency</li> </ul> </li> <li>Teaching activities to promote early literacy               <ul style="list-style-type: none"> <li>Concepts about print and how a book works</li> <li>Various early reading strategies</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Show the presentation on "Early literacy (pre-reading) development and its relationship with reading development" –</li> <li>Briefly talk about the importance of concepts related to books and print. Book and print awareness:               <ul style="list-style-type: none"> <li>Small group discussion</li> <li>To build interest in reading and improve vocabulary, introduce teachers the activities in Toolbox 4.1 (Reading aloud to children), Toolbox 4.2 (Reading aloud-2), and Toolbox 4.3 (Working on vocabulary). These activities can be used to improve and extend the vocabulary knowledge.</li> <li>Toolbox 4.6 (Connect sounds and letters): This activity can be used as an example when talking about phonological awareness skills.</li> <li>Toolbox 4.15 (games): This toolbox includes various games that can be used to improve letter and sound recognition, rhyming, and vocabulary.</li> </ul> </li> </ul>
Part II: Reading difficulties		
<b>Reading Theories</b>	<ul style="list-style-type: none"> <li>Teachers should know about theories that explain reading. Understanding the theoretical part of reading guides teachers to organize their teachings of reading and help them examine their teaching practices. This section introduces Chall's reading theory.</li> <li>Influences on learning: The second part of this section talks about major cognitive processes and major skills in reading including the PASS theory (Planning, Attention, Arousal, Simultaneous, and Successive processing)</li> <li>Cognitive assessment (CAS)</li> </ul>	<ul style="list-style-type: none"> <li>Show the presentation on "Chall's reading theory" –</li> <li>Show the presentation on "Influences on learning"</li> <li>Show presentation on "PASS theory"- Toolbox 4. 5</li> <li>Discuss the important parts of the PASS theory (Planning, Attention, Arousal, Simultaneous, and Successive processing)</li> </ul>
Part III: Reading difficulties		
<b>Difficulties that students face when reading</b>	<ul style="list-style-type: none"> <li>Myths about poor readers</li> <li>Definition and characteristics of poor readers</li> </ul>	<ul style="list-style-type: none"> <li>Show the presentation on "Reading difficulties and poor readers" –</li> <li>Discuss with teachers their belief system about reading development and poor readers.</li> <li>Define the poor readers and ask how they recognize poor readers? What are the signs of being a poor reader?</li> </ul>

<b>Part IV: Reading fluency</b>		
<b>Reading fluency and its development</b>	<ul style="list-style-type: none"> <li>Definition, characteristics, and types of reading fluency</li> <li>How fluency develops</li> <li>The role of fluency in early reading</li> <li>Quality problems in instruction as an assignable cause of poor reading</li> </ul>	<ul style="list-style-type: none"> <li>Show the presentation on “Reading fluency” – There are various fluency strategies that teachers could use in their classrooms. After subject introduction, discuss these strategies with teachers and demonstrate how and when to use them to increase fluency skills</li> <li>Toolbox 4.8 (Connect Fluency)</li> <li>Toolbox 4.10 (Repeated Reading of Familiar Text)</li> <li>Toolbox 4.11 (Choral Reading)</li> <li>Toolbox 4.12 (Choral Repeated Reading)</li> <li>Toolbox 4.13 (Coached Reading – Assisted Reading)</li> <li>Toolbox 4.14 (Paired Reading)</li> </ul>
<b>Part V: Interventions (general)</b>		
<b>Interventions and examples</b>	<ul style="list-style-type: none"> <li>How to design phonological awareness (PA) instruction</li> <li>School interventions                             <ul style="list-style-type: none"> <li>- Reading Recovery</li> <li>- Better Reading Partnership</li> <li>- ELS (Early Literacy Support)</li> <li>- VRH (Volunteer Reading Help_</li> <li>- Linking Letters and Sounds to Phonics</li> </ul> </li> <li>Examples of various interventions strategies: Examples are supported with case studies.                             <ul style="list-style-type: none"> <li>- Basic principles for an effective intervention programme</li> <li>- Structure of a good interventions programme</li> </ul> </li> <li>PREP Programme:                             <ul style="list-style-type: none"> <li>- Definition, what it is used for?</li> <li>- Characteristics of the programme</li> <li>- Who benefits from this programme?</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Show the presentation on “Reading interventions”</li> <li>Show the presentation on “Various intervention strategies”</li> <li>Introduce different techniques that teachers can use in their classrooms.</li> <li>Toolbox 4.7 (Connect Word Recognition): This is a good activity for partial readers. This activity can be beneficial especially for 1<sup>st</sup> graders if the word recognition is too difficult for them.</li> <li>Toolbox 4.9 (Decoding words into sounds and letters: F &amp; L Method)</li> <li>Show the presentation on “PREP Programme” – Toolbox 4.5</li> </ul>
<b>Part VI: Reading for Pleasure</b>		
<b>Reading for pleasure and parental involvement</b>	<ul style="list-style-type: none"> <li>Good reading practice</li> <li>Reading at home</li> <li>Parent involvement in students’ reading</li> <li>How to enhance reading skills and comprehension by reading to children</li> </ul>	<ul style="list-style-type: none"> <li>Do reading games (Toolbox 4.15)</li> <li>Show the presentation on “Parental involvement on reading and reading for pleasure”</li> <li>Discuss with teachers about the benefits of reading for pleasure and how we promote reading among children.</li> <li>Talk about ways on how to get parents involve with their children’s reading</li> </ul>

## Background and Key Concepts

Module 4 focuses on the development of initial reading skills. It also aims to describe reading theories that are influential in this area and to provide support for teachers in how to incorporate the principles of these theories into practice. This module is developed to prepare teachers in how to use practical strategies for specific reading difficulties that students experience during their (initial) reading.

Successful reading is a vital factor in academic and social life. Learning to read is not acquired naturally and is a continuous process that goes on over a lifetime. If learning to read was an easy task, then everybody would learn to read with no special effort and education. Although children should be taught to read in developmentally appropriate ways, we should not simply wait until the time children are ready to learn to read. Especially at early grades, literacy difficulties can be overcome by effective teaching and focused instruction. As children's reading experience grows as they read, they will learn new words, meanings, language structures and ways of thinking. If children's literacy needs are not met early, then the gap between poor readers and good readers will widen. When children find reading difficult, they may become increasingly less willing to practise and engage with the processes of learning to read. In other words, when children start off slowly, their reading and learning progress possibly will decrease over time. As a result, early readers who remain unsupported will later need extensive, intensive and expensive remedial instruction.

Research has shown that the process of reading is very complicated and has two main components. One is related to decoding words and vocabulary, a second part is related to comprehension of what it is read. Skills that are necessary to learn to read successfully can be listed as "phonemic awareness, decoding skill, word recognition, vocabulary, fluency, comprehension and meta-cognitive skills" (Manzo, Manzo, and Albee, 2004). Many children learn these skills easily and run through these steps with little difficulty. However, learning to read is not an easy task for some children. Therefore, teachers should understand the process of reading, how it develops and how it should be taught. Teachers should be introduced to a variety of reading methods so that they can help students with differing levels of needs in the classroom. To help poor readers become good readers, it is important to have an "on-going" and well-designed programme for these children within regular classrooms. Teachers need to use effective teaching techniques and well-coordinated curriculum when teaching students who are at risk of reading failure or are underachieving.

### References

Manzo, A., Manzo, U., and Albee, J. (2004) *Reading assessment for diagnostic prescriptive teaching* (2nd ed.). Toronto, Ontario, Canada: Wadsworth/Thomson Learning.

## Part 1: Understanding children's literacy development

### Goals

#### Knowledge:

1. To acknowledge which factors influence the acquisition of reading skills;
2. To acknowledge how and when literacy skills start emerging in children's lives,

#### Understanding and being aware of

1. The factors/weaknesses possibly related to and affect the child's reading;
2. The impact of student's background on his/her learning in the classroom.

#### Showing in Practice:

1. To efficiently identify, determine and apply prevention strategies;
2. To observe students' performance in order to collect useful information for interventions;
3. To use the technique of modelling in order to enhance interest in reading.

### Language acquisition and literacy

Learning to speak a language is a natural process. If the linguistic environment is rich enough children will learn the language naturally. However, reading is not acquired naturally. Otherwise, everybody would learn to read with no special effort or education. Language appears in several forms: (a) spoken language: listening and speaking; (b) reading: the printed word can be translated into speech; (c) writing: speech sounds can be translated into written symbols (Minskoff, 2005).

Children first learn about spoken language and then learn about written language (reading and writing). Spoken and written languages continue to develop throughout life. Oral communication occurs through the sounds of words.



## Five Parameters of Spoken Language

Language involves five different parameters: phonology, morphology, semantics, syntax, and pragmatics. All five components help students understand sentences (heard or read) (O'Connor, 2007).

**Phonology:** It is the knowledge of speech sounds (phonemes) in a language. Phonemes are the smallest parts of speech sounds that are combined to make words. Phonology is related to the pre-reading skill of phonological awareness and word identification. Knowledge of phonological awareness is also related to spelling development. It includes phonemes as well as prosody (the ability to use inflection and intonation to convey meaning). Students who have not acquired the knowledge of prosody may fail to hear the intonation when being read to any reading materials.

**Phonological awareness:** It is the ability to understand and manipulate speech sounds. Children who have phonological awareness understand, think, recognize, identify, and manipulate sound structure of a language.

**Phonemic awareness:** It is a subcategory of phonological awareness. Phonemic awareness is the ability to hear, recognize, and identify speech sounds in a word. It is the ability to understand and differentiate sounds (phonemes) in a language. Phonemic awareness does not involve print directly.

Phonological and phonemic awareness are important skills for literacy development. Research has shown that teaching phonemic awareness is a necessary prerequisite for developing decoding skills. Yet, phonemic awareness is a necessary but not sufficient skill in learning to reading .

**Morphology:** It refers to the smallest meaningful units of oral language (morpheme) and related to the word identification and spelling skills. Understanding of how morphemes change the meaning of the word is critical when producing and comprehending sentences.

**Semantics:** It is related to meaningful understanding and production of spoken words. It involves the comprehension skill of understanding written words or vocabulary.

**Syntax:** It is related to understanding written sentences and use of grammar. Knowledge of syntax is necessary to compose sentences of different lengths and difficulty, and to support cohesion among sentences. It helps to comprehend what we read as well as reading fluently.

**Pragmatics:** It is related to skills involving literal, inferential, and evaluative comprehension of reading material. It focuses on appropriate use of oral language (Boyle and Scanlon, 2010; Minskoff, 2005).

Toolbox: PowerPoint presentation can be found on DVD

You can find concrete applications of aspects mentioned above in toolbox 4.4

## References

- Boyle, J., & Scanlon, D. (2010). *Methods and strategies for teaching students with mild disabilities*. Singapore: Cengage Publishers.
- Minskoff, E. (2005). *Teaching reading to struggling learners*. Baltimore: Brookes Publishing.

## Early literacy experiences

Marion East

The earliest experiences of language and literacy have a profound effect on the later development of reading and writing. The socio-cultural context of children's earliest experience cannot be overemphasized: from the earliest proto-conversations, (Trevvarthen 1977; Malloch, and Trevvarthen, 2010 ) to the social modelling of reading and writing for a purpose within their families and communities, children enter a literate world.

The opportunity for children to develop vocabulary, enter imaginary worlds and make marks for expressive communication must not be missed. Often children who have missed early kindergarten experiences have gaps in these early literacy experiences. They have not all, for example, had opportunities to engage in the symbolic representation or play.

### The Critical importance of representation

From the first year of life children can "represent", making one thing stand for another, one object can have a number of representations, e.g. a stick becomes a dog or a man or "mummy", a leaf can represent a cup. This ability to use one thing to mean another is a vital link between the cognitive process of representing and de-coding later. Aspects of memory and meta-cognition are present too as children imagine other worlds and play at "being someone else" or use images, pictures, photographs and computer images to describe things they are familiar with, remember past experiences, and discuss present and future events. The ways in which children use symbolic representation – making marks, drawing, making models and sculptures, talking about what they have done, making up stories, being someone else in dramatic play, making multi-modal constructions and resolving problems bring them into contact with the written world of print and text and the signs and symbols around them (Pahl 1999, Kress 1997). Social constructivists would argue that mental processes are mediated through shared symbols and signs taking them from idiosyncratic representations to an understanding of the conventional forms of shared meanings in print and written texts. The ways in which children use "a hundred languages" to hypothesize, to make meaning and seek connections are well documented in the work of the pedagogues from Reggio Emilia in Northern Italy (Rinaldi, 2006; Rinaldi , Kinney and Wharton 2008; Gandini, Edwards and Forman 2011 ; Malaguzzi and Rinaldi 1996).

It is therefore important that children do not miss any of these stages and that they experience all of Bruner's modes of representation before they are expected to learn to read (Bruner 1966, 1983, 2003; Bruner and Weinreich-Haste 1987).

- **Enactive mode** – action based and often related to first hand, physical and sensory experiences and play;
- **Iconic** – image based, pictures, photographs, computer images, magazines etc.;
- **Symbolic representation** – language based, talking, mark making, role play, drawing, telling stories, multi-modal representations, writing, reading. At the point when children understand that print has meaning and can be shared they are entering into the remarkable world of reading for pleasure and purpose.

For many children this is a seamless transition, but for others more time is needed for pre-reading experiences and play.

Children's emergent writing and reading, so closely linked at this stage. is founded upon the need to construct meaning, to make sense of the world around them and to make connections. The links between thought/problem solving, hypothesising and cognitive development are well documented. The more that print and text are relevant and connected to children's lived experiences, the clearer the purpose and meaning of shared text and print will be for them. As children learn to read their names, recognize signs and symbols, "pretend to read" words and stories in books they become emergent readers and enter into the powerful world of print and textual images.

### Stories and "storying"

Current Western pedagogy stresses the importance of print, text, books and the written word, but in all cultures, our history, significant values and morals and common experiences are told in stories. "Storying" is the act of creating spontaneous narratives (Whitehead, 2004) and is an integral part of a process which connects vocabulary, speech patterns, rhythm, rhyme, repetition, sequence, alliteration and linguistic structures. The opportunity for story-telling, listening to stories and poems and rhymes and "storying" is critical for children's understanding of language. Story narratives provide experience of phonology, semantics, syntax and pragmatics, as well as active participation, fun, excitement and the engagement of the effective aspects of learning both social and emotional. They can be universal or culturally specific. Narratives shape, model and provide a structural framework for reading and writing.

### References

- Bruner, J. (1966) *Towards a Theory of Instruction*. Cambridge MA: Harvard University Press.  
 Bruner, J. (1983) *Child's talk*. New York: W.W Norton.

- Bruner, J. (1987) *Making Sense: Child's Construction of the World* (Bruner/Weinreich-Haste) New York: Methuen.
- Bruner, J. (2003) *Making Stories*, Harvard University Press.
- Edwards, C., Gandini, L., and Forman, G., (1998) *The Hundred Languages of Children. The Reggio Emilia Approach – Advanced Reflections* (2<sup>nd</sup> Edition) London and Greenwich USA: Ablex.
- Edwards, C., Gandini, L., and Forman, G. (2011) *The Hundred languages of Children: The Reggio Transformation* (3<sup>rd</sup> Edition) London and Greenwich USA: Ablex.
- Kress, G. (1997) *Before Writing – Rethinking the Paths to Literacy*. London Routledge.
- Malaguzzi, L and Rinaldi, C. (1996) *The Hundred Languages of Children – Exhibition Catalogue*. Reggio Emilia: Reggio children.
- Malloch, S. and Trevarthen, C. (2010) *Communicative Musicality: Exploring the basis of human companionship*. Oxford: Oxford University Press.
- Pahl, K. (1999) *Transformations – Meaning Making in Nurse Education*. Stoke on Trent: Trentham Books.
- Rinaldi, C, Kinney, L. and Wharton (2008) *An Encounter with Reggio Emilia: Children's Early Learning Made Visible*. Abingdon: Routledge.
- Trevarthen, C. (1977) Descriptive analyses of infant communication behaviour. In H.R. Schaffer (Ed.) *Studies on mother-infant interaction: The Loch Lomond Symposium*. London: Academic Press
- Whitehead, M. (2004) *Language and Literacy in the Early Years*. London: Sage.

## Early literacy (pre-reading) development and its relationship with reading development

Children need to master some of the knowledge listed below:

Concepts of early reading

- a. Written language represents one's thoughts and sounds of language can be put in written symbols (print).
- b. Reading and writing are used for meaningful communication.
- c. 'Book language' and "everyday daily speech" are different.
- d. A printed message never changes and is read the same way each time.
- e. A book contains print and/or pictures.
- f. We read print not the pictures.
- g. Reading is from left to right and top to bottom.
- h. There are spaces between written words.
- i. We pause at the punctuation marks (Mid-Continent Research for Education and Learning, 1998).

When a child is aware of these aspects of (written) language it's ready to start the reading process. The skills needed for a successful reading process are listed below.

## Starting to read: Four Major skills in reading development

These skills should be emphasized in a reading programme:

**Pre-reading:** before students learn to read, they need to develop some prerequisite skills (e.g. language, book and print awareness, letter-sound knowledge, motivation, experience, visual and auditory processing skills, cognitive processes).

**Vocabulary:** Vocabulary is critically important in oral reading instruction. There are two types of vocabulary—oral and printed.

Vocabulary occupies an important position in learning to read.

As a learner begins to read, reading vocabulary encountered in texts is mapped onto the oral vocabulary the learner brings to the task.

**Word recognition (decoding):** is needed to figure out how to decode words; relies more on phonological awareness, letter-sound knowledge, how to combine knowledge of oral language and transforming it into print.

**Reading fluency:** requires automatic word identification; reading speed, reading smoothly and with expression, visual processing skills; mastery of prerequisite pragmatic language skills.

## Teaching activities to promote early literacy

- Provide children with many opportunities to engage them in oral language activities.
  - Provide a rich literacy environment.
  - Teach print awareness.
  - Play word and sound games.
  - Help children recognize and write alphabet letters.
  - Help children understand the relationship between letters and sounds.
  - Encourage children to scribble, write letters, and draw pictures.
  - Help children build a reading vocabulary.
- (Lerner and Johns, 2009:360)

You can find concrete applications of aspects mentioned below in toolboxes 4.15

### I. Concepts about print and how a book works

Teaching concise Book strategies such as:

- Front cover, title, blurb;
- Fiction, non-fiction;
- Reading left page before right, from top to bottom (in western languages);
- Word order left to right and return sweep (in western languages);
- Line order (all sentences begin with a capital letter);
- Punctuation marks: what do they mean?
- Cut up story change word order, letter spelling order e.g. eth (The) cmoe (come);
- Letter and word distinction games.

### II. Specific Early Reading Strategies 1

- Learning one to one finger pointing to check reading;
- Learning to find known words;
- Learning to use picture cues;
- Learning to use initial letters and picture cues;
- Learning to link picture cues with initial letters;
- Learning to expect the text to make sense and attend to errors;
- Learning to recognize when words don't look right;
- Using the print to check accuracy;
- Using letters and meaning to predict new words.

### III. Specific Early Reading Strategies 2

- Re-reading to self-correct;
- Re-reading to confirm/monitor;
- Self-monitoring;
- Knowing what to do when stuck : using reading strategies such as:
  - o Blending
  - o Predicting
  - o Using analogy (cat,mat,sat)
  - o Finding small words in big ones (beware not always helpful-e.g. 'bed' in 'climbed')
  - o Use syllables in words to read longer words
- Reading fluently (finger pointing should be discouraged as soon as children are secure with left to right and one-to-one).

### IV. Supporting Word Learning Within Text 1

- You can orient readers to the meaning of the whole text, engage interest, familiarize them with any tricky language structures.
- You can help them to locate known/unknown words: locating words engages children in the visual searching needed to recognize the word by its features.
- You can encourage them not to memorize words in isolation but to read within continuous text while keeping the meaning of the text in mind.

## V. Good Reading Practice in the Classroom

- Reading for pleasure – story time;
- Guided reading;
- Home school reading/book bags;
- Inviting book corners;
- Good selection of appropriate books;
- Shared texts within literacy lessons;
- Teacher Parent partnership workshops.

## VI. Reading for Pleasure

- Links with the local library;
- Links with local bookshop;
- Author visits;
- Reading buddies i.e. year 1 with year 5;
- Reading rockets reward scheme;
- Book fair.

## Part 2: Theories of learning to read

### Goals

#### Knowledge

1. To explain, compare, and contrast the theories of learning to read;
2. To determine whether students are appropriately integrating all the components (e.g., phonological awareness, word recognition, vocabulary, fluency, reading comprehension, and motivation) of accurate and fluent reading.

#### Understanding and being aware of

3. How students learn to read;
4. The cognitive processes related to learning and learning difficulties (PASS);
5. The impact of student's background on his/her learning in the classroom.

#### Showing in Practice

6. To efficiently identify, determine and apply strategies to prevent reading difficulties;
7. To observe the student's performance in order to collect useful information for interventions.

## Reading development: Chall's reading theory

Teachers should be able to understand how reading develops and apply this knowledge when discussing reading development in the early years. Understanding the characteristics of these stages will help teachers comprehend problems of struggling readers and enhance their recognition of when to do what for struggling readers. Chall describes reading development in good readers. According to Chall, reading is a developmental process and all students go through the same stages at a different pace (Chall, 1983). Chall has a stage theory consisting of six stages that explain reading process from birth to up to adulthood.

### Stage 0: From birth to Grade 1 (Pre-reading)

At this stage, children show growth in their knowledge and the use of spoken language, particularly in morphology (word parts), syntax (grammar), and semantics (meaning of the words). Children rely heavily on contextual knowledge provided by the pictures in the text. Words are recognized through the context. Children start understanding the nature of the words and begin to understand that words are made up of sounds. They may learn the names of the alphabet and to print their names. During this stage, children need to be exposed to language related activities to develop phonological awareness skills. Phonological awareness skills help them to manipulate speech sounds and in this way children learn that some words may have the same sounds at the end (rhymes) and at the beginning (alliterations). At this stage the child remembers the words by its visual characteristics, may understand that words can be broken into parts and that those parts can be put together to form whole words. Children can make connections between words and sounds. They acquire some knowledge of print and their reading is described as pseudo (pretend) reading. In order to be successful at this stage, children need to be in a print-rich environment. This will help them to make connections between language and reading (Wolf, 2007).

### Stage 1 (Grades 1-2, Ages 6-7) Initial Reading or Decoding

Children attempt to “crack the code” (to pronounce the words). This means that when reading, children can no longer rely only on knowledge of certain words in the text. They have to apply phonological awareness skills to read words. They begin gluing to print and sounding out words. They acquire orthographic knowledge of words. They learn that letters (consonants and vowels) have sounds. This is very important knowledge at this stage. By the end of the stage they acquire a general understanding of spelling. At this stage, learning and being able to apply phonological awareness skills are crucial when learning to read. Difficulty with phonological memory may result in problems in learning vocabulary. Children progress from using picture cues and relying on their memory of the words to relying on the phonological skills and recognition of words on sight.

### Stage 2 - Confirmation, Fluency, and Ungluing from Print (Grades 2 - 3, Ages 7-8)

This stage is the confirmation of what was learned at Stage 1. When reading words and stories, children learn to apply the skills and knowledge that they acquired in Stage 1. Students start reading more complex words, decoding the words automatically at this stage. They start gaining control over their reading. Practice helps them to read more fluently (automaticity). They begin to develop comprehension skills (literal comprehension) and acquire orthographic knowledge of words.

### Stage 3 - Reading for Learning the New: A first step (Grades 4-8, Ages 9-13)

This is the stage of “reading to learn”. Reading now involves learning facts and concepts from different types of books. It is an essential tool to learn facts and students can conceive facts from a single viewpoint. Students must relate new knowledge with prior knowledge and should be able to see connections between ideas and store them for later recall.

### Stage 4: Multiple Viewpoints (High school - Ages 14-18)

The main difference between Stage 3 and 4 is that the student starts evaluating information from different perspectives. Students’ ability to read analytically and critically increase and they take different viewpoints into considerations. They start reading materials written from different perspectives and learn more in-depth concepts. They learn to interact with more complex texts that reflect different views and opinions.

### Stage 5 - Construction and Reconstruction - A world view: (College, ages 18 and above)

College students heavily rely on prior knowledge and various comprehension strategies. The reader now has the ability to differentiate what to read and what not to read. Based on the purpose of the reading, the reader is able to use multiple reading strategies. For example, skimming the text or reading in depth. The reader has acquired the ability to construct knowledge and becomes more critical when establishing his/her own “truth” using multiple sources.

### References

- Chall, J. (1983). *Stages of reading development*. New York: McGraw-Hill.
- Chall, J. (1996). *Learning to read: The great debate* (3rd ed.). Fort Worth: Harcourt Brace College
- Wolf, M. (2007). *Proust and the Squid: The story and science of the reading brain*. New York: Harper-Collins.
- [http://www.scholastic.com/content/collateral\\_resources/pdf/r/reading\\_bestpractices\\_assessment\\_red\\_c1\\_L02\\_tr\\_alooksrch.pdf](http://www.scholastic.com/content/collateral_resources/pdf/r/reading_bestpractices_assessment_red_c1_L02_tr_alooksrch.pdf)
- [http://newlearningonline.com/literacies/chapter-14-literacies-and-learner-differences/chall-on-stages-of-reading-development/www.educate.vt.edu/PSLC/.../stages\\_reading\\_development.doc](http://newlearningonline.com/literacies/chapter-14-literacies-and-learner-differences/chall-on-stages-of-reading-development/www.educate.vt.edu/PSLC/.../stages_reading_development.doc)

## Influences on Learning: Major cognitive processes and major skill areas in reading

Mim Hutchings

### Influences on Learning

As children begin to enter the world of reading and writing teachers need to remember the range of influences involved in the processes of learning. Whilst learning is an intensely personal process, it is heavily influenced by our life experiences, who we learn with and where we are learning (Hutchings, 2012). Illeris (2003, 2009) argues that a more general overview of learning is based on two key assumptions. First that learning requires the integration of two processes: ‘an external interaction process between the learner and his or her social, cultural or material environment, and an internal psychological process of acquisition and elaboration’ (Illeris, 2003:398). The second is that learning includes three dimensions:

1. A content dimension of knowledge, skills, attitudes, ways of behaving;
2. An incentive dimension, mainly connected with emotions;
3. An interaction dimension involving communication, cooperation and community (Illeris, 2009).

In pedagogical discussions, learning to read is predominately about the content dimension, especially the knowledge and skills required to interpret graphic symbols and the relationship between phonemes and graphemes. Much research on learning literacy tends to separate cognitive, emotional and environmental aspects and focuses predominately on psychological processes of acquisition and elaboration.

### What are the implications of these observations for thinking holistically about literacy learning?

First the environments and the ways in which children experience reading and writing are being transformed. Developments in digital technology are changing the way children experience literacy. There is an increasing range of sources of information, ways of communicating and entertainment commonly accessed online or through digital media. Often children bring to school a range of experiences associated with technology that can provide foundations for learning in school. Examples include a wide range of stories from film and television or use of technology for games or texting from mobile phones. All of these are changing our definitions of what it means to be literate in a modern world. Eagle (2012) discusses how parents and young children interact with simple electronic learning aids commonly sold in toyshops. These interactions were contrasted with more traditional interactions around storybooks. It is suggested that our definitions of literacy should include:

- Traditional literacy associated with books;
- Audio visual literacy related to film and television;
- Digital literacy related to technologies such as phones, computers and tablets.

Whilst schools, especially in the early years, may continue to concentrate on traditional literacy, it is important to acknowledge what children learn from the use of technology in the wider environment. For example, what children may have learnt about complex story structures, characterization and language from televisual texts (Browne) or what they understand about writing from the use of text messaging. The relationships and bridges built between home and school life can be a vital element of supporting children's first ventures into the world of school. Brooks *et al.* (2008) in a review of effective inclusive practices of family literacy, language and numeracy programmes provide a range of examples from UK and internationally which have supported young children. They indicate that newer programmes are increasingly multi-modal combining storytelling and new technologies such as text messaging.

The second key area is to consider the organization and appropriateness of classroom based teaching programmes for literacy. One approach is to think in terms of three levels; in England these are called 'waves' (Brooks 2002).

Level 1: high quality inclusive first teaching for all children;

Level 2: additional organized interventions to help children catch up and work at age related levels. This would include working in small groups on a planned intervention programme such as 'paired reading', group reading or phonics;

Level 3: specialized interventions for children who do not respond to levels 1 and 2 or who have identified needs or barriers to learning related specifically to literacy. This level draws on specialist advice to devise a programme for individuals or groups.

The third area is to think about is the basic principles of for the acquisition and elaboration of reading skills and strategies. Clay (1979, 1993,) defines reading as a meaning-making and problem-solving activity that increases in power and flexibility the more it is practised.

### Reading as meaning making

The purpose of reading is to move beyond just knowing words and sounds towards understand a writer's message. Readers have to work with the text, questioning and thinking about what it means.

### Reading as problem solving

As we read we know that what we read should make sense, so we recognize when grammatical structures or words do not make sense. Good readers adjust and self-correct in order to make text meaningful. They problem-solve as they read.

Reading increases in power and flexibility the more it is practised.

The more we read the better readers we become. Children who are inexperienced and do not enjoy their reading have fewer incentives to practise. This can lead into a widening gap between children in the same class.

There are key messages surrounding this definition about how children improve their reading. Children need:

1. Good reasons (incentives) for reading and writing (purposes);
2. Experience of and practice in reading and writing different kinds of texts such as stories, poems, messages and information texts (range);
3. To be taught and supported (direct instruction);
4. To watch, listen to and be shown how experienced readers and writers work.



Fluent experienced readers have rapid, automatic learned responses to text, and they only become aware of what they are doing when faced with the need to problem solve around new or difficult texts. On the other hand, inexperienced or weak readers are dependent on using what they know to break the code and get meaning. For example they will search for familiar words, letter sound relationships they know, or use pictures to guess.

Early literacy teaching frequently emphasizes one aspect of learning to read. For example, in England currently there is a strong emphasis on teaching systematic synthetic phonics (Rose, 2006, Joliffe and Waugh, 2012). Synthetic phonics focuses on systematically teaching individual sounds, e.g. c/a/t, before blending the sounds into words – cat. However reading requires not only knowledge of the sounds of a language, but is also based on orchestrating a range of skills and strategies to gain meaning.

### Skills and Strategies - what do we mean?

Skills – the toolkit for reading	Strategies – how the reader draws together knowledge and uses it to read and understand
<ul style="list-style-type: none"> <li>• words</li> <li>• sounds</li> <li>• letter names</li> <li>• vocabulary</li> <li>• text forms</li> <li>• grammar</li> <li>• The knowledge base</li> </ul>	<ul style="list-style-type: none"> <li>• Predicting</li> <li>• Comparing</li> <li>• Creating images</li> <li>• Determining importance</li> <li>• Re-reading</li> <li>• Adjusting rate of reading</li> <li>• Problem solving and meaning-making</li> </ul>

In this section we have briefly considered some key influences on early literacy and the importance of thinking holistically about early reading development. A holistic approach recognizes how external influences from home and wider world can be integrated with school expectations and practices to support children in their early literacy development. A holistic approach also appreciates that, whilst the content of early literacy programmes may be the dominant concern in the classroom, children need to feel that becoming a reader has meaning and purpose in their lives.

### References

Brooks, G. (2002). *What Works for Children with Literacy Difficulties? The effectiveness of intervention schemes*. London: Department for Education and Skills. Available from: <http://www.interventionsforliteracy.org.uk/assets/documents/Greg-Brooks.pdf>

Brooks, G. Pahl, K. Pollard, A. & Rees, R. (2008) *Effective and inclusive practices in family literacy, language and numeracy: a review of programmes and practice in the UK and internationally*. Reading, CFBT Trust. Available from: [http://www.cfbt.com/evidenceforeducation/pdf/family%20learning%20report%20\(v08\)web.pdf](http://www.cfbt.com/evidenceforeducation/pdf/family%20learning%20report%20(v08)web.pdf)

Clay, M. (1979). *The Early Detection of Reading Difficulties*. Auckland, Heinemann.

Clay, M. (1993). *Reading Recovery: A Guidebook for Teachers in Training*. Auckland Heinemann.

Eagle, S. (2012). Learning in the Early Years: Social interactions around picture books, puzzles and digital technologies. *Computers and Education*, 59: 38-49

Illeris, K. (2003). Towards a Contemporary and Comprehensive Theory of Learning. *International Journal of Lifelong Learning*, 22(4): 396-406

Illeris, K. (2009). A Comprehensive Understanding of Human Learning. *International Journal of Continuing Education and Lifelong Learning*, 2(1): 45-63

Joliffe, W. Waugh, D. (2012). *Teaching Systematic Synthetic Phonics in Schools*. London, SAGE

### Neurology, Cognition and Learning

Victor Cruz

#### The theory of Luria as a basis

Luria described human cognitive processes within the framework of three functional units. The cognitive processes that occur within these three functional units are responsible for, and involved in, all cognitive activity.

- The first functional unit of **Attention-Arousal** is located in the *brain stem and reticular activating system* (Luria, 1973). This unit provides the brain with the appropriate level of arousal or cortical tone and “directive and selective attention” (p. 273). Attentional processes are engaged when a multidimensional stimulus array is presented to the subject in a task requiring se-



lective attention to one dimension and the inhibition of responses to other, often more salient, stimuli. Luria stated that only under optimal conditions of arousal can the more complex forms of attention involving “selective recognition of a particular stimulus and inhibition of responses to irrelevant stimuli” occur (Luria, 1973:271). Moreover, only when sufficiently aroused and when attention is adequately focused can an individual utilize processes within the second and third functional units.

- The second functional unit is associated with **Simultaneous and Successive Processing** of information. Luria’s description of the second functional unit follows the work of Sechenov. Luria described “two basic forms of integrative activity of the cerebral cortex” (Luria, 1966:74). The processes of the second functional unit are responsible for “receiving, analysing, and storing information” (Luria, 1973:67) through the use of simultaneous and successive processing.

Simultaneous processing is associated with the *occipital-parietal areas of the brain* (Luria; 1966). The essential aspect of simultaneous processing is surveyability, that is, each element is related to every other element. For example, in order to produce a diagram correctly when given the instruction “draw a triangle above a square that is to the left of a circle under a cross”, the relationships among the shapes must be correctly comprehended.

Successive processing is associated with the *fronto-temporal areas of the brain* and involves the integration of stimuli into a specific serial order where each component is related to the next. That is, in successive synthesis, “each link integrated into a series can evoke only a particular chain of successive links following each other in serial order” (Luria, 1966:77). For example, in language processing, successive processes are involved with decoding and production of syntax and with speech articulation.

- The third functional unit is concerned with **Plans and Decision-making**. It is located in the *prefrontal divisions of the frontal lobes of the brain* (Luria, 1980). Luria stated that “the frontal lobes synthesize the information about the outside world... and are the means whereby the behaviour of the organism is regulated in conformity with the effect produced by its actions” (p.263). Planning processes provide for the programming, regulation and verification of behaviour, and are responsible for behaviour such as asking questions, problem-solving, and the capacity for self-monitoring (Luria, 1973). Other activities of the third functional unit include regulation of voluntary activity, impulse control, and various linguistic skills such as spontaneous conversation. The third functional unit provides for the most complex aspects of human behaviour including personality and consciousness (Das, 1980, Das *et al.*, 1996).

## Major Cognitive Process Associated with Reading and Writing

The cognitive process involved in learning (e.g., reading and writing) can be organized in Input, Processing, and Output (Das *et al.*, 1975). The PASS theory (Figure 10 The PASS Model of Intelligence (adapted from Das *et al.*, 1994)) provides a model to conceptualize human intellectual competence that is a blend of neuropsychological, cognitive and psychometric approaches.

### (a) Input

People receive information, which is, **input**, from external sources through their senses and internal organs. When that sensory information is sent to the brain for analysis, central processes become active. However, internal cognitive information in the form of images, memory, and thoughts becomes a part of the input as well. The external information may be presented serially, that is, one after another, for instance, “Listen to these words: cow, hot, wall, man, key,” or concurrently, for instance, in dichotic listening when two different words are presented simultaneously, one to each ear. No such presentation mode can exist for internal input, however. “Automatic”, “learned”, and “effortful” describe the ways in which internal inputs are accessed.

Input is of two kinds: *external* and *internal*. External input may be Visual, Auditory, etc. These can be presented all at once (concurrently) or one after another (sequentially). Internal inputs are images, thoughts, and their emotional contexts as accessed from Knowledge Base.

### (b) Processing

The four components of the central processing mechanisms, that is, *Planning* (P), *Attention-Arousal* (A), *Simultaneous* (S) and *Successive* (S) processing, together make up “PASS”. An important addition is *knowledge*: one’s knowledge base is a part of each of the components. The base of past experiences, learning, emotions, and motivations provide the background as well as the source for the information to be processed.

Thus, the four processes must be active in the context of an individual’s knowledge base. It is as if PASS processes were floating on a sea of knowledge; without seawater they would sink. In other words, they cannot operate outside the context of knowledge. “Cognitive

processes rely on (and influence) the base of knowledge, which may be temporary (as in working memory) or more long term (that is, knowledge that is well learned)" (Naglieri and Das, 1997:145). Knowledge can also be tacit (e.g., spontaneous, experiential, or non-conscious) or explicit (e.g. formal or instructed).

Knowledge Base comprises *Implicit* (tacit, experiential, and spontaneous) knowledge, and *Explicit* (formal, instructed) knowledge. The sources of knowledge are integrated from at least three kinds of stores, which are long-term memory, books and media, and the computer.

*(i) Planning*

- Planning is a mental process by which the person determines, selects, and uses efficient solutions to problems. Planning tasks involves selective activation of the prefrontal cortex.
  - o Problem solving
  - o Formal mental representations
  - o Impulse control
  - o Retrieval of knowledge

*(ii) Attention arousal*

- Attention is a mental process by which the person selectively attends to some stimuli and ignores others. Reticular formation as substrate is involved.
  - o Focused cognitive activity
  - o Selective attention
  - o Resistance to distraction
  - o Orienting response
  - o Vigilance

*(iii) Simultaneous Processing*

- Simultaneous processing is a mental process by which the person integrates stimuli into groups, associated with parieto-occipital-temporal regions.
  - o Stimuli are seen as a whole or Gestalt
  - o Each piece must be related to others
  - o Simultaneous processing is not necessarily non-verbal

*(iv) Successive Processing*

- Successive processing is a mental process by which the person integrates stimuli in a specific serial order, associated with the fronto-temporal regions.
  - o Stimuli form a chain-like progression
  - o Successive processing is not necessarily verbal

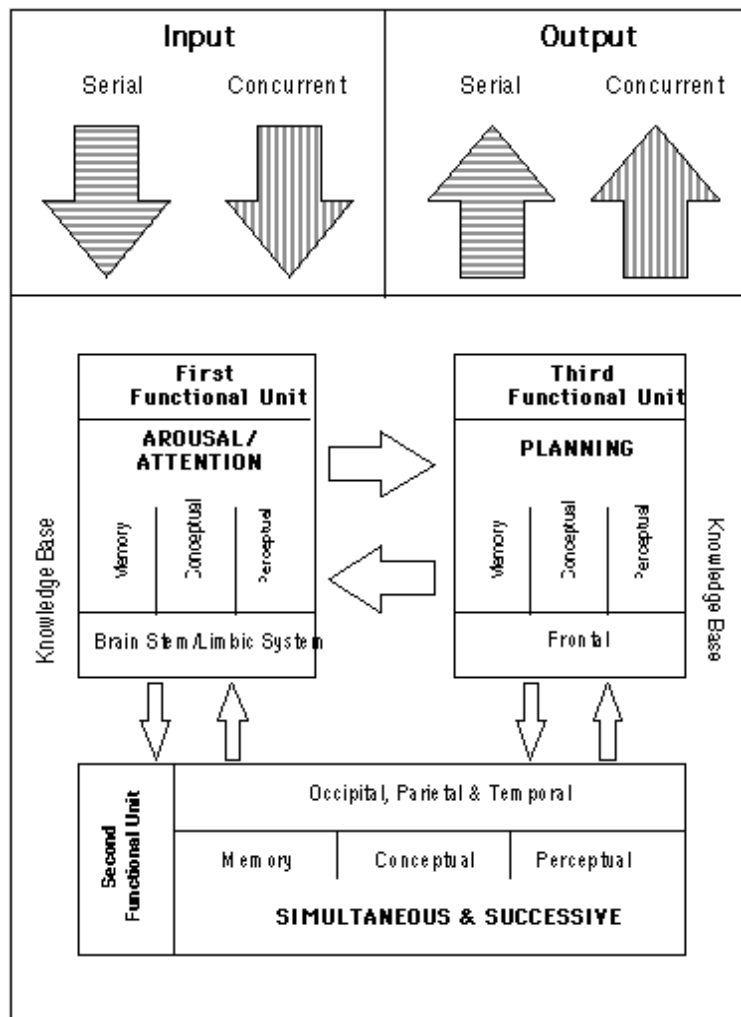


Figure 10 The PASS Model of Intelligence (adapted from Das et al., 1994)

(c) Output

The final component is Output, or action and behaviour. Simply by changing the output demand, a change in performance may become evident. For instance, individuals who may be able to recognize but not recall items from memory can often recall them with a little prompting. In many cases, recognition improves retrieval where recall has failed. Therefore, how we measure output becomes important in measuring performance as an indicator of “intelligence”.

Output can be in two modes as well: Concurrent and Sequential. An individual may use three tools for output (Donald, 1991). These are:

- Movements: Fine and gross;
- Mimetic: Gestures, dance, music;
- Language: Oral, written, sign language.

Word Reading and Writing and PASS Theory

Theoretically, *successive* and *simultaneous* processing are both important for word reading and writing. Dual-route theories of word recognition, for example, suggest that a word is recognized, either through direct visual access or through phonological coding of its sounds. The first should relate to mainly simultaneous processing via orthographic processing, and the second primarily to successive processing via phonological processing. Thus, the two processes should show correlations with word reading. Figure 2 below shows a simplified presentation of these relationships.

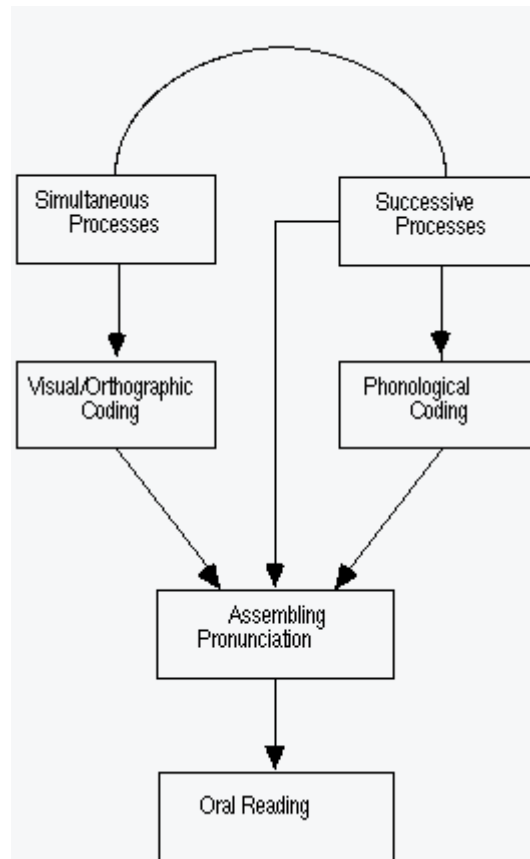


Figure 11 Processes underlying word recognition (adapted from Das et al., 1994)

Due to the importance of phonological processing in word decoding (and writing coding), successive processes are naturally expected to be more important at this level. Similarly, Share (1994) suggested a “domain-general temporal processing dysfunction” in the reading of disabled children to account for inconsistencies in phonological processing literature.

After the initial stages of letter and visual word identification, simultaneous processing may play a secondary role in word reading. It should, however, be more strongly related to reading comprehension and composition (Kirby and Das, 1990, Kirby and Williams, 1991). In reading comprehension (and composition), simultaneous processing is needed in the relating of meaningful units and in their integration into higher level units (Kirby *et al.*, 1996). Planning and attention are necessary in all levels of reading and writing, although common decoding tasks are not likely to be affected by minor differences in these executive processes. However, their importance should increase as a function of task complexity.

### Cognitive Assessment

The Cognitive Assessment System (CAS) is a well-researched, norm-referenced measure of cognitive abilities developed to be consistent with well-known Planning, Attention, Simultaneous, Successive (PASS) theory, based on cognitive and neuropsychological research. The CAS measures those cognitive processes which are important for differential diagnosis and intervention planning. The CAS can be used from 5 through 17 years.

There are two versions of CAS

Standard Battery: includes three subtests in each of the four PASS scales, administered in about one hour.

Basic Battery: includes two subtests from each of the four PASS scales, about 45 minutes to administer.

For more information, see the references.

In PART 3 you can read about PREP, a remedial programme. PREP stands for PASS Reading Enhancement Programme and was developed by J.P. Das and his colleagues at the University of Alberta. It is based on the PASS theory of Intelligence (Planning, Attention, Simultaneous and Successive Processing), and should be understood within the framework provided by PASS theory. The PASS Theory is based on well-accepted theories of child development and cognitive psychology.

## Part 3 Reading difficulties

### Goals

Knowledge:

1. To determine whether students are appropriately integrating all the components (e.g., phonological awareness, word recognition, vocabulary, fluency, reading comprehension, and motivation) of accurate and fluent reading;
2. To enable teachers to be aware of their misconceptions related to early reading and reading difficulties;
3. To be able to define reading fluency and understand its components;
4. To understand and describe the development of fluency;
5. To identify fluency difficulties that students display.

Understanding and being aware of

6. The strategies used by the student to determine what he needs to help him solving specific academic problems;
7. The presumptions teachers have on students displaying reading difficulties;
8. How the teacher's attitude, behaviours, and expectations affect students' motivation toward reading;
9. Understand that deficits in fluency also affects comprehension.

Showing in Practice:

10. To help the child to be aware of his strengths;
11. To build a learning environment that enhances the student's motivation to read more frequently;
12. To observe students' performance in order to collect useful information for interventions;
13. Being able to design activities that would help children increase their reading speed, accuracy, and prosody.

### Five myths about poor readers

Torgesen (2004) made a top five of the myths that block the poor reader. Lyon confirms this negative effect on the reading evolution of these students:

1. For visual oriented children you have to give preference to a visual approach instead of an auditory one.
2. When the child doesn't succeed in making the letter-sound connection in his first year at primary school, teachers have to provide another procedure..
3. Children in preschool and the first year in primary school showing problems with phonemic awareness, vocabulary and/or letter-sound combination may just need more time.
4. Other approaches to learning (e.g., multiple intelligence should be integrated in reading methods.
5. A volunteer or tutor who has enough time can help a student to get rid of their reading problems.

### Definition of a poor reader

Readers at risk are readers who:

- will become poor readers when no intervention is offered;
- are poor readers who will become inadequate readers without effective instructions.

It's the responsibility of schools to provide good reading instructions. Ninety-five per cent of the students leaving primary school should be adequate (technical) readers (Vernooy, 2006).

Students who experience significant difficulties when learning to read can be described as struggling readers. The best way is to identify children as early as possible and to provide them with the support they need.

Teaching strategies will be most effective when they are used in an early stage (Bursuck and Damer, 2011).

When students are behind in reading, most will not be able to catch up because late intervention is very ineffective.

- About 5 per cent of students: able to learn to read naturally with no formal instruction.
- 20-30 per cent of students: learn to read with ease with no special instruction.
- 20-30 per cent of students: learning to read will take hard work. They will need extra support.
- About 30 per cent of students: will only learn to read if they are given intensive support.
- About 5 per cent of students: will have serious reading problems and need special education services.

- When they are behind in reading, most students will not be able to catch up because late intervention is very ineffective.

Although children should be taught to read in developmentally appropriate ways, we should not simply wait until the time children are ready to learn to read. Especially at early grades, the literacy difficulties can be overcome by effective teaching and focused instruction.

It's a fundamental responsibility of teachers to deal with differences between students in their evolution to become good readers. Effective teaching is much more important than particular curriculum materials, pedagogical approaches, or "proven programmes" (Allington and Johnston, 2001, Darling-Hammond, 1999, Duffy, 1997, Pressley, *et al.*, 2001, Sanders, 1998, Taylor *et al.*, 2000). Therefore we must focus on creating a substantially larger number of effective, expert teachers. Good and effective teachers manage to produce better achievement regardless of which curriculum materials, pedagogical approach, or reading programme is selected. It's important to be aware of this when we're discussing the best approach for potential poor readers.

### Characteristics of struggling readers

Readers who have difficulty when learning to read may display some problems in some of the areas listed below:

- Oral language skills;
- Phonological and phonemic awareness;
- Vocabulary (oral, reading, and writing);
- Decoding;
- Reading fluency;
- Reading comprehension;
- Lack of attention;
- Memory;
- Being able to use prior knowledge (Cooper *et al.*, 2006).

### Characteristics of stagnating readers

- Phonological problems;
- Reading too slow but correct;
- Reading too slow and incorrect.

These readers are confronted with one or more of the following aspects:

- They don't learn to read in their first language;
- Oral language;
- Decoding phonemic awareness and letter –sound combination;
- Fluent reading;
- Comprehension;
- Concentration while reading;
- Motivation (Chall, 2003)

## Reading fluency

Reading fluency is described as an accurate, efficient, and rapid way of recognizing words. Research has shown that fluency is an important skill and must be taught to both young and older students (National Reading Panel, 2000). When readers struggle with reading and cannot read fluently, this often leads to comprehension problems.

Readers who are fluent are able to decode words easily. Becoming fluent readers will allow them to devote most of their cognitive resources (memory and attention) to comprehension. Fluent reading will also permit reading with expression and help them to construct meaning easily. Research indicates that when fluency is improved comprehension usually improves as well (Kuhn and Stahl, 2000). Therefore, fluency is a crucial skill for all readers to develop. Even though reading fluency is an important part of reading development, the fluency instruction in classrooms is often neglected and mostly focuses on "speed" rather than "meaning of what it is read" (Husel, 2011). In other words, due to such practices, efficiency in reading will not develop and students will not be motivated to read more and longer times. Reading will not be a pleasant, joyful activity for them.

Fluent reading was described as a skill that requires repetition and constant practice as in the way we see in physical activities (Huey, 1908). He describes fluent reading as "Repetition progressively frees the mind from attention to details and makes facile the total act,

shortens the time, and reduces the extent to which consciousness must concern itself with the process" (Huey, 1908:104). In other words, when words are recognized in a fast and accurate way, memory will have more space to execute higher level of reading processes such as comprehension. When the reader is fluent, this leads to increased self-esteem and motivation to reading. When the reader is confident and seeing reading as a joyful activity, this will result in more reading, which leads to remembering spelling of the words, sounds of the words, and meaning of the words more. In other words, the reader will become a fluent reader and have a large vocabulary, and better comprehension skills. This section, again, discusses the importance of fluency and its relationship to successful reading.

Even though research indicates that there is strong relationship between reading fluency and independent reading, increasing the amount of independent reading will not improve student's reading fluency unless he or she is taught how to read fluently and what to do when fluency breaks down (Housel, 2011). Therefore, this section elaborates a variety of techniques that can be used to improve fluency in reading. Strategies and techniques that are described here in this module are based on research findings and theories related to reading fluency. Fluency instruction can take forms from whole group instruction to individual approaches. Techniques to increase fluency such as repeated reading, choral reading, assisted reading, and paired reading are included in the toolbox and explained in details.

### What is Reading Fluency?

Fluency is the ability to read with accuracy, speed, and prosody. When students read smoothly and with expression, this allows them to comprehend the text (Cooper *et al.*, 2006). Fluency typically occurs around second and third grade. It serves as a bridge from focusing on word identification to focusing on comprehension (Minskoff, 2005). Fluency and comprehension go hand in hand; however, reading fluently does not mean that student will be able to construct the meaning and comprehend the text. In order for reading effective and efficient, attention and memory should be free for comprehension. Furthermore, automaticity of sub-skills of early reading is crucial to gain fluency. In other words, reading smoothly and with expressions is connected with automatic recognition of letters, their corresponding sounds, word parts, and words (Cooper *et al.*, 2006).

#### I. Components of reading fluency

There are three components of reading fluency:

- **Accuracy:** being able to read correctly (how correct one reads). It includes
  - o Phonological awareness;
  - o Word knowledge;
  - o Word-attack skills.
- **Speed:** Being able to read effortlessly (how fast one reads)
  - o Automatic reading;
  - o Fast and effortless reading;
- **Prosody:** Being able to read smoothly with expression, intonation (Boyle, 2010).

#### II. Types of reading fluency

There are two types of fluency:

- Oral reading fluency: Oral reading fluency combines both rate, accuracy, and prosody;
- Silent reading fluency: Silent reading fluency includes rate and comprehension.

#### III. Difficulties with Fluency

Students with fluency problems may exhibit some of the following problems (Bryant *et al.*, 2008).

- slow oral reader (read word by word; problems with accuracy and speed);
- slow silent reader;
- difficulties with basic word reading;
- limited sight word vocabulary;
- poor memory for letters and words;
- reads orally with flat, dysrhythmic intonation;
- cannot retell what has been read;
- when reading unfamiliar words aloud, makes errors;
- loses place when reading aloud;

- mispronounces the words;
- substitutes the words;
- Omits the words.

#### IV. Development of Fluency

It is important to understand the development of fluency because it will help teachers design classroom instruction for students who have fluency problems.

According to Ehri's model, children become fluent when they reach the "fully alphabetic stage". At this stage children need to familiar with the letters and corresponding sounds. When a child encounters an unfamiliar word, he first determines the corresponding sound for each letter, then blends the sounds, and finally decodes the word. When the child encounters with words several times, these words become sight words because repetition helps the child read the words instantly and accurately. In other words, automatization of decoding leads to fluency (Cooper *et al.*, 2006).

Later, during "consolidated alphabetic stage", the instant recognition of spelling patterns leads to fluency. Repeated encounters with words and developing sight words lead to recognizing letter patterns which in turn help children read by analogy (Cooper *et al.*, 2006).

#### V. Role of Fluency in Reading

Students first need to read words accurately, and then move to read words automatically. Accuracy in word reading is necessary at the word identification stage. Automaticity in word reading is necessary at the fluency stage. Fluency is not only about rapid word reading, it also includes reading sentences and the text quickly (Minskoff, 2005).

Fluency instruction should be provided to each of the following fluency skills.

1. Automatic word reading;
2. Oral reading with prosody (expression and intonation);
3. Fluent oral reading;
4. Rapid silent reading.

Students should gradually move from fluent oral reading to rapid silent reading. Keeping them at the oral reading stage too long may prevent them moving from oral reading to silent reading (Minskoff, 2005).

#### Quality problems in instruction as an assignable cause of poor reading

Being aware of the importance of good instruction school and its teachers must ask themselves some critical questions on their instruction:

- Do I use measurable goals?
- Do I finish the method?
- Do I use the manual of the method?
- Do I supply my students with enough reading time?
- Do I have enough attention for automation of technical reading?
- Do I have a correct insight into the profile of a poor reader?
- Is the use of differentiation effective?

The goals must be realistic, which means that 95 per cent of the students can manage these goals. It's a misconception that a teacher being confronted with a poor reader or a mediocre class, has to adjust his goals. It's important that a teacher finishes the method for initial reading completely.

Schools have a big responsibility in a critical approach of methods. Does the method pay attention to systematic and explicit instruction on (auditory) blending? Does the method work on vocabulary, on fluent reading, on comprehension of a text starting from a holistic approach, instead of drilling reading strategies in isolation?

The teacher has to provide his pupils with sufficient reading time. An initial reader needs 400 minutes per week! A student of class two and three needs three hours a week.

Teachers must provide at least one hour of extra instruction for a possible poor reader.

Systematic and explicit instruction gives the teachers the possibility to take into account the strengths and weaknesses of the students (Vernooy, 2012). Teachers do have to check their approach of the profile of the poor reader:



Poor readers don't need:

- a slower pace;
- completely different instructions ( e.g. attention to different learning styles; visual training; special programmes);
- special programmes, which turn out to get students confused in the use of strategies.

Poor readers need more time, more instruction, more coaching, more exercise and more repetition. Teachers do have to check their ideas on differentiation: some schools prefer poor readers setting their own pace. This approach results in less interaction with and less coaching of the teacher. Mortimer (1988) indicates a positive relationship between teacher-student interaction and progress made by the student. The reader at risk gets more benefit from group instruction and interaction than from individual work that is done at their own pace.

Adaptive education even prevents the student in his development:

- Adaptive means the more individual the better, but research indicates the opposite;
- Adaptive means to remedy by remedial teachers who sometimes don't give effective instruction;
- Adaptive means to work outside the classroom. Good classroom management, good group instruction and extended instruction is more effective;
- Adaptive means 'at the child's own pace'. It's better to work harder on early literacy;
- Adaptive means to reduce the goals for the poor reader. This has a negative impact on them. The student must be provided with more time to read but *with the same goals as his peers* (Vernooy, 2012).

### Get students and parents involved

Children struggling to read can display unwelcome behaviour. They get frustrated and start avoiding work and engage in disruptive behaviour: talking, copying, guessing...

It's important to involve students in the elaboration of adaptation of their reading instructions:

- What do they experience as difficult?
- Are they able to practise at home and is anyone able to help?
- Can they answer questions about the text?
- Can they identify reading strategies used?

Parents have a big influence on the development of language and reading skills (see part 1). Teachers should involve them in the reading development especially when the child is at risk. Therefore, schools can organize information rounds about early literacy, the importance of phonemic awareness, the benefit of reading aloud to their children, providing them with good reading books. Nowadays a lot of schools give parents extra tools for reading at home with their child using the website of the school.

Talk to the parents:

- Discuss levels and ability based on the outcome of previous assessments.
- Are the children able to practise at home?
- Do they practise?
- Are the parents able to support them?

### Assessment

#### Reading assessments

Assessing reading;

- **Informal measures:** informal reading inventory: (a) independent reading level, (b) instructional reading level, (c) frustration reading level;
- **Portfolio assessment:** keeping samples of reading and writing work;
- **Formal tests (standardized tests)**
  - Are they accurate?
  - Are they set at an appropriate level?
  - What other tests could be useful?

## Assessing phonological awareness

- A measure of segmentation: ask students to segment some chosen words.
- First demonstrate how to segment the sounds. Then ask them to do the same thing. If they cannot segment the words, identify activities to teach phonological awareness skills.
- Listen for a phrased and fluent manner with expression for full stops, question marks and exclamation marks.

## Carry out a running record

### What is a running record?

- It is a more detailed assessment of a child's reading ability.
- It enables us to identify areas that the child finds most difficult

## Part 4 Interventions (general)

### Goals

#### Knowledge:

1. Being able to select strategies and techniques that would be best for the students' various needs;
2. Being able to design activities that would help children to increase their reading speed, accuracy, and prosody.

#### Understanding and being aware of

3. How students learn to read;
4. The cognitive processes related to learning and learning difficulties (PASS);
5. Understand that deficits in fluency also affects comprehension ;
6. Understand that fluency can be improved with activities that focus on student's reading rate, accuracy, and prosody.

#### Showing in Practice:

7. To observe the student's performance in order to collect useful information for interventions;
8. To know alternative ways to teach a child with reading problems;
9. Being able to design activities that would help children increase their reading speed, accuracy, and prosody;
10. To efficiently identify, determine and apply intervention strategies;
11. To be able to modify the classroom setting in a way that would enhance children's learning;
12. Being able to design activities that would help children increase their reading speed, accuracy, and prosody.

## Guidelines for designing phonological awareness (PA) instruction

- From simple to more difficult;
- Instructional difficulty of sounds: position of sound in words (initial, middle, last sounds);
- Instructional difficulty of tasks: use first receptive , the expressive tasks when teaching PA;
- Modelling the words and sounds;
- Use multisensory approach;
- Short and frequent instructional periods of:
  - Auditory discrimination
  - Sound segmentation
  - Sound blending
  - Rhyming
  - Sound counting
  - Sound deletion and Addition
  - Onsets and Rimes
  - Syllable blending and segmentation

Resource: <http://www.youtube.com/watch?v=c4Soey3NETU>

### Letter and word distinction

- Cut up story change word order, letter spelling order e.g. eth (The) cmoe (come);

- Teaching concise Book strategies such as: Front cover, Title, Blurb;
- Fiction, non-fiction;
- Reading left page before right, from top to bottom;
- Word order left to right and return sweep;
- Line order (all sentences begin with a capital letter).

## School Interventions

When the usual strategies are not effective, the following reading interventions should be considered.

- Reading recovery (wave 3 for very low-attaining children);
- Better reading partnership;
- ELS (Early Literacy Support);
- ALS (Additional Literacy Support);
- VRH (volunteer reading help);
- Linking Letters and sounds Phonics.

### Reading Recovery (RR)

For children who are well below the expected level of achievement (not including SEN).

They work one-to-one with a specialized RR teacher, for 30 minutes every day for 20 weeks.

It includes, reading three books per session, a running record for assessment each day, letter and word work and practical sessions on writing simple sentences.

### Better Reading Partnership (BRP)

For children who are achieving just below the appropriate reading age. They work one-to-one with a trained adult three times a week for 20 minutes for 10+ weeks. The programme uses reading recovery techniques but does not include writing.

### Early Literacy Support (ELS)

Early Literacy Support is an intervention programme for year 1 children who need additional support. However, if children in years 2 and 3 are very low-attaining this programme can still be used. It includes a training programme, a screening package, and 60 extra literacy sessions to be run by a teaching assistant.

### Additional Literacy Support

The ALS programme is intended to help Key Stage 2 pupils who have already fallen behind in literacy, but who would not otherwise receive any additional support in this area.

Most of these pupils are likely to be Years 3 and 4 pupils who have attained level 2C or level 1 in their Key Stage 1 English tests.

The ALS programme is designed to be delivered by teachers and classroom assistants, working in partnership.

### Volunteer Reading Help (VRH)

VRH is a national charity that recruits, trains and supports reading helpers who volunteer their time to work on a one-to-one basis with children in primary schools.

They work with three children for 30 minute sessions twice a week.

## Examples of Intervention strategies

Mim Hutchings

### Case Study 1: Early Intervention in the first year of school

Sammy was almost five when he started school. He was an only child who lived on a remote farm. His parents worked long hours keeping the farm going, which meant that he had not attended kindergarten. It quickly became clear that Sammy had little experience of traditional literacy, books and stories. The classroom was a reading rich environment with a range of books. Sammy's class teacher had a systematic programme designed to support all children in the early stages of reading. After two months the class teacher decided

that Sammy, along with three other children, needed more experience of talking about and enjoying books with a supportive adult in daily twenty-minute sessions. The class teacher designed a structured intervention programme based on 'guided reading' (Wray, 2004).

## I. Basic Principles

### 1. About effective programmes:

Working on:

- self-esteem at the same time as reading is successful;
- on phonological skills is most effective when it is related to texts (stories and information books);
- short (8-20 weeks) intensive and focused interventions can have a lasting impact (Brooks 2002).

### 2. About becoming a reader:

- Learning to read is a social experience – the importance of reading for pleasure with a supportive adult and in a group;
- Discussion around books supports both reading and vocabulary development;
- The importance of experience and practice with a range of books.

## II. The structure of the intervention programme

Guided reading is when a group of children (4-6) read the same book together. The adult leads the session guiding the children to focus on significant aspects of the books. For Sammy's group the focus was enjoyment, vocabulary, concepts about print, identifying words, sounds within the text. Books are selected that match children's interests and reading level. In this example picture books with minimal text, offering plenty to talk about and were appropriate. Each session followed the same structure.

1. Introduction to the book – discussing the topic of the book, the title, the author and predicting what was in the book;
2. Adult reading of the book, supporting the children in following the story;
3. Discussion of story/book focusing on comprehension and enjoyment of the story;
4. Rereading the book focusing on details of the characters and story structure and any words / letters /sounds /rhymes that were significant;
5. Responding to the text through drawing and writing, e.g. drawing their favourite character /part of book and writing a caption.

Through this simple intervention programme Sammy and the group soon began to acquire the early literacy knowledge skills and strategies needed to benefit fully from the literacy programme in the classroom.

## Case study 2: Identifying and supporting literacy acquisition in bilingual learners

Case study two looks at one part of a wider research project, The Big Lottery Dyslexia and Multilingualism Project (Mortimore *et al.*, 2012a, b) which focused on identifying and supporting literacy acquisition in bilingual learners potentially at risk of dyslexia. The project involved 215 children aged 8-11 speaking 43 different languages from 55 schools in England. This case study focuses on the intervention programmes used within the project.

The intervention programme was designed around effective practice in supporting children's literacy development (see Brooks 2002). It was structured, reinforced, cumulative and multi-sensory. The focus was improving phonological-processing skills, oral language development, explicit vocabulary teaching, developing comprehension skills, and work with morphemes as well as using strategies to improve memory and processing speed (Mortimore *et al.*, 2012a, b). Two commercial intervention programmes were selected: *Nessy* (Net Educational Systems Ltd): a dyslexia-friendly computer based programme with games and activities to develop phonological awareness, word patterns and spelling rules.

*Rapid Reading* (Pearson Heinemann): a reading scheme for children age 7-11 which encourages discussion of ideas and vocabulary with fiction and information texts. It also included speech recognition software for independent listening and reading practice.

The intervention programme was delivered by teaching assistants trained by the research team. Each group of children received a daily 30-minute session in pairs for 15 weeks.

The practical recommendations from the project overall included:

- Implementing a daily 30 minute structured intervention programme with trained teaching assistants and two children over a period of 15 weeks can boost both reading and spelling/writing skills effectively. These improvements can be sustainable, but children will need further reinforcement to automatize spelling gains.

- Programmes should involve phonological processing, systematic explicit teaching of new phonemes in the target language (English) supported by carefully structured multi-sensory programmes based on learners error patterns; explicit teaching of morphology and syllable structure plus strategies for inferring meaning from context and morphology.
- Computer-based programmes with a strong element of fun and interest appeal. Both Rapid Reading and Nessy were endorsed by the children.
- Include explicit enrichment of vocabulary systematically linked to the materials being used or contextualized in some way. Emphasize building confidence in use of language and expression.
- Focus on listening and reading comprehension strategies and develop children's awareness of their own reading skills. Include explicit higher order comprehension strategies, pre reading prediction, visual and holistic approaches.
- Develop an understanding of children's life stories, their languages and literacies and ensure these enhance the teaching of English (or target language).
- Exercise caution over the need for a label; instead focus on children's strengths and areas for development.

## References

- Brooks, G. (2002) What Works for Children with Literacy Difficulties? The effectiveness of intervention schemes. *Department for Education and Skills*. Available from: <http://www.interventionsforliteracy.org.uk/assets/documents/Greg-Brooks.pdf>
- Mortimore, T. Hutchings, M. and Northcote, A. (2012a) *Identifying and supporting literacy acquisition in bilingual learners potentially at risk of dyslexia: The Big Lottery Dyslexia and Multilingualism Project*, in Everatt, J. *Dyslexia, Languages and Multilingualism*. Bracknell: British Dyslexia Association.
- Mortimore, T. Hansan, L. Hutchings, M. Northcote, A. (2012b) *Dyslexia and Multilingualism: Identifying and supporting bilingual learners who might be at risk of developing SpLD/dyslexia*. Research Report. Bracknell: BDA. The report can be downloaded from: <http://www.bdadyslexia.org.uk/news/publications/dyslexia-and-multilingualism.html>
- NESSY Learning Programme (2010)* Net Educational Systems Ltd. <http://www.nessy.com> Rapid Reading (2011) Heinemann Pearson <http://www.pearsonschoolsandcolleges.co.uk/Primary/Literacy/AllLiteracyresources/RapidReading/RapidReading.aspx>
- Rapid Reading Promotional film at <http://vimeo.com/42340307>
- Wray, D. (2004) *Teaching Literacy: Using Texts to Enhance Learning*. London: David Fulton

## Cognitive strategies

Vitor Cruz

PREP stands for PASS Reading Enhancement Programme and was developed by Dr. J. P. Das and his colleagues at the University of Alberta. It is based on the PASS theory of Intelligence (Planning, Attention, Simultaneous and Successive Processing) and should be understood within the framework provided by PASS theory. The PASS Theory is based on well-accepted theories of child development and cognitive psychology (see also p.131).

### What is PREP? What does it do?

PREP is a remedial programme for children who are experiencing difficulty with reading, spelling and comprehension. It is based on widely accepted theories of child development and cognitive development.

The PREP is a reading enhancement programme that aims to improve the information processing strategies, namely, simultaneous and successive processing that underlies reading, while at the same time avoiding the direct teaching of word reading skills. PREP is also founded on the premise that the transfer of principles can be facilitated through inductive, rather than deductive inference (Carlson and Das, 1996). Accordingly, the programme is structured so that tacitly acquired strategies are likely to be used in appropriate ways.

Attention and planning are important aspects of tasks given in the programme. Specifically, attention is required to perform each task, and planning skills are developed by encouraging the children to discuss their strategies and solutions both during and following each task.

An integral part of the structure of each task is to develop strategies such as rehearsal, categorization, monitoring of performance, prediction, revision of prediction, sounding, and sound blending. Thus, children develop their ability to use these strategies through experience with the tasks. Rather than being explicitly taught strategies by the tutor, children are encouraged to become aware of their use of strategies through verbalization. Growth in the ability to use strategies and be aware of appropriate opportunities for their use is expected to develop over the course of remediation

## How is PREP structured, and what does it consist of?

The programme consists of eight tasks, which vary considerably, both in content and in what they require of the student. Each task involves both a **global** training component and a curriculum-related **bridging** component. The **global** component consists of structured non-reading tasks that require the application of simultaneous or successive strategies. These tasks also provide children with the opportunity to internalize strategies in their own way, thus facilitating transfer (Das, Mishra and Pool, 1995). The **bridging** component involves the same cognitive demands as its global component, and provides training in simultaneous and successive progressing strategies that are closely linked to reading and spelling (Das, Naglieri and Kirby, 1994).

The global tasks begin with content that is familiar and non-threatening so that strategy acquisition begins in small stages (Das *et al.*, 1994). Complexity is introduced gradually, and only after a return to easier content. Through verbal mediation, which occurs through discussion of specific strategies used, the children are encouraged to apply their chosen strategies to academic tasks such as word decoding. The global and bridging components are further divided into three levels of difficulty. This allows the child to progress in strategy development and, for those who already have some successful processing strategies in place, to begin at an appropriate level.

A system of prompts is also integrated into each global and bridging component. The series of prompts creates a scaffolding network that supports and guides the child to ensure that tasks are completed with minimum assistance and maximum success. A record of these prompts provides a monitoring system for facilitators to determine when material is too difficult for the child or, alternatively, when the child is ready to progress to the more difficult level. A criterion of 80 per cent correct responses is required before a child can proceed to the next level of difficulty. If this criterion is not met, an alternate set of tasks, at the same level of difficulty, is used to provide the additional training required.

## Who is most likely to benefit from PREP?

Research has revealed that among children who have reading difficulties, despite good motivation, family support, and emotional well-being, two types of difficulties are present. The groups are similar in that children in both are unable to read at the level expected for their grade.

The larger group of poor readers comprises children whose reading difficulties arise from a wide array of weaknesses in cognitive functioning, while children in the smaller group can be classified as dyslexic readers. The poor reader from the larger category is likely to struggle in other subjects that do not require a lot of reading, and may perform poorly on a wide variety of intellectual tasks. By contrast, the dyslexic child has specific cognitive processing difficulties that are related to converting spelling to speech, or with phonological coding.

Also, both simultaneous and successive processing are required for reading. When a young child fails to learn to read, however, the failure is largely due to a deficit in successive processing, which is the process that helps the child to sequence different items or letters and words (Das, 1988). A child cannot read "friend" or "tongue" if he or she cannot remember the exact sequence of letters in each word and then convert these words into speech. Difficulties in successive processing may cause difficulties in acquiring and/or using phonological coding. This may, in turn, lead to an inability to effectively decode words, which ultimately leads to reading failure (Martinussen, 1995).

Poor performance in either simultaneous or successive processing may be due to (a) a decreased ability to use the process, (b) barriers to the use of the process that can be overcome by training, or (c) an inclination not to use the process when it is the optimal method (Kirby and Williams, 1991). It is important to note, however, that no cognitive task requires one process alone: it is a matter of emphasis. A child may use either process, depending on the task requirements (for example, the use of successive processing in spelling or decoding words phonetically) or his or her habitual mode of information processing.

PREP provides (a) alternatives for children who cannot use the processes very well, (b) experience and practice for children who have not developed one or both processes, and (c) specific training in recognizing when the method applied is the most efficient approach (Kirby and Williams, 1991).

For PREP to be both efficient and effective there should be no more than four children in any group session, and it is imperative that children begin the programme at their own reading level irrespective of their current age or grade. In summary, PREP training improves word reading and comprehension.

## References

Krywaniuk, L.W., and Das, J.P. (1976) Cognitive strategies in native children: Analysis and intervention. *Alberta Journal of Educational Research*, 22(4), 271-180.

- Brailsford, A., Snart, F., and Das, J.P. (1984) Strategy training and reading comprehension, *Journal of Learning Disabilities*, 17(5), 287-290.
- Das, J.P., Naglieri, J.A. and Kirby, J.R. (1994) *Assessment of cognitive processes*. Boston: Allyn and Bacon.
- Das, J.P., Mishra, R.K., and Pool, J.E. (1995) An experiment on cognitive remediation or word-reading difficulty, *Journal of Learning Disabilities*, 28(2), 66-79.
- Carlson, J.S., Das, J.P. (1997). A process approach to remediation of word-decoding deficiencies in Chapter 1 Children. *Learning Disability Quarterly*, 20, 93-125.
- Das, J.P., Parrila, R.K., and Papadopoulos, T.C. (2000) Cognitive education and reading disability. In A. Kozulin and Y. Rand (eds.), *Experience in Mediated Learning*. London: Elsevier.
- Papadopoulos, T.C., Das, J.P., Parrila, R.K., and Kirby, J.R. (2003) Children at risk for developing reading difficulties: A remediation study, *School Psychology International*, 24(1), 103-115.
- Hayward, D., Das, J. P., Georgiou, G and Janzen, T. (2007) Innovative Programmes for Improvement in Reading through Cognitive Enhancement: A remediation study, *Journal of Learning Disabilities* (in press).

## Reading at home: Teachers in training enhance reading skills and comprehension by reading to children

Saar Callens, Ase Vermeire and Marijke Wilssens

### What?

Cooperation between University College, local schools, libraries and some local organizations. The parents decide if they want to be part of the project and they can subscribe through the schools. Students visit the families at least ten times, until the reading has become a more common practice in the family (reading culture).

### Where?

This project is organized in different cities:

- Books at home [Boekenbende aan Huis] (Brussels): <http://www.boekenbende.be/>
- Book caravane [Boekenkaravaan] (Antwerp): <http://www.leesweb.org/karavaan/>
- Books on a visit [Boek op bezoek] (Ghent): <http://www.pbdgent.be/node/880>
- Reading Express [Voorleesexpress] (Holland): <http://www.voorleesexpress.nl/>

### Implications for parents and families

- Parents explore the importance of reading and reading at home, learn about great books and stories and inspiration about how reading can be joyful for young children.
- These families typically have a rich tradition of storytelling, but no real reading culture and they are not familiar with reading. Some parents also discover reading and picture books from their own culture, which they enjoy telling their children.
- Many parents and children find the way to the library nearby.
- Students are role models for parents by reading out loud to show how they can do it.  
"Reading culture" is not better than the "oral culture", but in a school reading culture is very important.

### Meaning for the children

- The children are enthusiastic. Often there are also brothers, sisters, neighbours' children who are listening.
- The children build a relationship of trust with the student who is reading.
- The gift book that students give at the end sometimes turns out to be the only book that the children have at home.
- In addition to their language and their starting literacy, their social, cognitive and affective developments are also stimulated.

### Significance for the primary school

- The relationship between the school and parents will be intensified.
- The teacher or a school counsellor can get additional information about the needs of the family by the student.
- The reading culture among school children is promoted.
- The relationship between reading at home and school is strengthened because the teacher in the classroom can continue to work around the books.
- We note that some parents become sensitive to the importance of reading and that the school library is visited more.



## Meaning for students

- A valuable opportunity to establish contacts with children (6 to 10 years) and parents in a family context and family situations where disadvantaged minority children grow up learning to discover through a positive activity.
- The awareness of poverty and its impact on a child at school. In a constructive way dealing with unknown aspects of the experiences of families and creating an open mind to diversity and other cultures.
- Meet a home culture, which is often very different from the school culture.
- Being discreet and showing a flexible attitude in these families.
- Meeting with a multicultural school.
- Reflecting on the relevance of these experiences for their own educational practice, especially on how to deal with the differentiated world of children.
- Realizing what the consequences might be when a child controls the school language insufficiently.
- Practical tips to create a good reading environment: e.g. turn TV or radio off, a suitable corner of the room to choose, make cosy, refer to the local children's library ...



## Movie examples:

<http://www.youtube.com/watch?v=fs6NF9WfZvE>

<http://www.youtube.com/watch?v=9ZeHpwgCx0k&feature=related>

[http://www.youtube.com/watch?v=GxXTxbg0B\\_I&feature=related](http://www.youtube.com/watch?v=GxXTxbg0B_I&feature=related)



## Sources for this module

	Websites
General Websites Related to Literacy	Child Development And Parenting Information <a href="http://www.childdevelopmentinfo.com">www.childdevelopmentinfo.com</a> American Speech Language Hearing Association (ASHA) <a href="http://www.asha.org">www.asha.org</a> The National Institute for Literacy <a href="http://www.nifl.gov">www.nifl.gov</a>
Phonological Awareness Phonemic Awareness	Phonemic Awareness Activities <a href="http://teams.lacoe.edu/documentation/classrooms/patti/k-1/activities/phonemic.html">http://teams.lacoe.edu/documentation/classrooms/patti/k-1/activities/phonemic.html</a> Phonological Awareness is Child's Play <a href="http://www.naeyc.org/files/yc/file/200901/BTJPhonologicalAwareness.pdf">http://www.naeyc.org/files/yc/file/200901/BTJPhonologicalAwareness.pdf</a> Phoneme Awareness Activities <a href="http://www.readingrockets.org/article/388/">www.readingrockets.org/article/388/</a> Ideas and Activities for Developing Phonological Awareness Skills <a href="http://www.doe.virginia.gov/instruction/response_intervention/resources/ideas_activities_develop_phonological.pdf">http://www.doe.virginia.gov/instruction/response_intervention/resources/ideas_activities_develop_phonological.pdf</a> Phonemic Awareness Activities <a href="http://www.readingresource.net/phonemicawarenessactivities.html">http://www.readingresource.net/phonemicawarenessactivities.html</a>
Word Recognition	Literacy Games to Develop Word Recognition <a href="http://www.childrens-books-and-reading.com/literacy-games.html">http://www.childrens-books-and-reading.com/literacy-games.html</a>
Website where teachers can find (Dutch) books by selecting 2 criteria at the same time: Reading comprehension and Reading skills (AVI)	<a href="http://www.leesplein.nl/LL_plein.php?hm=3&amp;sm=4&amp;method=aviorclib&amp;avi=E7&amp;clib=3&amp;submit=Zoek">http://www.leesplein.nl/LL_plein.php?hm=3&amp;sm=4&amp;method=aviorclib&amp;avi=E7&amp;clib=3&amp;submit=Zoek</a> Ppt. Voorlezen aan huis: Kathleen Meersseman (Arteveldehogeschool) 2011-2012 <a href="http://www.boekenbende.be/">http://www.boekenbende.be/</a> <a href="http://www.leesweb.org/karavaan/">http://www.leesweb.org/karavaan/</a> <a href="http://www.pbdgent.be/node/880">http://www.pbdgent.be/node/880</a> <a href="http://www.voorleesexpress.nl">http://www.voorleesexpress.nl</a>
	Books, Chapters and Articles
Bos, C. S. (1982)	Getting past decoding: Using modelled and repeated readings as a remedial method for learning disabled students. <i>Topics in Learning and Learning Disabilities</i> , 1, 51-57.
Bos, C. S., and Vaughn, S. (2002)	<i>Strategies for teaching students with learning and behaviour</i> . Boston: Allyn and Bacon
Boyle, J., and Scanlon, D.(2010)	<i>Methods and Strategies for teaching students with mild disabilities</i> . Singapore: Cengage Publishers.
Bryant, D. P., Smith, D. D., and Bryant, B.R. (2008)	<i>Teaching students with special needs in inclusive classrooms</i> . Boston: Pearson
Bursuck, W.D., and Damer, M. (2011)	<i>Teaching reading to students who are at risk or have disabilities</i> (2 <sup>nd</sup> ed.). Boston: Pearson.
Chall, J. (1983).	<i>Stages of reading development</i> . New York: McGraw-Hill.
Chall, J. (1996)	<i>Learning to read: The great debate</i> (3 <sup>rd</sup> ed.). Fort Worth: Harcourt Brace College
Chambers, A. (2011).	<i>The Reading Environment How adults help children enjoy reading</i> . Thimble Press <i>Tell Me: Children reading and talk</i> . Thimble Press
Cooper, J. D., Chard, D. J., and Kiger, N. D. (2006)	<i>The struggling reader: Interventions that work</i> . New York: Scholastic.
Donoghue, M. (2008)	<i>Language arts: Integrating skills for classroom teaching</i> . Sage Pub.

Hallahan, D. P., Kaufmann, J. M., and Pullen, P.C. (2009)	<i>Exceptional learners: An Introduction to Special Education</i> . Boston: Pearson
Heward, W. L. (2003)	<i>Exceptional children: An introduction to special education</i> . Upper Saddle River: Merrill Prentice Hall.
Housel, D. (2011)	<i>Strategies for building fluency</i> . Huntington Beach, CA: Shell Education Publishing.
Huey, E.B. (1908)	<i>The psychology and pedagogy of reading</i> . Cambridge, MA: MIT Press.
Kuhn, M. R., and Stahl, S.A. (2000)	<i>Fluency: A Review of Developmental and Remedial Practices</i> . (CIERA Rep. No.2-008). Ann Harbour, MI: Centre for the Improvement of Early Reading Achievement.
Lerner, J., and Johns, B. (2009)	<i>Learning disabilities and related mild disabilities: Characteristics, teaching strategies, and new directions</i> . Australia: Wadsworth
Manzo, A., Manzo, U., and Albee, J. (2004)	<i>Reading assessment for diagnostic prescriptive teaching (2nd ed.)</i> . Toronto, Ontario, Canada: Wadsworth/ Thomson Learning.
Minskoff, E. (2005)	<i>Teaching reading to struggling learners</i> . Baltimore: Brookes Publishing.
National Reading Panel. (2000)	<i>Report of the National Reading Panel: Teaching children to read</i> . Washington, DC. National Institute of Child Health and Human Development.
O'Connor, R. E. (2007)	<i>Teaching word recognition: Effective strategies for students with learning difficulties</i> . New York: Guilford Press.
Otto, B. (2008)	<i>Literacy development in early years</i> . New Jersey: Pearson.
Pence, K. L. (2007)	<i>Assessment in emergent literacy</i> . San Diego: Plural Publishing.
Pressley, M., & Rankin, J. (1994)	More about whole language methods of reading instruction for students at risk for early reading failure. <i>Learning Disabilities Research &amp; Practice</i> , 9, 157-168.
Torgesen, J. K (2004)	<i>Lessons learned from research on interventions for students who have difficulty learning to read</i> . In P. McCardle and V. Chhabra (Eds). <i>The voice of evidence in Reading Research</i> . Baltimore : Brookes Publishing Co.
Spafford, C. A., and Grosser, G. S. (2005)	<i>Dyslexia and reading difficulties: Research and resource guide for working with all struggling readers</i> . Boston: Allyn and Bacon.
Vernooy, K. (2006)	<i>Effectief omgaan met risicolezers. Werken aan preventie en beter omgaan met leesmoelijkheden</i> . [Dealing effectively with at risk-readers. Working at prevention in reading difficulties] Amersfoort, CPS
Vernooy, K. (2012)	<i>Elk kind een lezer</i> . [Every child a reader], Garant, Antwerpen-Apeldoorn
Wolf, M. (2007).	<i>Proust and the Squid: The story and science of the reading brain</i> . New York: Harper-Collins.
Articles	
Adams, M. J., & Bruck, M. (1995, Summer)	Resolving the 'great debate'. <i>American Educator</i> , p. 7, 10-20.
Bos, C.S., Mather, N., Friedman Narr, R, & Babur, N (1999)	Interactive, collaborative professional development in early literacy instruction: Supporting the balancing act. <i>Learning Disabilities Research &amp; Practice</i> , 14, 215-226.
Ball, E., and Blachman, B. (1991)	Does phoneme awareness training in kindergarten make a difference in early word recognition and developmental spelling? <i>Reading Research Quarterly</i> , 26, 49-66.
Chard, D. J., and Dickson, S. V. (1999)	Phonological awareness: instructional and assessment guidelines. <i>Intervention in School and Clinic</i> , 34(5)
Mastropieri, M. A., Leinart, A., and Scruggs, T. E., (1999)	Strategies to increase reading fluency. <i>Intervention in School and Clinic</i> , 34(5).
Mather, N. (1992)	Whole language reading instruction for students with learning disabilities: Caught in the crossfire. <i>Learning Disabilities Research &amp; Practice</i> , 7, 87-95.
Mather, N., Bos, C., & Babur, N. (2001)	Perceptions and knowledge of preservice and inservice teachers about early literacy instruction. <i>Journal of Learning Disabilities</i> , 34(5), 472-482.
Pressley, M., & Rankin, J. (1994)	More about whole language methods of reading instruction for students at risk for early reading failure. <i>Learning Disabilities Research &amp; Practice</i> , 9, 157-168.
Samuel, S. J. (1997)	The method of repeated readings. <i>The Reading Teacher</i> , 50, 376-381.
Topping, K. (1989)	Peer tutoring and paired reading: Combining two powerful techniques. <i>The Reading Teacher</i> , 42, 488-494.

Vellutino, F.R., Scanlon, D.M., Sipay, E.R., Small, S.G., Pratt, A., Chen, R., & Denckla, M.B. (1996).	Cognitive profiles of difficult to remediate and readily remediated poor readers: Early intervention as a vehicle for distinguishing between cognitive and experiential deficits as basic causes of specific reading disability. <i>Journal of Educational Psychology</i> , 88, 601-638.
	PASS Reading Enhancement Programme (PREP)
Books	
Das, J.P., Naglieri, J.A., and Kirby, J.R. (1994)	<i>Assessment of cognitive processes</i> . Boston: Allyn and Bacon.
Das, J.P., Parrila, R.K., and Papadopoulos, T.C. (2000)	<i>Cognitive education and reading disability</i> . In A. Kozulin and Y. Rand (Eds.), <i>Experience in Mediated Learning</i> . London: Elsevier.
Articles	
Brailsford, A., Snart, F., and Das, J.P. (1984).	Strategy training and reading comprehension. <i>Journal of Learning Disabilities</i> , 17(5), 287-290.
Carlson, J.S., Das, J.P. (1997).	A process approach to remediation of word-decoding deficiencies in Chapter 1 Children. <i>Learning Disability Quarterly</i> , 20, 93-125.
Das, J.P., Mishra, R.K., and Pool, J.E. (1995).	An experiment on cognitive remediation or word-reading difficulty. <i>Journal of Learning Disabilities</i> , 28(2), 66-79.
Hayward, D., Das, J. P., Georgiou, G and Janzen, T. (2007)	Innovative Programmes for Improvement in Reading Through Cognitive Enhancement: A Remediation Study. <i>Journal of Learning Disabilities</i> .
Krywaniuk, L.W., and Das, J.P. (1976).	Cognitive strategies in native children: Analysis and intervention. <i>Alberta Journal of Educational Research</i> , 22(4), 271-180.
Papadopoulos, T.C., Das, J.P., Parrila, R.K., and Kirby, J.R. (2003).	Children at risk for developing reading difficulties: A remediation study. <i>School Psychology International</i> , 24(1), 103-115.

## Toolbox of activities for early reading



Toolbox 4.1	Reading aloud to children 1
Toolbox 4.2	Reading aloud to children 2
Toolbox 4.3	Working on vocabulary
Toolbox 4.4	Language experience approach
Toolbox 4.5	PREP (PASS Reading Enhancement Programme)
Toolbox 4.6	Connect sounds and letters
Toolbox 4.7	Connect word recognition
Toolbox 4.8	Connect fluency
Toolbox 4.9	F and L Method
Toolbox 4.10	Repeated reading
Toolbox 4.11	Choral reading
Toolbox 4.12	Choral repeated reading
Toolbox 4.13	Coached reading (Assisted Reading)
Toolbox 4.14	Paired reading
Toolbox 4.15	Games

## Toolbox 4.1 Reading aloud to children 1

<b>Goals</b>	<ul style="list-style-type: none"> <li>• To build interest in literacy.</li> <li>• To learn to play with the language.</li> <li>• To learn the sounds a language is made of.</li> <li>• To build vocabulary.</li> <li>• All these elements are important in learning how to read.</li> </ul>
<b>For whom?</b>	All primary school-aged children
<b>Methods</b>	
<b>Materials</b>	<p>Different reading materials:</p> <ul style="list-style-type: none"> <li>• (picture)books in all kind of materials ( wooden, plastic, paper, digital,...)</li> <li>• newspapers,</li> <li>• magazines,</li> <li>• kamishibai,</li> <li>• listening books.</li> </ul>
<b>Author(s)</b>	
<b>Approximate time needed to teach</b>	A quarter of an hour every (school)day
<b>Background</b> 	<p>Children who have been read to aloud have a more elaborated vocabulary, know the names of the letters and sounds. They are more able to distinguish the sounds in a word.</p> <p>When a child has the experience of being read to aloud it obtains almost 70% of the skills that it needs to start reading himself. A lot of children don't have a rich environment of books at home. Such an environment improves vocabulary and the skills for technical reading (Mol &amp; Bus, 2011).</p> <p>Teacher read-alouds are a very consistent activity that provides profound opportunities to enhance the literacy of young children. Read alouds integrate the effective development of vocabulary. By reading aloud and by reading aloud the same story over and over again children :</p> <ul style="list-style-type: none"> <li>• Get insight in the structure of stories, the connections between characters and events in the story</li> <li>• Like the effect of recognition</li> <li>• Improve their vocabulary</li> <li>• Understand the story better and focus on other aspects (such as intonation, vocabulary, the effect of rhyme and repetition...)</li> <li>• Start asking other questions about the story because they understand it better. This is a good start for reading comprehension.</li> </ul>
<b>Where to find more information</b>	<p>Roots of Reading. With tips and techniques for parents to read to their children.  <a href="http://www.pbs.org/launchingreaders/rootsofreading/overview.html">http://www.pbs.org/launchingreaders/rootsofreading/overview.html</a></p> <p>"Voorlezen, het leukste kwartiertje van de dag." [Reading out aloud; the nicest moment of the day]. Voorleesjaar 2013 a project by Stichting Lezen Vlaanderen [Foundation for Reading]. (in Dutch) Brochure "The reader organisation" <a href="http://thereader.org.uk">http://thereader.org.uk</a></p> <p>Chambers, A. (2011). <i>The Reading Environment How adults help children enjoy reading</i>. Thimble Press</p> <p>Chambers, A. (2011) <i>Tell Me: Children reading and talk</i>. Stroud: Thimble Press</p> <p>The Reading Environment describes, with many practical examples, the surroundings and attitudes that support children's encounters with books in school, enabling them to become thoughtful, willing readers.</p> <p>Macmillan, A. (2010). <i>A little aloud for children. An anthology of poems and stories to share aloud</i>. London: Chatto &amp; Windus</p>
<b>Video material</b> 	Meet the experts: G. Reid Lyon. "Reading today" <a href="http://www.youtube.com/watch?v=hzmnUaIHtqs">http://www.youtube.com/watch?v=hzmnUaIHtqs</a>

## Toolbox 4.2 Reading Aloud 2

<b>Goals</b>	<ul style="list-style-type: none"> <li>To promote reading fluency</li> <li>To provide background knowledge for students</li> <li>To develop new vocabulary</li> <li>Provide a positive role model</li> <li>Help children develop pleasure of reading</li> </ul>
<b>For whom?</b>	Children (Beginning readers)
<b>Methods</b>	<ul style="list-style-type: none"> <li>The teacher models fluent reading.</li> <li>For beginning readers, the use of "Big Books" is very helpful.               <ol style="list-style-type: none"> <li>It allows the teacher point at the words while reading.</li> <li>It allows the teacher to discuss the pictures while reading.</li> <li>Through this way the students interact with the teacher and see the pictures and the print.</li> <li>Reading aloud helps the students hear prosody of the text (read with intonation and punctuation).</li> </ol> </li> <li>When reading aloud, read the story with the background summary (semantic cueing).</li> <li>Reading aloud allows the students listen to and discuss books that are not at their current reading level</li> </ul>
<b>Materials</b>	Big books for beginners or attractive books that are not at the students' current reading level
<b>Author(s)</b>	Bos & Vaughn, 1991
<b>Approximate time needed to teach</b>	10-15 minutes
<b>Background</b>	See Part 2: Theories of learning to read page 128
<b>Where to find more information?</b>	<a href="http://www.youtube.com/watch?v=Dm_uEgELsRo">http://www.youtube.com/watch?v=Dm_uEgELsRo</a> <a href="http://www.youtube.com/watch?v=MHdnVCOM2zo&amp;feature=related">http://www.youtube.com/watch?v=MHdnVCOM2zo&amp;feature=related</a> <a href="http://writingcenter.tamu.edu/for-faculty/teaching-writing/instruction/reading-aloud/">http://writingcenter.tamu.edu/for-faculty/teaching-writing/instruction/reading-aloud/</a> <a href="http://www.readingrockets.org/article/16287/">http://www.readingrockets.org/article/16287/</a>

### Description of the activity

- Start the session asking some questions about the title of the book. Lead the conversation towards the topic of the book. Try to raise their interest about the book.
- Show the cover of the book. Read the title and talk about it. Give them some time to notice the details on the cover, story characters, and ask them what the story will be about.
- When reading the book, use a special tone of voice. This helps students to understand the music of the language, how and where to use intonation and stresses on the words.
- While reading, pause long enough for them to notice certain vocabulary. If there are some predictable words or rhyming words, ask them to complete the sentences.

Have them repeat some unfamiliar words or phrases. Help them experience with those words and take time to explain these new words.

### Toolbox 4.3 Working on vocabulary

<b>Goals</b>	To improve and extend the active vocabulary
<b>For whom?</b>	All primary school-aged children
<b>Methods</b>	Six steps of Marzano
<b>Materials</b>	Marzano describes a six-step process in the instruction of vocabulary (Building Academic Vocabulary). The first three steps are to assist the teacher in direct instruction. The last three steps are to provide the learner practice and reinforcement.
<b>Author(s)</b>	Marzano
<b>Approximate time needed to teach</b>	Teachers should be aware of the importance of focusing on vocabulary in every school activity! The different steps can be used along the different activities.
<b>Background</b> 	<p>Marzano describes a six-step process in the instruction of vocabulary (Building Academic Vocabulary). The first three steps are to assist the teacher in direct instruction. The last three steps are to provide the learner practice and reinforcement.</p> <p>The importance of an elaborated vocabulary to be successful in technical and reading comprehension has been the subject of various studies.</p> <p><i>"Teaching vocabulary will not guarantee success in reading, just as learning to read words will not guarantee success in reading. However, lacking either adequate word identification skills or adequate vocabulary will ensure failure"</i> (Biemiller, 2005).</p>
<b>Where to find more information?</b>	<p><a href="http://jc-schools.net/tutorials/vocab/strategies.html">http://jc-schools.net/tutorials/vocab/strategies.html</a>            A Six-Step Process for Teaching Vocabulary DVD ISBN-13:978-1-4166-0253-8            Building Academic Vocabulary Teacher's Manual by Robert J. Marzano and Debra J. Biemiller, A. (2005). Size and sequence in vocabulary development: Implications for choosing words for primary grade vocabulary instruction. In E. H. Hiebert and M. L. Kamil (Eds.), <i>Teaching and learning vocabulary: Bringing research to practice</i> (pp. 223–242). Mahwah, NJ: Lawrence Erlbaum. Retrieved August 18, 2009, from PsycINFO database.</p> 
<b>Video material</b> 	Meet the experts: G. Reid Lyon, "Reading today <a href="http://www.youtube.com/watch?v=hzmUalHtq5">http://www.youtube.com/watch?v=hzmUalHtq5</a>

#### Description of the activity

Six steps of Marzano is a manual to implement a comprehensive approach to teaching academic vocabulary at the classroom, school and district levels.

The method also includes teacher as student activities: teacher explanation, student explanation, student graphic or pictographic representation, review using comparison activities, student discussion of vocabulary terms, and use of games. The games not only add a bit of fun to the teaching and learning process, but also provide an opportunity to review the terms in a non-threatening way.

Information from: <http://jc-schools.net/tutorials/vocab/strategies.html>

Step 1: The teacher gives a description, explanation, or example of the new term.

- Provide learners information about the term.
- Determine what the learner already knows about the term.
- Ask learners to share what they already know as a means of monitoring misconceptions.
- Ask learners to share what they already know to use this knowledge as a foundation for more learning.
- Utilize examples, descriptions, but not definitions. Definitions are not a recommended method for vocabulary instruction as they do not give learners an informal, natural way to learn new vocabulary.
- Help the learning of proper noun terms by identifying characteristics of the proper noun.

Step 2: The teacher asks the learner to give a description, explanation, or example of the new term in his/her own words.

- Remind learners to not copy, but use their own words.
- Monitor students to determine whether any confusion exists.
- Provide more descriptions, explanations, or examples if necessary.
- Request that students record these in their Academic Notebook Worksheet. These notebooks can travel with the learner as he/she moves through each grade level and become a compilation of vocabulary terms mastered.

Step 3: The teacher will ask the learner to draw a picture, symbol, or locate a graphic to represent the new term.

- Provide learners with a non-linguistic method of vocabulary mastery.
- Share examples of other learners' drawings or allow students to work in teams to help those who complain that they cannot draw.
- Teach the concept of speed drawing for those who labour too long over their work.
- Ask learner to share their work.
- Use graphics from magazines or the Internet.
- Illustrate terms through symbols, drawing the actual term, illustrate with a cartoon, or drawing an example of the term should be encouraged.

Step 4: The learner will participate in activities that provide more knowledge of the words in their vocabulary notebooks.

- Remind learners not to copy, but use their own words.
- Distribute the Academic Notebook Worksheet to assist learners in organizing their vocabulary terms.
- Encourage learners to identify prefixes, suffixes, antonyms, synonyms, related words for the vocabulary term as "new info" on the Academic Notebook Worksheet.

Step 5: The learner will discuss the term with other learners.

Pair-Share Strategy:

1. THINK: Allow thinking time for learners to review their own descriptions and images of the terms.
2. PAIR: Put learners in pairs to discuss their descriptions, images, and any new info related to the terms.
3. SHARE: Provide opportunity for groups to share aloud and discuss conceptions and misconceptions.

Monitor as learners help each other to identify and clear up any confusion about new terms.

Step 6: The learner participates in games that provide more reinforcement of the new term.

- A variety of games are available at this website: PowerPoint Games, Word Game Boards, Excel Games, WORDO, Twister, Fly Swat
- Walk around the room and check their work when learners are working on their Academic Notebook Worksheet.
- Check the notebooks to evaluate accuracy.
- Listen for misconceptions when learners are playing games/activities.

Provide an opportunity for learners to work together



## Toolbox 4.4 Language experience approach

<b>Goals</b>	Children experience the world of stories, making their own stories experimenting with semantics, syntax, various writing materials (stamps, letters and other signs, print )																										
<b>For whom?</b>	All primary school-aged children																										
<b>Methods</b>	Taal leren op eigen kracht ('Learning language on your own'): Suzanne van Norden. Goodman, K. 2005. <i>What's Whole in Whole Language?</i> Berkeley CA: RDR Books, pp.3-7.																										
<b>Materials</b>	None																										
<b>Author(s)</b>	Goodman																										
<b>Approximate time needed to teach</b>	Teachers should be aware of the importance of focusing on vocabulary in every school activity! The different steps can be used along the different activities.																										
<b>Background</b>	<p>Goodman, K. (1986, p.7)</p> <p>Many teachers and handbooks tried to make learning language as easy as possible. By doing this we took 'apart the language and turned it into words, syllables, and isolated sounds. Unfortunately, we also postponed its natural purpose — the communication of meaning — and turned it into a set of abstractions, unrelated to the needs and experiences of the children we sought to help.</p> <p>This approach tries to 'keep language whole and involve children in using it functionally and purposefully to meet their own needs. That simple, very basic discovery is leading to some dramatic, exciting changes in schools. The following lists show that a whole language programme is more pleasant and more fun for both pupils and teachers. Is it also more effective? Yes, it is. With the language they've already learned, children bring to school their natural tendency to want to make sense of the world. When schools break language into bits and pieces, sense becomes nonsense, and it's always hard for kids to make sense out of nonsense Each abstract bit and piece that is learned is soon forgotten as kids go on to further fractured fragments In the end, they begin to think of school as a place where nothing ever seems to make sense.</p> <p>That's why learning language in the real world is easy, and learning language in school should be easy, but is often hard. However the five essential components for an effective reading programme (phonemic awareness, phonics, reading fluency, vocabulary development, and reading comprehension) mustn't be forgotten. A combination of direct instruction on these five elements and the experience of using your own language to read and to communicate will consolidate better literacy.</p> <table border="0"> <tr> <td><b>It's easy when:</b></td> <td><b>It's hard when:</b></td> </tr> <tr> <td>It's real and natural.</td> <td>It's artificial.</td> </tr> <tr> <td>It's whole.</td> <td>It's broken into bits and pieces.</td> </tr> <tr> <td>It's sensible.</td> <td>It's nonsense.</td> </tr> <tr> <td>It's interesting.</td> <td>It's dull and uninteresting.</td> </tr> <tr> <td>It's relevant.</td> <td>It's irrelevant to the learner.</td> </tr> <tr> <td>It belongs to the learner.</td> <td>It belongs to somebody else.</td> </tr> <tr> <td>It's part of a real event.</td> <td>It's out of context.</td> </tr> <tr> <td>It has social utility.</td> <td>It has no social value.</td> </tr> <tr> <td>It has purpose for the learner.</td> <td>It has no discernible purpose.</td> </tr> <tr> <td>The learner chooses to use it.</td> <td>It's imposed by someone else.</td> </tr> <tr> <td>It's accessible to the learner.</td> <td>It's inaccessible.</td> </tr> <tr> <td>The learner has power to use it.</td> <td>The learner is powerless.</td> </tr> </table>	<b>It's easy when:</b>	<b>It's hard when:</b>	It's real and natural.	It's artificial.	It's whole.	It's broken into bits and pieces.	It's sensible.	It's nonsense.	It's interesting.	It's dull and uninteresting.	It's relevant.	It's irrelevant to the learner.	It belongs to the learner.	It belongs to somebody else.	It's part of a real event.	It's out of context.	It has social utility.	It has no social value.	It has purpose for the learner.	It has no discernible purpose.	The learner chooses to use it.	It's imposed by someone else.	It's accessible to the learner.	It's inaccessible.	The learner has power to use it.	The learner is powerless.
<b>It's easy when:</b>	<b>It's hard when:</b>																										
It's real and natural.	It's artificial.																										
It's whole.	It's broken into bits and pieces.																										
It's sensible.	It's nonsense.																										
It's interesting.	It's dull and uninteresting.																										
It's relevant.	It's irrelevant to the learner.																										
It belongs to the learner.	It belongs to somebody else.																										
It's part of a real event.	It's out of context.																										
It has social utility.	It has no social value.																										
It has purpose for the learner.	It has no discernible purpose.																										
The learner chooses to use it.	It's imposed by someone else.																										
It's accessible to the learner.	It's inaccessible.																										
The learner has power to use it.	The learner is powerless.																										
<b>Where to find more information?</b>	Goodman, Ken. 2005. <i>What's Whole in Whole Language</i> . Berkeley CA: RDR Books, pp.3-7. Van Norden, Suzanne.2009. <i>Taal leren op eigen kracht. Taalverwerving op school met behulp van de werkwijze van taalvorming</i> . Assen: Van Gorcum Moats, L. <i>Whole Language High Jinks: How to Tell When "Scientifically-Based Reading Instruction" Isn't</i> . pg. 12																										

### Description of the activity

It's important to start from what the children already are able to do, what they know, what they are interested in. The basic order of working with a language round:

Preparation: the teacher chooses a subject. He thinks about a question to start with and some other questions which can be useful during the conversation.

The teacher can decide not to offer a subject but to let children come up with one.

Step 1: You make a circle with the group.

Step 2: The teacher introduces the subject by making a choice from the subjects children or the teacher offered:

Showing objects

Reading a poem or a story aloud

- Step 3: This is the storytelling round: every child tells something about the given information in step 2.
- Step 4: In this phase the children make lists with ideas on the subject. These ideas can be their own ideas or things they heard in step 4. Another possibility is children making drawings on the subject.
- Step 5: Each child picks up one word or drawing from his list. The children talk about it in duos.
- Step 6: The children write something down from their conversation in step 5. When the children are still too young to write, they make a new drawing and the teacher writes down the story behind the drawing ( a ' language drawing' ).
- Step 7: The children and/or the teacher read their story out loud. The others can ask questions about it and can express their appreciation.

After the language round, the teacher can further explore the texts using the following steps:

- Step 1: The teacher chooses a text from a student. He copies the original (all mistakes or wrong sentences included) text on the blackboard. The sentences are numbered in different colours.
- Step 2: The teacher makes duos. Every duo gets a piece of paper and a pencil.  
The teacher reads the text out loud twice.  
The teacher asks the children to write down their questions on the content of the text.  
The children are asked to mark the possible mistakes in the text. The teacher can decide to do this with the whole group using the blackboard text.
- Step 3: The whole group discusses the text (content and spelling mistakes). The writer of the text can answer questions and decides whether a suggestion is applied to his text (e.g. order of the sentences, adding a word... ).  
The teacher gives information on linguistics: the discussion gives children the opportunity to think about various aspects of language.
- Step 4: The final text is read out loud.
- Step 5: Children start to work on their own text following the instructions:
- Read your own text;
  - Make some changes if necessary;
  - Read the text of your neighbour;
  - Talk together about the text;
  - Change the texts until your happy with the result;
  - Make a drawing;
  - Ask the teacher to correct your text;
  - Write the text under your drawing.

This is the basic approach.

Other useful possibilities for the language round:

- To make lists on the blackboard;
- A question round;
- To order objects or words;
- First drawing then writing;
- One child starts a drawing, the next one continues it;
- To work with associations;
- To write a text under a drawing of someone else;
- To make a comic;
- To write dialogues;
- To write a poetical text;
- To work with a printing press;
- To work on the pc.

### Toolbox 4.5 PASS Reading Enhancement Programme (PREP)

<b>Goals</b>	Improve the information-processing strategies that underlie reading and reading comprehension while at the same time avoiding the direct teaching of word reading skills.
<b>For whom?</b>	Primary school-aged children who are experiencing difficulty with reading and spelling, and who show evidence of difficulties in information-processing strategies, namely simultaneous and/or successive process.
<b>Methods</b>	PREP consists of four successive processing modules and four simultaneous processing modules, each involving a global and curriculum-related bridging component. The global components comprise structured non-reading tasks requiring application of successive or simultaneous strategies, while the bridging component involves the same processing and strategy used in activities linked to reading and spelling. The programme provides scripted instructions for each task along with a hierarchy of scripted prompts for each global and bridging component to support and guide any child so he/she can succeed with minimal assistance and maximal success. The first level prompts remain quite general, helping a student find a strategy to remember the instructions for example. The third level of prompts is much more direct; a student may be asked to watch and see how another student successfully performs the task, or the facilitator may discuss a variety of ways to successfully complete the task.
<b>Materials</b>	Successive Processing tasks (Joining Shapes; Connecting Letters; Related Memory; Window Sequencing), 1 printed instructional manual, 190 pages Simultaneous Processing tasks (Tracking; Shapes and Objects; Shape Design; and Sentence Verification), 1 printed instructional manual, 150 pages 45 reusable, laminated sheets (8.5 x 11) 1 package of reusable manipulate tables (objects, shapes, etc...) and laminated cards
<b>Author(s)</b>	J.P. Das, University of Alberta, Canada
<b>Approximate time needed to teach</b>	Improvements in reading and reading comprehension are typically achieved in 12-16 hours of facilitation.
<b>Background</b>	 <p>As the title suggests, PREP is a reading enhancement tool based on a theory of intelligence called PASS, created by J.P. Das — which proposes that cognition is organized in three systems: Planning; Attention; and Information Processing. See background text on page 131 and 144</p>
<b>Where to find more information?</b>	Child learning programmes for young students – PREP and COGENT <a href="http://childlearningprogram.com/">http://childlearningprogram.com/</a> Das, J. P., Carlson, J., Davidson M. B. and Longe, K. (1997). <i>PREP: PASS remedial programme</i> . Seattle, WA: Hogrefe. <a href="http://dascentre.educ.ualberta.ca/pass.html">http://dascentre.educ.ualberta.ca/pass.html</a> Rosário, A. C., Candeias, A.A. & V. Cruz, Dynamic assessment and intervention of learning difficulties based on the PASS Reading Enhancement Programme, in: Lebeer, J., Candeias, A.A., and Grácio, L. (Eds.) (2011), <i>With a different glance. Dynamic Assessment and Functioning of Children Oriented at Development and Inclusive Learning</i> . Antwerpen/Apeldoorn: Garant, pp.219-226.

## Toolbox 4.6 Connect sounds and letters

<b>Goals</b>	To improve the phonemic awareness, connection letter-sound, initial reading process.
<b>For whom?</b>	Intervention programme for children with difficulties with aspects of initial reading: sounds and letters.
<b>Methods</b>	CONNECTMETHOD: SOUNDS, Anneke Smits (NL)
<b>Materials</b>	
<b>Author(s)</b>	Anneke Smits
<b>Approximate time needed to teach</b>	3 times a week , 20 minutes each; Individual, in small groups of three children, whole class.
<b>Background</b> 	<p>Connect is a programme for initial readers at risk. It focuses on the first months of initial reading. The programme 'Connect' is based on :</p> <ol style="list-style-type: none"> <li>1. Connectionist models of the reading process ( Van den Broeck,1993; Snowling en Hulme,1999) that claims that mastery of the alphabetic principle (the idea that individual letters or letter clusters—graphemes—represent the sounds—phonemes—of spoken words is critical for learning to read in an alphabetic script such as English. Both letter-sound knowledge and phoneme awareness are necessary for a child to understand the alphabetic principle.</li> <li>2. On the work of Spalding. She published 'The writing Road to Reading (2003) in which she claims that children should be explicitly taught sound-letter correspondences by saying the sound and writing the letter or letters. Children then say sounds and write high-frequency words, then sentences and read aloud their own writing. This programme integrates explicit, multisensory, interactive, and diagnostic instruction with the five research-based components (phonemic awareness, phonics, reading fluency, vocabulary development, and reading comprehension).</li> </ol>
<b>Where to find more information?</b>	<p>Bitter, G and Aleta.M. (2011) Effects of Explicit, <i>Multisensory, Structured Language Arts Instruction Compared to Conventional Reading Instruction</i>. White Arizona State <a href="http://tblr.asu.edu/bitter/Bitter%20Article%209-12-2011.pdf">http://tblr.asu.edu/bitter/Bitter%20Article%209-12-2011.pdf</a></p> <p>Spalding, R.B. (1990) <i>The Writing Road to Reading</i>. New York: Quill.</p> <p>Smits, A. en Braams,T. ( 2006) <i>Dyslectische kinderen leren lezen</i>. Amsterdam, Boom. <a href="http://www.masterplandyslexie.nl">www.masterplandyslexie.nl</a></p> <p>Hulme C, Snowling MJ, Caravolas M, Carroll J. Phonological skills are (probably) one cause of success in learning to read: A comment on Castles and Coltheart. <i>Scientific Studies of Reading</i>. 2005;9:351–365. <a href="http://www2.warwick.ac.uk/fac/sci/psych/people/academic/jcarroll/jcarroll/publications/ssrproof.pdf">http://www2.warwick.ac.uk/fac/sci/psych/people/academic/jcarroll/jcarroll/publications/ssrproof.pdf</a></p> <p>Van den Broeck, W. ( 1993) Theorieën van woordherkenning en praktische implicaties. <i>Tijdschrift voor orthopedagogiek</i>,32,474-488.</p>
<b>Video material</b> 	<p><a href="http://www.masterplandyslexie.nl">www.masterplandyslexie.nl</a></p> <p>How kindergarteners learn to read ( 4 parts) on Youtube <a href="http://www.leraar24.nl/video/2615">http://www.leraar24.nl/video/2615</a> (Dutch example)</p>

### Description of the activity

**Connect Word-recognition** is an intervention programme for pupils who can almost name letters correctly, but who have difficulties in reading the letters in a word. It is directed at improving word-reading of words with double consonants, two-syllable words, and pluri-syllabic words. Precision is more important than speed. Connect Word-recognition can be done in small groups (2-3 pupils), accompanied by a teachers. A Connect session last about 20 minutes and is done three times a week with the same pupils. It can also be done individually.

Connect Word-recognition is a structured programme whereby a number of phases are involved. To maximise the effect, it has to be followed consistently.

**Phase 1: Reading to the children:** only during the first session. The teacher reads, but in an interactive way. It is motivating and increases reciprocity. The pupils joins the reading and points in the book..

**Phase 2: Write words:** the row of "connect" is dictated in a sequence; the pupil writes on a transparent board. Correct the writing.

**Phase 3: Read words:** read cards with words

**Phase 4: Simultaneous reading (= "choir" reading):** teacher and pupil read out the text aloud simultaneously.


**Phase 5: Word lotto:** play bingo with word cards.

**Phase 6: Duo reading:** teacher and pupil read on turns (three sessions for the same text)

The teacher offers enough support.

Teacher reads out further

## Toolbox 4.7 Connect Word Recognition

<b>Goals</b>	For students who know the letters but who experience difficulties reading longer words. Being partial cue readers, word recognition is too difficult for them.
<b>For whom?</b>	Intervention programme for children with difficulties with aspects of initial reading: words. First grade.
<b>Methods</b>	CONNECTMETHOD : WORD RECOGNITION, Anneke Smits (NL)
<b>Materials</b>	Textbooks zone approximate development Flashcards
<b>Author(s)</b>	Anneke Smits
<b>Approximate time needed to teach</b>	3 times a week , 20 minutes each Individual, small groups of three children, whole class
<b>Background</b> 	See toolbox 4.6
<b>Where to find more information?</b>	See toolbox 4.6
<b>Video material</b> 	<ul style="list-style-type: none"> <li>• <a href="http://www.masterplandyslexie.nl">www.masterplandyslexie.nl</a></li> <li>• How kindergarteners learn to read ( 4 parts) on Youtube</li> <li>• <a href="http://www.leraar24.nl/video/2298">http://www.leraar24.nl/video/2298</a> ( Dutch example)</li> </ul>

### Description of the activity

It is almost the same as CONNECT SOUNDS AND LETTERS activity.

The teacher chooses a text of 40 to 60 words.

The teacher makes connect rows. He can make words with consonant clusters and polysyllabic words.

In the first step the teacher reads the text out loud after he has discussed with the children the theme and the pictures of the text (only the first time).

In the second step the children write the words of the connect row down.

In the third step the children read the connect words (game word lotto).

In the fourth step the students read the text: one sentence for the teacher, one for the student. They read the text together.

In the fifth step the student reads flashcards of the given words.

In the final step the student reads the text again (automation).

It is important that students read correctly: accuracy is more important than speed!

The teacher supports the student and gives neutral feedback.

To finish the session the teacher reads a new passage of the story out loud.

## Toolbox 4.8 Connect fluency

<b>Goals</b>	To improve fluent reading and to collect 'reading miles'.
<b>For whom?</b>	The student masters the initial reading strategies but doesn't manage to automate his reading. First grade.
<b>Methods</b>	CONNECTMETHOD : FLUENCY, Anneke Smits (NL)
<b>Materials</b>	Textbooks zone approximate development Flashcards
<b>Author(s)</b>	Anneke Smits
<b>Approximate time needed to teach</b>	3 times a week , 20 minutes each Individual, in small groups of three children, whole class
<b>Background</b>	See toolbox 4.6, 4.7
<b>Where to find more information?</b>	See toolbox 4.6, 4.7
<b>Video material</b>	<ul style="list-style-type: none"> <li>• <a href="http://www.masterplandyslexie.nl">www.masterplandyslexie.nl</a></li> <li>• How kindergarteners learn to read ( 4 parts) on Youtube</li> <li>• <a href="http://www.leraar24.nl/video/2616">http://www.leraar24.nl/video/2616</a> ( Dutch example)</li> </ul>

### Description of the activity

Almost the same as CONNECT SOUNDS AND LETTERS OR CONNECT WORD RECOGNITION

The teacher chooses five inspiring books. The student can pick up the book he likes most.

From the chosen book the teacher selects a passage of 60-200 words.

In the first step the teacher discusses the content of the book or the expectations of the student using pictures, title ...

In the second step the teacher reads the text out loud and in a fluent way. During the reading some interaction between teacher and student takes place: they discuss the content, difficult or unknown words.

In the third step the children start choir reading: the teacher and the children read the text out loud and together.

In the fourth step the students write and read words. These words are picked up from former lists or are chosen by the children. They first write the words. Then they read the words. They read the words in the given order and in a mixed order.

In the fifth step the student reads the text autonomously.

The student needs support performing this step: the teacher reads the word or the letter when he suspects that the student hesitates in order to avoid a wrong imprinting and frustration.

Temporarily prompting facilitates the automation of the reading process. In the final step

To finish the session the teacher reads a new passage of the story out loud.

**Toolbox 4.9 Decoding words into sounds and letters: F&L method**

<b>Goals</b>	<ul style="list-style-type: none"> <li>• To help (dyslectic) children to analyse a word in order to read and write correctly;</li> <li>• To focus on weak phonological awareness and weak identification of the sounds words are made of;</li> <li>• To help to (re)construct a word using sound images and coloured boxes representing vowels and consonants;</li> <li>• To help to understand the spelling rules;</li> <li>• To work with a multi-sensorial approach.</li> </ul>
<b>For whom?</b>	The student masters the initial reading strategies, but doesn't manage to automate his reading and writing. The student struggles with spelling rules.
<b>Methods</b>	'TAAL IN BLOKJES' De Fonologische en Leerpsychologische (F&L) methode <sup>®</sup> [Language in blocks; a phonological and learning psychological method]
<b>Materials</b>	A poster with the colour code of the sounds and letters, colour blocks, examples, markers.
<b>Author(s)</b>	Thalita Boumans
<b>Approximate time needed to teach</b>	Variable, a few weeks
<b>Background</b> 	<p>The F &amp; L method is a Dutch method (Thalita Boumans, 1978). It is a phonological method in which technical reading and spelling (writing) are offered in an integrated system. The method can be used complementarily in addition to the reading method used at school.</p> <p>Characteristics of the method :</p> <ol style="list-style-type: none"> <li>Integrated system of reading and writing;</li> <li>Working with colours to visualize the structure of the language;</li> <li>Focus on visualization in every type of exercise;</li> <li>Training of phonological awareness in all exercises (reading and writing);</li> <li>Use of pseudo-words with abstract;</li> <li>Support with colours for the phoneme – grapheme connection.</li> </ol>
<b>Where to find more information?</b>	<a href="http://www.taalinblokjes.nl/Alg_methode.php">http://www.taalinblokjes.nl/Alg_methode.php</a> (Dutch site) <a href="http://www.masterplandyslexie.nl">www.masterplandyslexie.nl</a> <a href="http://www.fenlschoolversie.nl">http://www.fenlschoolversie.nl</a> Gijsel, M.A.R. & A.M.T. Bosman (2010). Het effect van de Fonologische en Leerpsychologische methode bij leerlingen met dyslexie. <i>Pedagogische Studieën</i> , (87) 118-133.
<b>Video material</b> 	<ul style="list-style-type: none"> <li>• <a href="http://www.masterplandyslexie.nl">www.masterplandyslexie.nl</a></li> <li>• <a href="http://www.leraar24.nl/video/1502">http://www.leraar24.nl/video/1502</a> (Dutch example)</li> </ul>

### Description of the activity

The psycholinguistic approach focuses on the phonological skills: auditory synthesis, manipulation of sounds within words (Oepkens, 2006). The training of these phonological skills is combined with cognitive task-oriented training of strategies for technical reading and for spelling. The focus is on the process and understanding of the system.

It works on the strengths of many dyslectic children: the visual – analytic and spatial skills.

The F&L-method is based on the sounds of the language: different groups of sounds are reflected in a colour code (blocks) which visualize the system of a specific language.

Each block represents a letter. The colour of the block is determined by the sound of the letter. In this way words can be built up with the colour blocks. As the structure of a word is clearly visualized it becomes easier to understand and to drill basic spelling rules.

The method is successful, especially for a correct spelling.

The implementation of the idea is different for each language as the structure of the language is decisive for the colour code.

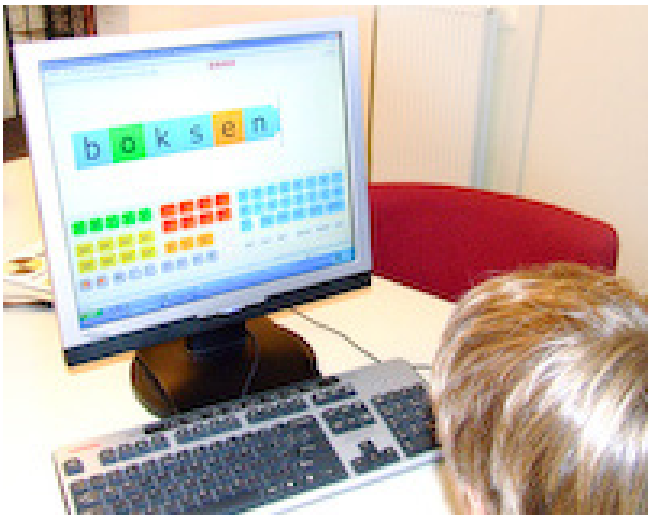




Figure 12 F&L method Language in blocks. Reproduced with permission from the author.

From [http://www.taalinblokjes.nl/Alg\\_methode.php](http://www.taalinblokjes.nl/Alg_methode.php)





### Toolbox 4.10 Repeated Reading of Familiar Text

<b>Goals</b>	To promote reading fluency
<b>For whom?</b>	Children with fluency problems who read below grade level.
<b>Methods</b>	<ul style="list-style-type: none"> <li>• It is based on the idea of repetition until the student becomes fluent and confident in his/her reading.</li> <li>• During repeated reading exercise, you may use               <ul style="list-style-type: none"> <li>(a) yourself (teacher);</li> <li>(b) an assistant;</li> <li>(c) an older student;</li> <li>(d) a parent;</li> <li>(e) a tape recorder followed by practice with a peer.</li> </ul> </li> <li>• Decide how many times the student will read the selected text.</li> <li>• Have the student read the passage.</li> <li>• Student should practise the text at least three times a week with the individuals listed above.</li> <li>• Graph the student's progress and seeing the reading growth visually may be very stimulating for the student:</li> </ul>
<b>Materials</b>	<ol style="list-style-type: none"> <li>1. Short, meaningful, familiar texts or books;</li> <li>2. Passages range from 50 to 200 words in length;</li> <li>3. A text at the student's independent reading level (can accurately read 95-100 per cent of the words).</li> </ol>
<b>Author(s)</b>	Bos and Vaughn (1991), Cooper <i>et al.</i> , (2006)
<b>Approximate time needed to teach</b>	10-15 minutes
<b>Background</b> 	<ul style="list-style-type: none"> <li>• The text should not include a lot of dates, numbers, and proper nouns.</li> <li>• The text should include words ranging from 50 to 200 words until students reach a more fluent reading rate and word recognition level.</li> <li>• The activity should occur on a regular basis. Therefore, choose a regular time in the school day for this activity.</li> <li>• If the student does not recognize the word, the teacher should pronounce the word.</li> </ul>
<b>Video material</b> 	<b>YouTube</b> : <a href="http://www.youtube.com/watch?v=LihljEYaL-w">http://www.youtube.com/watch?v=LihljEYaL-w</a>


## Toolbox 4.11 Choral Reading

<b>Goals</b>	<ul style="list-style-type: none"> <li>• To help students improve their sight word reading;</li> <li>• To provide a good model for fluent reading;</li> </ul>
<b>For whom?</b>	Children who are able to comprehend the text, but have difficulties in word recognition and slow reading speed.
<b>Methods</b>	<ul style="list-style-type: none"> <li>• Provide each student with a copy of the text. This will allow them to follow you when you are reading aloud.</li> <li>• Read the passage a loud and model fluent reading for them.</li> <li>• Ask students to use their finger or pencil when reading.</li> <li>• Reread the passage and have the students read the passage aloud together.</li> </ul>
<b>Materials</b>	A text or passage that is not very long, predictable, and at the independent reading level of the students.
<b>Author(s)</b>	Bos, 1982; Cooper <i>et al.</i> , 2006,
<b>Approximate time needed to teach</b>	10-15 minutes
<b>Background</b> 	It is a technique for students reading aloud with a group or class. It is a good model for fluent reading when students listening to teacher. It may help students build fluency, confidence, and motivation for reading. This technique could be used with students who have knowledge of at least 25 sight words.
<b>Video material</b> 	<a href="http://www.youtube.com/watch?v=LFRzI2Oe_Bs&amp;feature=related">http://www.youtube.com/watch?v=LFRzI2Oe_Bs&amp;feature=related</a> <a href="http://www.youtube.com/watch?v=6IBIYpLV8ck&amp;feature=related">http://www.youtube.com/watch?v=6IBIYpLV8ck&amp;feature=related</a>




### Toolbox 4.12 Choral Repeated Reading

<b>Goals</b>	To improve word recognition and reading rate.
<b>For whom?</b>	Children with severe word identification and/or fluency problems.
<b>Methods</b>	<ul style="list-style-type: none"> <li>• Explain the technique to the student.</li> <li>• Select a book that interests the student.</li> <li>• The book should be above the student's instructional reading (by one or two levels).</li> <li>• To check the level of word recognition, have the student read a short passage from the book.</li> <li>• If the child's reading level is lower than 75% to 85%, choose another book.</li> <li>• Read the book with the student. Do the following steps.             <ol style="list-style-type: none"> <li>1. <i>Teacher reads:</i> Read at a normal rate. Point the words with your finger while you are reading. When reading, choose a short passage to help the student use his memory as an aid.</li> <li>2. <i>Teacher and student read:</i> Read the same passage together with the student. Keep pointing the words. Read the passage several times until the student feels comfortable reading it independently.</li> <li>3. <i>Student reads:</i> Have the student read the passage independently. When the student encounters some unknown words, help him to pronounce those words. Note the words he has difficulty recognizing.</li> </ol> </li> <li>• After reading each passage, discuss it with the student. Talk about what he has learned.</li> <li>• Increase the length of each section and repeat the steps above.</li> <li>• For word identification, write on word cards the words that the student consistently has difficulty identifying quickly.</li> <li>• Use some word activities to teach word identification.</li> <li>• Use graphs showing student's progress. Have the student recode his results on the graph</li> </ul>
<b>Materials</b>	A text or passage that is not very long, predictable, and at the independent reading level of the students
<b>Author(s)</b>	Bos and Vaughn, 1991
<b>Approximate time needed to teach</b>	10-15 minutes
<b>Background</b> 	<p>It combines the ideas of repeated and choral reading. It can be used for students who have difficulties in word recognition and reading rate. This strategy is designed for students who have better listening comprehension level than their reading level.</p> <p><u>Important:</u> If this method is to be used, the student should have at least 25 sight words. The session should last 15-20 minutes.</p>
	<p><a href="http://www.youtube.com/watch?v=6IBIYpLV8ck&amp;feature=related">http://www.youtube.com/watch?v=6IBIYpLV8ck&amp;feature=related</a></p>


**Toolbox 4.13 Coached Reading (Assisted Reading)**

<b>Goals</b>	To improve reading rate
<b>For whom?</b>	Children with reading problems or children with normal reading development
<b>Methods</b>	<ul style="list-style-type: none"> <li>• Work with a small group of children approximately for ten minutes.</li> <li>• Use a text at the child's instructional level.</li> <li>• Sometimes have children read chorally. Listen to their reading and provide feedback.</li> <li>• Later listen to one child at a time and provide feedback.</li> <li>• During the reading time, if the child cannot decode the word help the child select appropriate decoding strategy.</li> <li>• Ask questions that would help children improve their understanding of the story.</li> </ul>
<b>Materials</b>	A text at the student's instructional level (95% to 98% accuracy for word recognition, 70% to 89% accuracy for comprehension)
<b>Author(s)</b>	Cooper <i>et al.</i> , 2006
<b>Approximate time needed to teach</b>	10 minutes
<b>Background</b> 	<p>It is similar to guided reading. Student reads aloud while a competent reader follows the reader silently. If the student makes an error, then the coach helps the student.</p> <p><u>Important:</u></p> <ul style="list-style-type: none"> <li>• A person who works with the student should be trained on this technique.</li> <li>• After guided reading, use repeated reading.</li> </ul>

### Toolbox 4.14 Paired Reading

<b>Goals</b>	Increase reading accuracy and fluency
<b>For whom?</b>	Nonfluent readers who have difficulties in reading
<b>Methods</b>	<ul style="list-style-type: none"> <li>• Sit with the student in a quiet place.</li> <li>• Say to the student: "Now we are going to read together for a while. Whenever, you want to read alone, you just tap my hand" (demonstrate it to the student). I will stop reading. When you cannot read a word, I will tell you the word, and begin reading aloud with you again.</li> <li>• Read from the book with the reader.</li> <li>• When the reader taps your hand, allow him to read alone, but follow him silently.</li> <li>• If the reader cannot read the word, or misread, wait five seconds. Then,             <ol style="list-style-type: none"> <li>1. Point to the word;</li> <li>2. Tell him the word;</li> <li>3. Have him repeat the word;</li> <li>4. Read with him aloud.</li> </ol> </li> <li>• Make sure you praise the student's effort.</li> <li>• Keep reading aloud with the student until he taps your hand to read alone.</li> <li>• Have students practise paired reading with each other.</li> </ul>
<b>Materials</b>	Reading books for each tutor
<b>Author(s)</b>	Topping, 1989
<b>Approximate time needed to teach</b>	10-15 minutes
<b>Background</b> 	It is used to increase reading accuracy and fluency. It is used with non-fluent readers who have difficulties in reading alone. In this technique, there will be a tutor and the reader with fluency problems. The tutor and the non-fluent reader read the text together. If the reader chooses to read alone, the tutor silently follows the text. When the reader makes an error, the tutor supplies the correct word.
	<a href="http://www.jimwrightonline.com/pdfdocs/prtutor/prtutor_lesson3.pdf">http://www.jimwrightonline.com/pdfdocs/prtutor/prtutor_lesson3.pdf</a>
<b>Video material</b> 	<a href="http://www.youtube.com/watch?v=_gmNGpJWJpQ">http://www.youtube.com/watch?v=_gmNGpJWJpQ</a> <a href="http://www.youtube.com/watch?v=j80MHkylIFs&amp;feature=related">http://www.youtube.com/watch?v=j80MHkylIFs&amp;feature=related</a> <a href="http://www.youtube.com/watch?v=r8LWdDEZkY">http://www.youtube.com/watch?v=r8LWdDEZkY</a>

## Toolbox 4.15 Games

<b>Goals</b>	To improve letter and sound recognition, rhyming, vocabulary
<b>For whom?</b>	Children with reading problems or children with normal reading development
<b>Methods</b>	<ul style="list-style-type: none"> <li>• Work with a small group of children approximately for ten minutes</li> <li>• Work with a merry – go – round</li> </ul>
<b>Materials</b>	See <b>Description of the activity</b>
<b>Author(s)</b>	Students of Karel – de – Grote – Teacher Training College, Antwerp – Belgium, 2008-2010
<b>Approximate time needed to teach</b>	10 minutes
<b>Background</b> 	<p>One has to provide children with many opportunities to engage them in oral language activities, provide a rich literacy environment, teach print awareness, and play word and sound games. These games help children to recognize and write alphabet letters, to understand the relationship between letters and sounds. It encourages children to scribble, write letters, and draw pictures; it helps them to build a reading vocabulary. See page 126 and following.</p>

### Summary of the activities

#### 1. FISHING

Goal: Auditory and visual recognition of sounds, letters, words

Enjoyment

Materials:

A fishing rot with a magnet on the end

Paper fishes with a magnet on its back

A list with words, letters the child already knows

Game:

2 students: Student A reads the word aloud

Student B starts 'fishing'

Student A gives feedback

Task: Read' a word on a list

Try to find the fish with:

The same word on its fins    the first letter of the word on its fin

a rhyme word on its fin



## 2. JUNGLE SPEED

Goal: Visual recognition of letters or words  
Enjoyment

Materials: A pile of cards with known letters or words on it. There are always two cards of each word or letter.

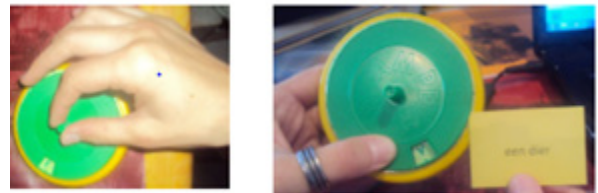
The game revolves around matching cards with identical symbols, and it has some similarities to the game [Snap](#). The similarities between some of the symbols, as well as some of the extra rules, make the game rather challenging.

Cards are shuffled and dealt to each player face down, ensuring that all players have an equal number of cards in their stacks. A wooden cylinder called 'a Totem' is placed in the centre of the table, equidistant from all players. Any remaining cards that cannot be distributed equitably are placed under the Totem in an area known as 'the Pot'. Players take turns playing the top card from their stacks in a clockwise rotation. Each player does this by flipping their card over in the direction of their opponents, so that their opponents get the first glance at their card to avoid unfair advantage. The card is then quickly placed in front of the player's pile. Players form discard piles in front of their piles of cards as the game progresses. When a player plays a card that matches the symbol of another player's top card, the two players must duel to grab the Totem in the centre as quickly as possible. The loser of the duel takes both players' played cards (their discard pile plus the card currently in play), as well as any cards in the pot, and places them at the bottom of his deck. The loser of the round plays the next card. (Wikipedia)



## 3. PIM PAM PET

Goals: Auditory and visual recognition of sounds, letters, words  
Making the connection sound and letter  
Blending the letters in the right order  
Working on vocabulary  
Enjoyment



Materials:

An original game of pim pam pet;

Help lists with names of animals or names of persons

Small cards indicating which kind of word you have to construct: e.g. an animal, the name of a child in the class, a vegetable...

Game:

Two students: Student A twists the pim pam pet to indicate a letter.

Student B reads a card with the task.

Student A picks out the letters and makes the word.

Student B gives feedback.

Task: Twist a letter.

Read a word on the card.

Listen carefully to the different sounds in the word.

Pick out the correct letters.

Lay out the word.

Read the word aloud: does it start with the correct sound/letter?



















F



Fish

Hulpkaarten

**DIEREN**

 aap a	 beer b	 dolfijn d	 eigel e
 hond h	 inktviss i	 konijn k	 mier m
 neushoorn n	 olifant o	 poes p	 rups r
 slang s	 tijger t	 uif u	 vis v
 wolf w	 zeehond z		

**NAAM**

a	b	d	e
an	ben	daan	eef
h	i	k	m
hugo	ilse	koen	mats
n	o	p	r
nina	odet	pim	roel
s	t	u	v
sam	tim	udo	vera
w	z		
wim	zana		

**4. RHYME Pictionary**

Goal: Auditory and visual recognition of sounds, letters, words

Making the connection between sound and letter

Working on vocabulary (the children have to make a word starting with the chosen letter)

Enjoyment

Materials: Cards with a picture and the word on it

Pencils

Game:

The student looks at the picture and reads the word. He listens carefully to the sounds and makes a rhyme word on it. He makes a drawing of the word.



FOX



## 5. TWISTER

Goal: Auditory and visual recognition of sounds, letters, words

Vocabulary (the student makes a word with the indicated letter)

Enjoyment

Materials:

A twister game

Vignettes with known words or letters

Adhesive tape

Cards with words, letters the child already knows

Game:

Twister is a game of physical skill produced by the Milton Bradley

Company. It is played on a large plastic mat that is spread on the floor or ground. The mat has four rows of large coloured circles on it with a different colour in each row: red, yellow, blue and green. A spinner is attached to a square board and is used to determine where the player has to put their hand or foot. The spinner is divided into four labelled sections: right foot, left foot, right hand and left hand. Each of those four sections is divided into the four colours (red, yellow, blue and green). After spinning, the combination is called (for example: "right hand yellow") and players must move their matching hand or foot to a circle of the correct colour. In a two-player game, no two people can have a hand or foot on the same circle; the rules are different for more players. Due to the scarcity of coloured circles, players will often be required to put themselves in unlikely or precarious positions, eventually causing someone to fall over. A person is eliminated when they fall or when their elbow or knee touches the mat. There is no limit to how many can play at once, but more than four is a tight fit. (Wikipedia)

Pictures taken by students of the Karel De Grote Teacher Training College



## ▶ Module 5 - Enhancing Reading Comprehension

Edited by Nalan Babür, Leen Stoffels and Ria Van den Eynde

With contributions from: Mim Hutchings

### Introduction: Reading comprehension

In the reading development process, the initial step is “learning to read”. Afterwards, the process of “reading to learn” begins and develops. This is not only important to achieve academic success, but is also important to increase knowledge for a variety of contexts. Reading comprehension is the essence of reading, involves higher level cognitive skills and strategies which a reader has to integrate to make a meaning out of what it is read. However, due to a general assumption that comprehension cannot be taught because it is part of intelligence, comprehension has not received much research attention. Starting from the 1990s, this view has changed and reading comprehension, as a research topic, has started receive attention (Aaron, Joshi, & Quatroche, 2008).

Research shows that many students in elementary schools experience difficulties in reading comprehension. Poor word recognition skills, lack of vocabulary, limited prior knowledge, motivation, and inefficient use of comprehension strategies are shown as some of the major factors that affect the quality of understanding when reading a written text (Carlisle and Rice, 2002; Lerner and Johns, 2009). Comprehension skills are not automatically developed after mastering word decoding. Despite having basic word recognition skills, many students may still have difficulties in reading comprehension. Prior to 1990, many teachers taught comprehension by asking literal questions about what has been read. Research shows that many teachers of K-3 grades, when teaching reading, spent only 25 per cent of classroom time on teaching comprehension, and used traditional questioning (Scott *et al*, 1999). The traditional way of teaching reading comprehension does not teach students how to comprehend the text and what to do when they need to make inferential conclusions. However, studies repeatedly show that teachers feel unprepared to teach reading comprehension (e.g. Bryant *et al*, 2001).

Module 5 is, therefore, developed to equip teachers with the basic conceptual insights, effective, practical and applicable strategies, techniques and activities to deal with reading comprehension.

#### References

- Aaron, P.G., Joshi, R.M., and Quatroche, D. (2008). *Becoming a professional reading teacher*. Baltimore: Brookes Publishing.
- Bryant, D. P., Smith, D. D., and Bryant, B.R. (2008). *Teaching students with special needs in inclusive classrooms*. Boston: Pearson
- Carlisle, J.F., and Rice, M.S. (2002). *Improving reading comprehension: Research-based principles and practices*. Baltimore: York Press.
- Lerner, J., and Johns, B. (2009). *Learning disabilities and related mild disabilities: Characteristics, teaching strategies, and new direction*. Australia: Wadsworth.
- Scott, J.A., Jamieson, D., and Asselin, M. (1999). Instructional interactions in upper elementary classrooms: An observational study. In T. Shanahan et al. (Eds.), *Theory and practice in literacy: National Reading Conference Yearbook* (Vol.48, pp.167-177).

### Goals

The goals of Module 5 are to enable teachers to:

- Understand comprehension skills at the different stages of reading;
- Understand the essential components of reading comprehension;
- Understand and be able to employ various methods to develop effective reading comprehension skills.

### Teacher competences we want to develop

#### To know

1. Being able to define reading comprehension and understand the factors that influence reading comprehension;
2. Knowing possibilities to help students to enhance their competences in reading comprehension;
3. Knowing which factors affect reading comprehension;
4. Knowing the difference between bottom-up and top-down approaches in reading comprehension;
5. Know how to guide and help students to use appropriate comprehension strategies;
6. Being able to determine instructional objectives that would be appropriate for the child’s needs.

#### To understand and to become aware

1. Being aware of how the teacher’s attitude, behaviours, and expectations affect student’s motivation toward reading;

2. Being aware of his/her own belief system on students who display reading difficulties (fluency and reading comprehension);
3. Belief in the importance of a rich reading – environment;
4. Understanding that technical reading, listening comprehension and reading comprehension go hand in hand;
5. Understanding that reading comprehension is a part of school culture,

#### To show in practice

1. Create a positive classroom environment that would maximize students' interests in reading;
2. Select strategies and techniques that are best for the students' various needs;
3. Be able to draw attention of the child to her/his strengths;
4. Build a learning environment that enhances students' reading motivation;
5. Demonstrate positive attitude and have realistic expectations for students;
6. Identify, determine and apply prevention and intervention strategies on the basis of the area of need (e.g. difficulties with fluency and comprehension);
7. Use practical instructional methods when helping children to develop reading comprehension skills;
8. Be able to design activities that help children to increase their reading comprehension;
9. Provide experiences for students to practise comprehension strategies when reading;
10. Provide opportunities to encourage students to think strategically while reading;
11. Model comprehension processes explicitly.

## Content of Module 5

Part I: Understanding reading comprehension		
Topics	Key ideas	Suggested Activities
<b>Development of reading comprehension</b>	<ul style="list-style-type: none"> <li>• Definition of reading comprehension</li> <li>• Elements affecting reading comprehension</li> <li>• Types of reading comprehension               <ul style="list-style-type: none"> <li>- Literal comprehension</li> <li>- Inferential comprehension</li> <li>- Metacognition</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Show the presentation on "Understanding reading comprehension"</li> <li>• Discuss with teachers their understandings and belief systems regarding what reading comprehension is.</li> </ul>
Part II: Reading comprehension in practice		
<b>Theoretical approaches</b>	<ul style="list-style-type: none"> <li>• Definition of both approaches "top-down and bottom-up"</li> <li>• Technical reading, listening comprehension, and reading comprehension</li> </ul>	<ul style="list-style-type: none"> <li>• Show the presentation on "Reading comprehension in practice"</li> <li>• Toolbox 5.13 Story Sacks</li> <li>• Toolbox 5.11 Reading Circles</li> </ul>
<b>Holistic approach</b>	<ul style="list-style-type: none"> <li>• Reading culture: A total approach</li> <li>• Why children get unmotivated toward reading</li> <li>• When pleasure for reading can occur?</li> <li>• Struggling readers</li> </ul>	<ul style="list-style-type: none"> <li>• Talk about reading culture and why students get unmotivated and how reading pleasure can be developed among children.</li> <li>• Give examples on how to motivate students for reading</li> <li>• Toolbox 5.12 Reading cubes</li> <li>• Toolbox 5.9 Understanding news</li> <li>• Toolbox 5.11 Reading circles</li> </ul>
Part III: Reading comprehension strategies		
<b>Reading strategies and techniques</b>	<ul style="list-style-type: none"> <li>• Some reading comprehension strategies               <ul style="list-style-type: none"> <li>- Before reading</li> <li>- During reading</li> <li>- After reading</li> <li>- Activating prior knowledge</li> <li>- Questions during reading</li> <li>- Visualization of the information</li> <li>- Monitoring the reading process</li> <li>- Construct deductions or conclusions</li> <li>- Summarizing</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Show the presentation on "Reading comprehension strategies"</li> <li>• Discuss with teachers the techniques that can be used for teaching reading comprehension</li> <li>• Demonstrate the techniques and discuss their use for specific reading comprehension problems</li> <li>• Reading Comprehension techniques</li> <li>• Toolbox 5.1 RU BART Technique</li> <li>• Toolbox 5.2 BCDE Strategy</li> <li>• Toolbox 5.3 RAP-Q Technique</li> <li>• Toolbox 5.4 Ask 5 W's &amp; 1 H Technique</li> <li>• Toolbox 5.5 FRAYER Model Technique</li> <li>• Toolbox 5.6 SPORE Technique</li> <li>• Toolbox 5.7 K-W-L Technique</li> <li>• Toolbox 5.8 Active reading with reading strategies</li> <li>• Toolbox 5.10 Creating meaningful connections</li> </ul>
<b>The role of the teacher</b>	<ul style="list-style-type: none"> <li>• Modelling</li> </ul>	<ul style="list-style-type: none"> <li>• Discuss the importance of modelling when teaching comprehension</li> </ul>
<b>Shared/interactive reading</b>	<ul style="list-style-type: none"> <li>• Shared interactive reading</li> <li>• Do's and Don'ts: to improve reading comprehension</li> <li>• General recommendations</li> </ul>	<ul style="list-style-type: none"> <li>• Give information on shared reading activities and discuss ways to improve comprehension</li> <li>• Introduce techniques that can foster reading for pleasure</li> <li>• Toolbox 5.11 Reading Circles</li> <li>• Toolbox 5.13 Story Sacks</li> </ul>

## Background and Key Concepts and Skills

Module 5 is organized in three sections: The first part of the module aims to explain the development of comprehension skills. It provides background knowledge in comprehension and discusses the components of reading. Reading comprehension is the ultimate goal of reading and the process of constructing meaning out of the text. Efficient word recognitions skills and fluency are crucial factors in comprehension. Can such students learn to read strategically and monitor their understanding of the written material in an efficient way? Research shows that when students are provided with appropriate training they learn how to use the cognitive and meta-cognitive abilities that are necessary for successful reading (Gersten *et al.*, 2001).

A variety of factors can affect the development of comprehension. These can be listed as (a) word recognition and /or fluency; (b) oral language; (c) vocabulary; (d) background knowledge; (e) interest and motivation, (f) text factors (Cooper *et al.*, 2006). Students who have word recognition difficulties struggle with reading and they often have comprehension problems due to lack of fluency. Oral language provides a necessary foundation for the development of good reading skills. Therefore, students with limited oral vocabulary also face comprehension problems. Sometimes students may decode the words, but not know the meaning of the words. When the student struggles with understanding the word, this also may cause to difficulties in comprehension. Background knowledge is a fundamental skill which includes vocabulary and the related concept of what it is to read. When a reader does not have sufficient background knowledge or concepts on a given topic, her/his understanding of the text may be lacking due to this limitation.

The second part of the module aims to explain the development of comprehension skills through theoretical frameworks. This section also focuses on the relationship between listening comprehension and reading comprehension.

The third part of the module describes and gives detailed information as to how to use various techniques and methods to develop effective reading comprehension skills. Most of the teachers refer to developing reading comprehension skills as asking questions about what has been read. However such methods are not known as effective ways to increase reading comprehension. Therefore, this section aims to introduce some techniques and strategies for teachers in order to enhance students' level of comprehension when reading a text. The section also attempts to explain why students with reading difficulties may have comprehension problems and the reasons behind them. Strategies such as Story Sacks, Reading Cubes, Reading Circles, RU BART, BCDE, RAP-Q, 5W's and 1H's, Frayer Model, SPORE, and K-W-L techniques are explained. This part also includes some recommendations related to how to teach reading comprehension.

As a last word, the themes that are chosen for the sections consist of some knowledge and skills that are necessary for teaching reading comprehension. To reach these goals teachers will learn key concepts and understand and use a variety of strategies to improve reading skills.

### References

- Cooper, J. D., Chard, D. J. and Kiger, N. D. (2006) *The Struggling Reader: Interventions that work*. New York: Scholastic.
- Gersten, R., Fuchs, L. S., Williams, J.P. and Baker, S. (2001). Teaching Reading Comprehension Strategies to Students with Learning Disabilities: A review of research. *Review of Educational Research*, 71(2), 279-320.

## Part I Understanding reading comprehension

### Definition

Reading comprehension is the overall understanding of written connected text. Definition of comprehension mostly focuses on the processes of comprehension. However, a definition of comprehension should include both processes and the products of comprehension (Kamhi, 2012). For example, Sweet and Snow (2002) defined comprehension as “the process of extracting and constructing meaning through interaction and involvement with written language”. According to Gambrell and colleagues (2002), comprehension was defined as “acquiring meaning from written text”.

Comprehension of texts is influenced by:

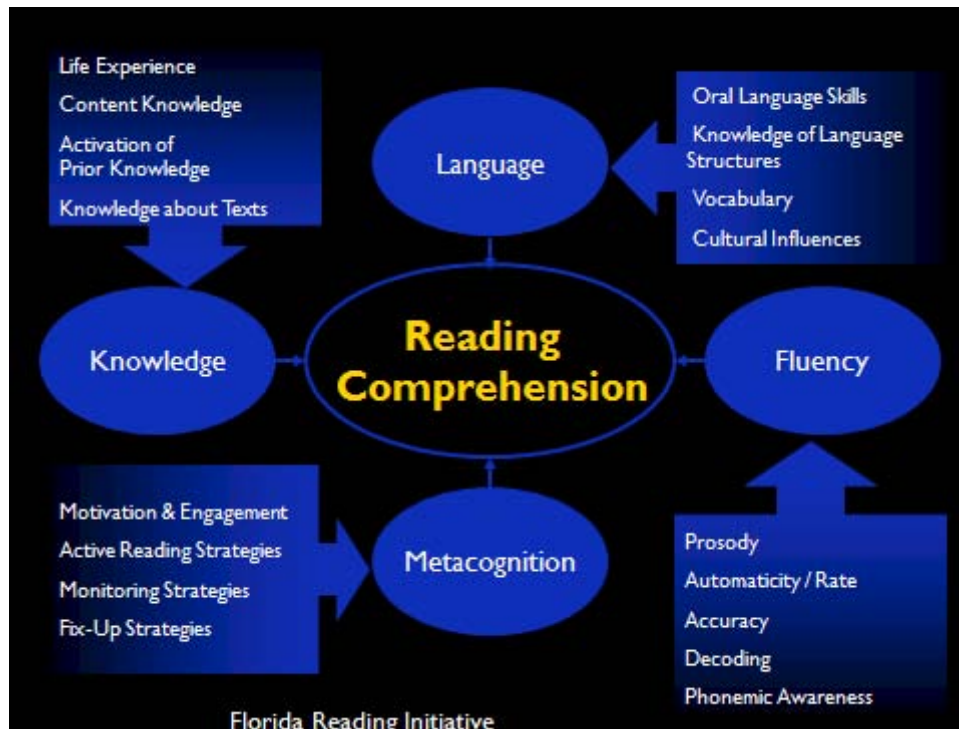


Figure 13 Reading Comprehension. Quoted with permission of the Florida Reading Initiative

Reading comprehension is more than understanding: translating print to sounds and words, while simultaneously making meaning, involves higher level cognitive skills and strategies, which a reader has to integrate to make a meaning out of what it is read. For example, Snow (2010) indicates that successful comprehension skills rely on three key elements: (a) accurate word reading, (b) integration of text information and prior and inferential knowledge, (c) a motivated reader.

Efficient word recognitions skills and fluency are crucial factors in comprehension.

But comprehension problems are not always caused by word-reading or decoding problems. There are many factors that affect comprehension:

- **Oral language skills:** sophistication and size of oral vocabulary , linguistic comprehension;
- **Understanding and following instructional language:** leads to the possibility of carrying out academic tasks at school;
- **Receptive vocabulary:** understanding the meaning of single words presented auditorily;
- **Extent of conceptual and factual knowledge;**
- **Prior background knowledge;**
- **Characteristics of text:** the difficulty level , the type and length can also influence the ability to understand the text;
- **Working memory:** the reader's ability to hold several items of thoughts in memory while processing meaning;
- **Accurate and fluent word reading skills;**
- **Interest and motivation:** interest and motivation related to certain subjects may affect student's enthusiasm about reading some materials. If the student is not interested in the topic it will be more difficult to focus on the reading (Cooper *et al.*, 2006);

- **Attention:** the reader's ability to concentrate on a task;
- **Knowledge and skill in use of cognitive strategies to improve comprehension or repair it when it breaks down;**
- **Reasoning and inferential skills.**

### Types of reading comprehension

We distinguish two types of comprehension:

- **Literal comprehension**

It is related to understanding explicit information provided in a text, such as names of characters, sequences of events.

- **Inferential comprehension**

It relies on understanding of implicit information in a text such as a main idea. Inferential comprehensions require the reader to deal with what is not directly mentioned in the text and to combine prior knowledge and/or implied information in the text (Bryant *et al*, 2008).

Comprehension reading requires a level of meta-**cognition**:

Knowing to use reading strategies for different purposes, independently selecting /using appropriate strategy when reading.

### References

Bryant, D. P., Smith, D. D., and Bryant, B.R. (2008), *Teaching Students with Special Needs in Inclusive Classrooms*. Boston: Pearson  
Cooper, J. D., Chard, D. J., and Kiger, N. D. (2006), *The Struggling reader: Interventions that work*. New York: Scholastic.



## Part II Reading comprehension in practice

Historically, teachers and researchers have believed that the ability to comprehend text was “caught rather than taught”. We now know that children have to be supported in this process.

### Bottom-up versus top-down approaches

Top-down approach: starting from functionality, comprehending the text based on the global purpose of reading the text. In this context, pupils will find regularities and systems for themselves.

Bottom up-approach; starting from reading strategies (e.g. predict a title after reading) and using the systematicity in the text.

The two approaches don't have to exclude each other, but too often teachers focus on the bottom-up approach. Students work on their technical reading and in the meantime teachers support them by reading aloud. Together they exercise listening comprehension, they enjoy the stories and they experience the functionality of reading.

**“In an ideal literacy programme, children are constantly reading, writing listening, and speaking. They are engaged learners who are constantly expected to apply what they are learning to new contexts.” (Opitz, 2000).**

### Technical reading, listening comprehension and reading comprehension

To fill the gap between the technical reading competences and the conditions for reading comprehension, Phillip Gough suggests starting from following scheme:

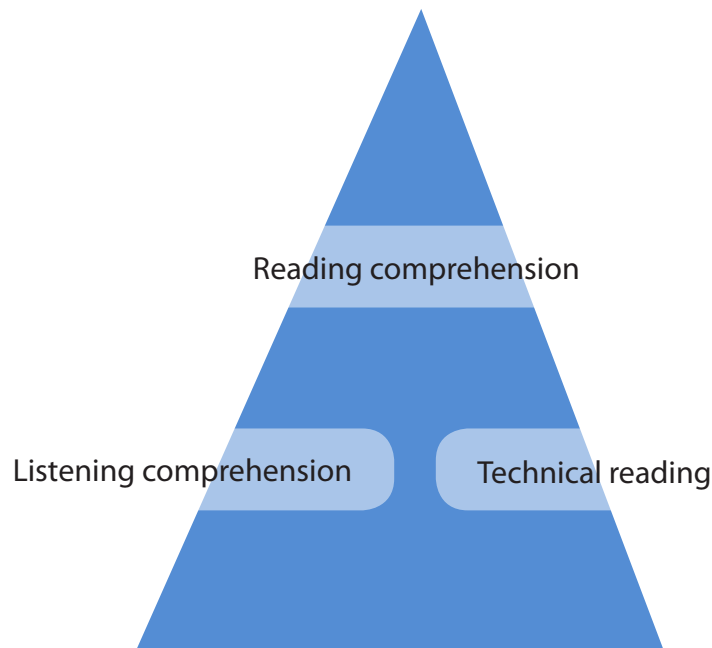


Figure 14 Gough, P and Tunmer, W(1986) Decoding, reading, and reading disability. *Remedial and Special Education*, 7, 6-10

This model shows the importance of making time on understanding oral language. Listening comprehension is an important element to keep children motivated for reading. Activities as interactive reading aloud to enhance vocabulary must go hand in hand with the process of technical reading.

### The Holistic Approach: A reading culture

A lot of six year-old children are looking forward “learning to read” when they start primary school. Unfortunately, many become demotivated after a few weeks.

This response can be due to:

- The demanding technical aspects of reading: drill and routine. These tasks can be demotivating and boring;
- The start of technical reading doesn't provide motivating texts. The students don't see any functional goal for reading words or sentences.



Students need:

- Functional tasks : they experience reading as a useful activity; reading becomes a way of communicating;
- Task-oriented texts: reading is a condition to accomplish a task, to get information, to relax;
- Challenging and realistic material.

Even an initial reader can experience the joy of understanding and interpreting texts on condition that:

- The reading task is not too predictable;
  - Students have to experience that they really have to read the text to do the task
  - e.g., a child has to colour a picture following some instructions:
  - 'The clown has a black nose' instead of the clown has a red nose'.
- The reading task is motivating and relevant:
  - make use of newspapers and magazines for children;
  - make use of their interests, their fascination, their choice of a text and a task;
  - make your task simple and legible;
  - offer a substantial reading part to fulfil the task.
- The reading task has to be challenging:
  - the task must be difficult enough;
  - the reading task has to include enough technical reading difficulties;
  - simplify the reading task after children tried out the original version.
- Attention to struggling readers:
  - simplify the reading task after children have tried out the original version;
  - work with a stronger peer;
  - find out if the child has enough foreknowledge to complete the task;
  - support the child constantly during the task.
- Reading comprehension is implemented in language classes, history and geography classes, working in corners...

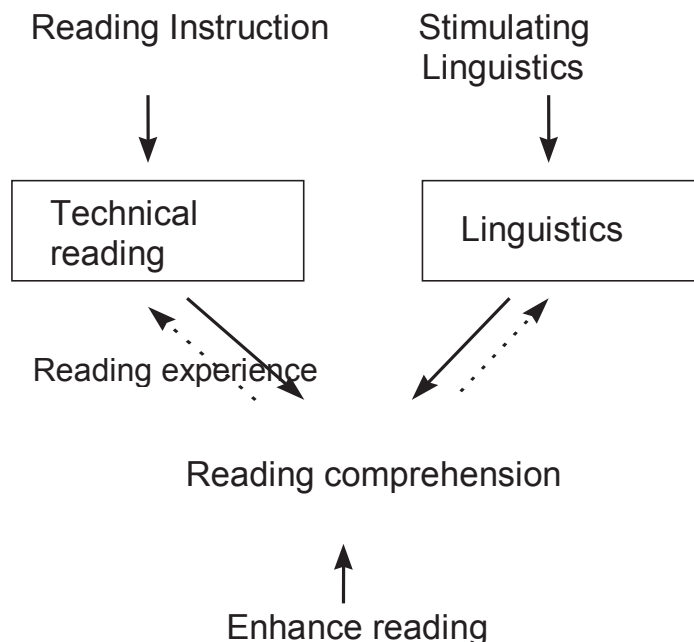


Figure 15 Reading comprehension

## Part III Reading Comprehension Strategies

### Before reading

- Determine importance: Why am I reading this text?
- Explore and predict;
- Activate prior knowledge: What do I know already?

### During reading

- Ask questions;
- Use sensory images;
- Monitor (draw inferences) and use fix-up strategies: What do I do when I don't understand what I am reading? How do I guide my reading process?

### After reading

- Synthesize
- Use the information

### Activating prior knowledge

Activating knowledge, experience with the theme of a text.

Existing prior knowledge of vocabulary, conceptual knowledge and experiences influence the understanding of reading material. The aim is for students make the link between the material and this prior knowledge and/or experience.

### Questions during reading

Asking questions before, during and after reading also influences comprehension.

Based on the questions, the student is going to look for the answers. In fact, questioning makes the student monitor his reading process. It brings him into interaction with text.

### Visualization of the information

The visualization of important ideas in a scheme helps to find, organise and remember important information. Using visualization prevents overloading the working memory. It also helps to summarize the information.

### Monitoring the reading process

Monitoring the reading process means using meta-cognitive strategies to control and guide the process before, during and after reading. This requires strategies which help a student to have a hold on the text to understand, to study the material and to use fix-up strategies from the moment there is something he doesn't understand. In Toolbox 5 we offer a checklist which can be used to coach children in guiding their reading process.

### Construct deductions or conclusions

In constructing deductions or formulating conclusions, the reader has to deduct information that you cannot find literally in the text. Deductions also have to be used in understanding cause-sequences.

### Summarizing

Summarizing requires the reader to identify, paraphrase, and integrate important text information. It is a strategy in which a reader is constantly synthesizing the important idea in text. They are significant shorter than the original text and take a broad overview of the source material.

### The role of the teacher

- Modelling
- Working together
- Peer tutoring
- Self-regulating

Teachers have an important role in modelling the strategies.

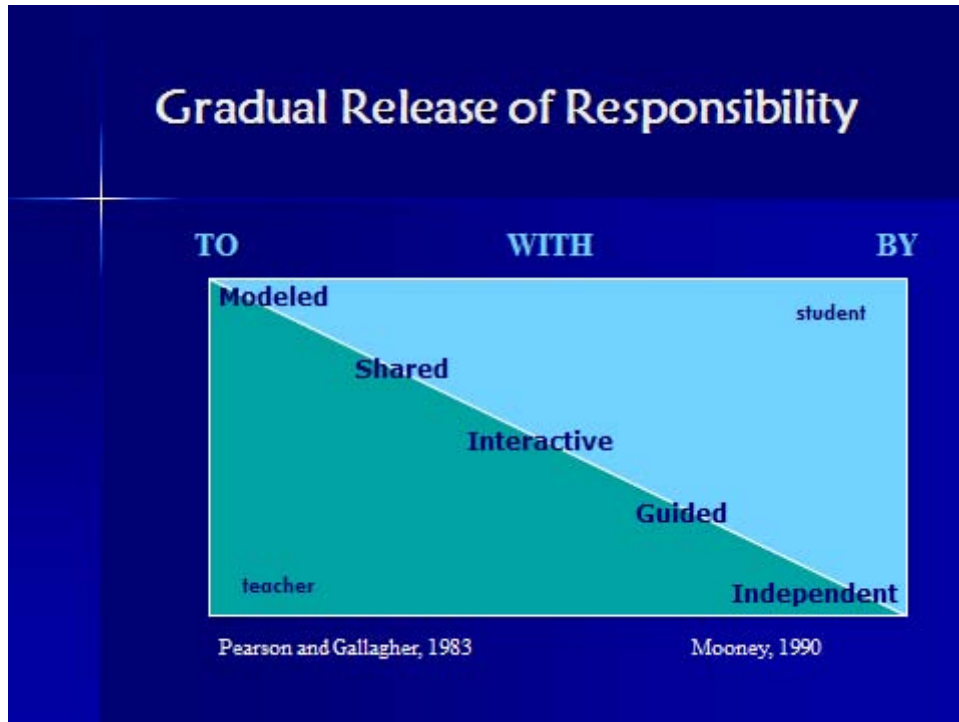


Figure 16 Gradual strategy in reading comprehension (Pearson and Gallagher, 1983)

### Shared/interactive reading

*"...the most common error made by adults about the learning of young children is that we can bypass what the child is thinking...Children of all ages, preschool through high school, need frequent opportunities to formulate their thoughts in spoken language...Children need to ask their questions, explain things to other children, and negotiate meaning between themselves and other children, and between themselves and other adults...Peers can be active partners in conversation"* (Clay, 1998:15 and 28).

Reading doesn't have to be a singular activity. Providing possibilities and situations in which interaction is involved, pupils talk about texts and their processes, which influences their comprehension of the material. To work and talk together about texts is a fundamental ingredient of good reading pedagogy.



Figure 17 Interactive reading

Interactive reading energizes whole-class instruction by raising the level of engagement for all learners. It enhances oral language proficiency, improves retention of reading content and vocabulary due to immediate interaction and use, engages students of all learning styles and levels of ability and sets the stage for small group strategic reading sessions.

Globally, we can distinguish following classroom conversation patterns

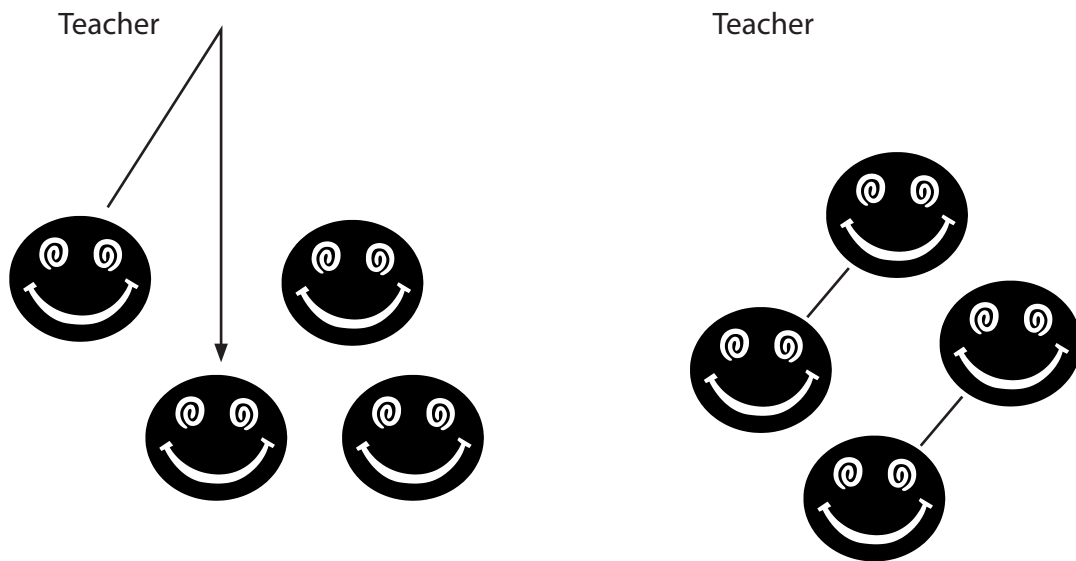


Figure 18 Leading versus Interactive Reading/Writing with the teacher

In the leading situation the teacher poses questions and one student answers. The question we can ask is, what about the rest of the students?

In interactive reading situations, all students are actively engaged as they work with a partner. It's their "Thinking Partner". The teacher releases responsibility to the students. Students are given the opportunity to apply their knowledge of skills and strategies, but without the intimidation of the whole class setting and with the support of a peer.

It can be used with any set of texts. For primary grades it is useful to use the shared reading texts since students are already familiar with the texts. For upper elementary grades, a variety of texts is most effective so that students can practise applying the skills and strategies across a variety of text types.

With interactive reading, students collaboratively apply the skills and strategies they have learned with the support of a partner.

*(Yellow Brick Roads: Shared and Guided Paths to Independent Reading 4-12*  
Janet Allen, 2000:58-61).

#### Possible forms

- Partners alternate reading only as much text as their hand can cover, covering the text with their hand, and then retelling the contents of the text to their partner.
- Students take turns reading section of text, covering it up, and then saying something about it to their partner. This differs from "Read, Cover, Remember, Retell" in that what the student says to their partner can be more than a straight retell of the contents – it can be any thought or idea they have in response to the text.
- Partners are each assigned a specific section of text to read and to write down one application of a comprehension strategy. Then partners debrief with another pair of partners in order to learn about the parts of the selection they did not read. This technique is particularly applicable to non-fiction selections that can be easily divided into sections.
- Partners read a selection together. Then they are both directed to be silent while using a sticky note to write only two words (not a phrase) that reflect their thinking about the text. Students then take turns reading their words to their partner, explaining why they chose the words they did and how the words relate to the selections or to their own lives.
- One partner follows along silently while the other partner reads aloud. The student following along selects a point in the text to stop the other student and ask a question about what he or she is thinking about the text at that moment. Partners then reverse roles. Students can ask each other questions about the content of the text or about specific comprehension or decoding strategies they applied while reading.

The teacher uses this time to observe and assess students.

The leading situation can be used in an interesting alternative way. Read-aloud time, where students do not have the text in front of them, extends quite naturally into shared reading, where students are invited to read along silently as the teacher reads the text.

During this shared reading, the decoding is done by the teacher (or tape), so student readers can focus their cognitive energies on the tasks of comprehension: visualizing, questioning, inferring, making word associations, predicting, connecting, and analysing. As these comprehension tasks become automatic, they can be transferred to students' independent reading or shared reading of more complex texts.

### If you want pupils to improve their reading comprehension: do's and don'ts

1. A direct correlation can be found between reading achievement and the amount of text processed per day. We improve as readers by reading: the Matthew effect.
2. Being forced to read books that are too difficult is devastating to students:
  - motivation;
  - development of healthy reading process and therefore progress;
  - fluency.
3. Fluency with regards to automatic and efficient use of reading strategies AS WELL AS fluency as in how reading sounds, good pace, smooth, with proper phrasing and intonation. Research shows a relationship between poor fluency and poor comprehension. And for many middle-schoolers, they can read the words on the page – it's the comprehension that gets them.
4. Many struggling readers have been subjected to year after year of remedial classes, most of which rely on isolated skill practice and decoding. Thinking strategies are not developed and therefore the problem is compounded. They get the message that reading is about decoding and not about the construction of meaning. Typically the only time comprehension is addressed is by a few questions after the reading. Therefore, students get the message that if we bother to think about the meaning. It is only done after the reading is over, seriously limiting their ability to comprehend.
5. As one can see through the discussion of the previous points, the problems of struggling readers are often compounded by the material and practices teachers subject them to. There needs to be a better way that will provide readable high-interest text for middle school students, with support for teachers to help them improve the type of instruction they provide.

### General recommendations

- Start from the curiosity and motivation of the pupils in choosing a text.
- Start from an attractive reading-goal, which leads to understanding the text in a broad sense.
- Vary the choice of texts.
- Vary the types of texts.
- Stimulate different ways of reading (global, searching, anticipating, predictive, studying, skimming, scanning)
  - ▶ Approach pupils as explorers and problem solvers (initiative takers instead of reproducers of knowledge)

Toolbox: PowerPoint presentation toolbox N° 5.3 can be found on DVD

### References

- Allen, J. (2000). *Yellow Brick Roads: Shared and Guided Paths to Independent Reading 4-12*, Portland (ME): Stenhouse Publishers, pp. 58-61
- Opitz, M. O. (2000). *Rhymes and Reasons: Literature and Language Play for Phonological Awareness*. Portsmouth NH: Heinemann

## Sources of this module

	Video materials and web sites
General Websites Related to Literacy	Child Development And Parenting Information <a href="http://www.childdevelopmentinfo.com">www.childdevelopmentinfo.com</a> American Speech Language Hearing Association (ASHA) <a href="http://www.asha.org">www.asha.org</a> The National Institute for Literacy <a href="http://www.nifl.gov">www.nifl.gov</a> Florida Online Reading Professional Development <a href="http://www.justreadflorida.com/">http://www.justreadflorida.com/</a>
	Books, Chapters and Articles
Aaron, P.G., Joshi, R.M., and Quatroche, D. (2008)	<i>Becoming a professional reading teacher.</i> Baltimore: Brookes Publishing.
Bos, C. S., and Vaughn, S. (2002).	<i>Strategies for teaching students with learning and behaviour.</i> Boston: Allyn and Bacon.
Brown, A. and Palincsar, A. (1989).	'Guided cooperative learning and individual knowledge acquisition.' In: L. Resnick (ed.). <i>Knowing, learning and instruction. Essays in honour of Robert Glaser.</i> Hillsdale, New Jersey: Lawrence Erlbaum Associates, p. 393-408
Boyle, J., and Scanlon, D. (2010).	<i>Methods and Strategies for teaching students with mild disabilities.</i> Singapore: Cengage Publishers.
Bryant, D. P., Smith, D. D., and Bryant, B.R. (2008).	<i>Teaching students with special needs in inclusive classrooms.</i> Boston: Pearson
Carlisle, J.F., and Rice, M.S. (2002)	<i>Improving reading comprehension: Research-based principles and practices.</i> Baltimore: York Press.
Collins, A., J. Brown and S. Newman (1989).	'Cognitive apprenticeship: teaching the crafts of reading, writing and mathematics.' In: L. Resnick (ed.). <i>Knowing, learning and instruction. Essays in honour of Robert Glaser.</i> Hillsdale, New Jersey: Lawrence Erlbaum Associates, p. 453-490.
Cooke, S. (1998).	<i>Collaborative Learning Activities in the Classroom: designing inclusive materials for learning and language development.</i> Leicester: Recourse Centre for Multicultural Education.
Cooper, J. D., Chard, D. J., and Kiger, N. D. (2006).	<i>The struggling reader: Interventions that work.</i> New York: Scholastic.
Ebbens, S., Ettehoven, S., and J. van Rooijen (1997)	Samenwerkend leren. Praktijkboek. [Cooperative Learning. A practice book] Groningen: Wolters-Noordhoff.
Florida Online Reading Professional Development (2004)	Lesson 8: <i>Scaffolding Students' Comprehension and Guiding Students Toward Independence in Reading.</i> University of Central Florida, Orlando, FL.
Gardner, H. (1992)	<i>Multiple Intelligence. The Theory in practice.</i> New York: Basic Books.
Gardner, H. (1983)	<i>Frames of Mind. The Theory of Multiple Intelligences.</i> Londen: Fontana Press.
Guthrie, J. e.a. (2002)	'Instructional Contexts for Reading Engagement'. In: C. Collins-Block and M. Pressley (eds.). <i>Comprehension Instruction; Research-based Best Practices.</i> New York: The Guilford Press.
Hallahan, D. P., Kaufmann, J. M., and Pullen, P.C. (2009)	<i>Exceptional learners: An Introduction to Special Education.</i> Boston: Pearson

Harvey, S., and Goudvis, A. (2000)	Strategies that work: Teaching comprehension to enhance understanding. Portland, ME: Stenhouse.
Housel, D. (2011)	<i>Strategies for building fluency</i> . Huntington Beach, CA: Shell Education Publishing.
Huey, E.B. (1908)	<i>The psychology and pedagogy of reading</i> . Cambridge, MA: MIT Press.
Israel, S., Luckhaupt, S., and Peters, L. (2006)	<i>Making meaningful connections</i> . <a href="http://www.uk.sagepub.com/upm-data/10837_Chapter_1.pdf">http://www.uk.sagepub.com/upm-data/10837_Chapter_1.pdf</a>
Kamhi, A. G. (2012).	Perspectives on assessing and improving reading comprehension. In A. G. Kamhi and H.W. Catts (Eds.), <i>Language and reading disabilities</i> (3 <sup>rd</sup> ed., pp. 146-162). Boston: Pearson.
Keene, E., and Zimmerman, S. (1997)	<i>Mosaic of Thought</i> . Portsmouth, NH: Heinemann.
Land, J. (2009).	<i>Zwakke lezers, sterke teksten? Effecten van tekst – en lezerskenmerken op het tekstbegrip en de tekstwaardering van vmbo-leerlingen</i> . [Poor readers, strong readers? Effects of tekst – and readers' characteristics and the appreciation of secondary vocational school pupils] Delft: Eburon.
Lanning, L.A. (2009)	<i>Four powerful strategies for struggling readers</i> . Grade 3-8, Corwin Press
Lerner, J., and Johns, B. (2009).	<i>Learning disabilities and related mild disabilities: Characteristics, teaching strategies, and new direction</i> . Australia: Wadsworth.
Minskoff, E. (2005)	<i>Teaching reading to struggling learners</i> . Baltimore: Brookes Publishing.
National Reading Panel (2000)	<i>Report of the National Reading Panel: Teaching children to read</i> . Washington, DC. National Institute of Child Health and Human Development.
National Reading Panel (2000)	<i>Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction</i> . Washington D.D.: National Institute of Child Health and Human Development.
Pearson, P., and L. Fielding (1991)	'Comprehension instruction'. In: R. Barr, M. L. Kamil, P. B. Mosenthal and P. D. Pearson (eds.). <i>Handbook of Reading Research</i> . Vol II. Mahwah, NJ: Lawrence Erlbaum, p. 815-865.
Scott, J.A., Jamieson, D., and Asselin, M. (1999).	Instructional interactions in upper elementary classrooms: An observational study. In T. Shanahan et al. (Eds.), <i>Theory and practice in literacy: National Reading Conference yearbook</i> (Vol.48, pp.167-177).
Snow, C. E. (2010).	Reading comprehension: Reading for learning. In P. Peterson, E. baker, & B. McGraw (Eds.), <i>International encyclopaedia of education</i> (3 <sup>rd</sup> ed., pp. 413-418). Oxford, UK: Elsevier.
Snow, M. and D. Brinton (red.) (1997)	<i>The Content-based classroom. Perspectives on integrating language and content</i> . New York: Addison Wesley Longman.
Tovani, C. (2000)	<i>I read it, but I don't get it: Comprehension strategies for adolescent readers</i> . Portland, ME: Steinhouse.
	Articles
Bos, C. S. (1982)	Getting past decoding: Using modelled and repeated readings as a remedial method for learning disabled students. <i>Topics in Learning and Learning Disabilities</i> , 1, 51-57.
Bryant, D.P., Linan-Thompson, S., Ugel, N. (2001).	The effects of professional development for middle school general and special education teachers on implementation of reading strategies in inclusive content area classes. <i>Learning Disability Quarterly</i> , 24(4), 251-264.
Buehl, D.	Comprehension Teaching Learning Activity Articles: "Yeah, that reminds me of..." Retrieved October 6, 2004 from <a href="http://wilearns.state.wi.us/apps/default.asp?cid=710">http://wilearns.state.wi.us/apps/default.asp?cid=710</a>
Gersten, R., Fuchs, L. S., Williams, J.P., and Baker, S. (2001)	Teaching reading comprehension strategies to students with learning disabilities: A review of research. <i>Review of Educational Research</i> , 71(2), 279-320.
Palincsar, A. and A. Brown (1984).	"Reciprocal teaching of comprehension fostering and comprehension monitoring activities". <i>Cognition and Instruction</i> , 1, nr. 2, p. 117-175.
	Educational Programmes
Gruwel, S., C. Aarnoutse and K. van den Bos (1995)	Elkaar onderwijzen in begrijpend lezen en luisteren. Een programma van twintig lessen bestemd voor groep 6 van het basisonderwijs en leerlingen van 9 tot en met 11 jaar van het speciaal onderwijs. Nijmegen: Berkhout. [Teaching each other in reading comprehension and listening. A programme of 20 lessons for grade 3 of primary school for pupils of 9-11 years old of special education classes ]


## Toolbox of activities for Reading Comprehension




Toolbox 5.1	RU BART Technique
Toolbox 5.2	BCDE Strategy
Toolbox 5.3	RAP-Q Technique
Toolbox 5.4	Ask 5 W's & 1 H Technique
Toolbox 5.5	FRAYER Model Technique
Toolbox 5.6	SPORE Technique
Toolbox 5.7	K-W-L Technique
Toolbox 5.8	Active reading with reading strategies
Toolbox 5.9	Understanding news
Toolbox 5.10	Creating meaningful connections
Toolbox 5.11	Reading Circles
Toolbox 5.12	Reading cubes
Toolbox 5.13	Story Sacks





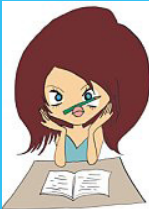

### Toolbox 5.1 RU BART Technique

<b>Goals</b>	To help student understand the meaning of long sentences
<b>For whom?</b>	Nonfluent readers who have difficulties in reading
<b>Methods</b>	<p><b>R</b>ead the long sentence that is hard for you to understand</p> <p><b>U</b>se punctuation marks to break the long sentence into chunks</p> <p><b>B</b>reak the long sentence into chunks that have complete ideas</p> <p><b>A</b>nalyse the meaning of each of the chunks</p> <p><b>R</b>e-analyse the meanings of the chunks to find out if they are related to each other</p> <p><b>T</b>hink about the meaning of the long sentence after you re-read it.</p>
<b>Materials</b>	Chalkboard, or overhead projector, or piece of chart paper
<b>Author(s)</b>	Esther Minskoff <i>et al.</i> , Faculty of James Madison University Special Education Programme
<b>Approximate time needed to teach</b>	A school year
<b>Background</b> 	Learning Toolbox was developed with a U.S. Department of Education grant on Steppingstones in Technology Innovation for Students with Disabilities. The grant was entitled "Field Testing the Learning Toolbox: An Instructional Resource Website for Students with Mild Disabilities, Parents, and Teachers." (Faculty of James Madison University Special Education Programme)
<b>Where to find more information?</b>	Adapted from <a href="http://coe.jmu.edu/learningtoolbox">http://coe.jmu.edu/learningtoolbox</a>


## Toolbox 5.2 BCDE Strategy

<b>Goals</b>	To improve reading comprehension (improve understanding of overall ideas) To help students understand details of what they read
<b>For whom?</b>	Children with comprehension problems
<b>Methods</b>	<ul style="list-style-type: none"> <li>• Before reading</li> <li>• Create questions</li> <li>• During reading</li> <li>• End of reading               <ul style="list-style-type: none"> <li>- Before starting to read, look over the pages you have to read</li> <li>- Create questions to ask yourself while you read the material</li> <li>- During reading of the material, answer the questions you wrote on the note cards</li> <li>- End of reading – summarize</li> </ul> </li> </ul>
<b>Materials</b>	Chalkboard, or overhead projector, or piece of chart paper
<b>Author(s)</b>	Esther Minskoff et al., Faculty of James Madison University Special Education Programme
<b>Approximate time needed to teach</b>	A few weeks
<b>Background</b> 	Learning Toolbox was developed with a U.S. Department of Education grant on Steppingstones in Technology Innovation for Students with Disabilities. The grant was entitled “Field Testing the Learning Toolbox: An Instructional Resource Website for Students with Mild Disabilities, Parents, and Teachers.”
	Adapted from <a href="http://coe.jmu.edu/learningtoolbox">http://coe.jmu.edu/learningtoolbox</a>





Description of the activity

<p><b>B</b></p>		<p>Before reading survey</p> <ul style="list-style-type: none"> <li>• Before starting to read, look over the pages you have to read.</li> <li>• Reading a textbook:             <ul style="list-style-type: none"> <li>- read the title;</li> <li>- side headings;</li> <li>- paragraph headings;</li> <li>- pictures;</li> <li>- graphics;</li> <li>- bold-faced words;</li> <li>- study questions.</li> </ul> </li> </ul> <p>Think about how this chapter is related to previous chapters</p> <ul style="list-style-type: none"> <li>• reading a story:             <ul style="list-style-type: none"> <li>- Look back at the previous section you read.</li> <li>- Predict what you think will happen in this section.</li> <li>- Skim the paragraphs to get some idea of what might be in the section you will be reading.</li> </ul> </li> </ul> <p>Make predictions about the characters and the actions that you think will take place.</p>
<p><b>C</b></p>		<p>Create questions to ask yourself while you read the material</p> <ul style="list-style-type: none"> <li>• Reading a textbook:             <ul style="list-style-type: none"> <li>- Ask questions about the material based on                 <ul style="list-style-type: none"> <li>- Title;</li> <li>- Side headings;</li> <li>- Paragraph headings;</li> <li>- Pictures;</li> <li>- Graphics;</li> <li>- Bold-faced words;</li> <li>- Study questions.</li> </ul> </li> <li>- Ask a teacher to write these questions for you to reply later.</li> <li>- If possible write them on note cards and keep them near to you.</li> </ul> </li> <li>• Reading a story book:             <ul style="list-style-type: none"> <li>- Either you or the teacher can write questions you may guess.</li> <li>- Have a guess about the characters and actions.</li> </ul> </li> </ul>
<p><b>D</b></p>		<p>During reading of the material, answer the questions you wrote on the note cards:</p> <ul style="list-style-type: none"> <li>• While reading, remember the questions you wrote before;</li> <li>• When you find the answers of those questions, write them on the cards, or ask your teacher to write them down.</li> </ul>
<p><b>E</b></p>		<p>End of reading – summarize</p> <ul style="list-style-type: none"> <li>• When the reading ends, check all the questions written beforehand.</li> <li>• If any are left un-answered, return and try to reply.</li> <li>• Ask yourself the questions and try to reply them.</li> <li>• Summarise the material you have just read and try to list the main ideas.</li> <li>• Compare the material you have just read and the previous materials e.g. any relation, similarities, differences.</li> <li>• Use your imagination and guess how what you have read now can be related to the next material you will read.</li> </ul>



### Toolbox 5.3 RAP-Q Technique

<b>Goals</b>	To improve reading comprehension To help students understand main ideas of what they read
<b>For whom?</b>	Children with comprehension problems
<b>Methods</b>	<ul style="list-style-type: none"> <li>• Read a paragraph or a section of material that you are working on</li> <li>• Ask yourself what the main ideas are</li> <li>• Put the book words in your own words</li> <li>• Questions about the reading</li> </ul>
<b>Materials</b>	Chalkboard, or overhead projector, or piece of chart paper
<b>Author(s)</b>	Learning Toolbox was developed with a U.S. Department of Education grant on Steppingstones in Technology Innovation for Students with Disabilities. The grant was entitled "Field Testing the Learning Toolbox: An Instructional Resource Website for Students with Mild Disabilities, Parents, and Teachers." (Faculty of James Madison University Special Education Programme)
	Adapted from <a href="http://coe.jmu.edu/learningtoolbox">http://coe.jmu.edu/learningtoolbox</a>

#### Description of the activity

<b>R</b>		<p>Read a paragraph or a section of material that you are working on</p> <ul style="list-style-type: none"> <li>• Try to read small pieces of the material, otherwise it might be too much to think about at once</li> </ul>
<b>A</b>		<p>Ask yourself what the main ideas are</p> <ul style="list-style-type: none"> <li>• Try to find the sentences giving the most important ideas of the material</li> </ul>
<b>P</b>		<p>Put the book words in your own words</p> <ul style="list-style-type: none"> <li>• Paraphrasing is when you put material you read into your own words</li> <li>• When paraphrasing think about other words which says the same thing as in the material</li> </ul>
<b>Q</b>		<p>Questions about the reading</p> <ul style="list-style-type: none"> <li>• Based on your paraphrasing of the main ideas, write a question in front of a note card and reply on the back so it can be used for further studying</li> <li>• Compare the main ideas on note cards for each paragraphs to see if and how the ideas are related with each other</li> </ul>

### Toolbox 5.4 Ask 5 W's & 1 H Technique

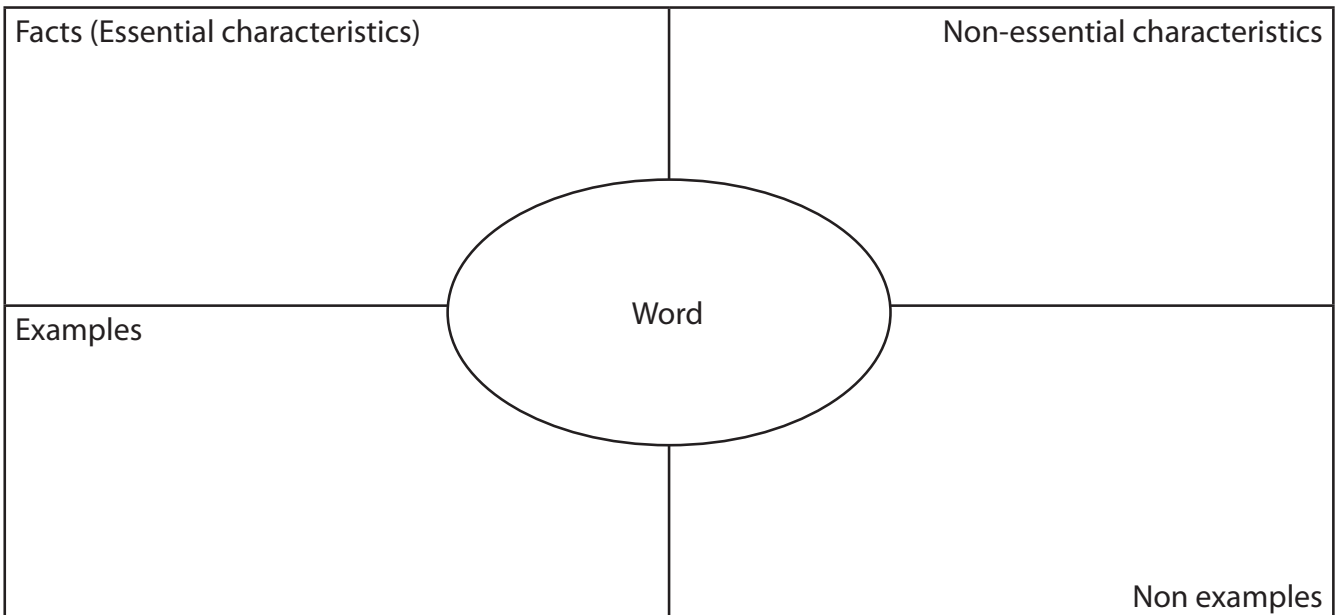
<b>Goals</b>	To improve reading comprehension (to help students understand stories when reading) To help students understand details of what they read
<b>For whom?</b>	Children with comprehension problems
<b>Methods</b>	<ul style="list-style-type: none"> <li>• Ask detailed questions to go with the main ideas of what you read</li> <li>• For each of the main ideas that you have identified in a reading section, ask yourself questions starting with the 5W's &amp; 1 H question words                             <ul style="list-style-type: none"> <li>- Who</li> <li>- What</li> <li>- Where</li> <li>- When</li> <li>- Why</li> <li>- How</li> </ul> </li> </ul>
<b>Materials</b>	Chalkboard, or overhead projector, or piece of chart paper
<b>Author(s)</b>	Learning Toolbox was developed with a U.S. Department of Education grant on Steppingstones in Technology Innovation for Students with Disabilities. The grant was entitled "Field Testing the Learning Toolbox: An Instructional Resource Website for Students with Mild Disabilities, Parents, and Teachers." (Faculty of James Madison University Special Education Programme)
<b>Approximate time needed to teach</b>	A few weeks
<b>Background</b>	Not all of the question words will fit the information you read. Select the question words that fit the information you read. Select the question words that fit the information.
	
	Adapted from <a href="http://coe.jmu.edu/learningtoolbox">http://coe.jmu.edu/learningtoolbox</a>

<b>WHO?</b>	<ul style="list-style-type: none"> <li>• Make a list of characters and their specifics</li> <li>• Find the relationship between the characters and link them</li> </ul>
<b>WHAT?</b>	<ul style="list-style-type: none"> <li>• Find out the events or actions in the reading material</li> <li>• Find the relationship amongst the events and link them</li> <li>• Find out the relationship between characters and event and link them</li> </ul>
<b>WHERE?</b>	<ul style="list-style-type: none"> <li>• Find out all the places in the reading</li> <li>• Find out the relationship amongst characters, places and events. Link them accordingly</li> </ul>
<b>WHEN?</b>	<ul style="list-style-type: none"> <li>• Find out the time factors in the reading</li> <li>• Find out relationship amongst characters, places, events and time factors. Link them accordingly</li> </ul>
<b>WHY?</b>	<ul style="list-style-type: none"> <li>• Make a list of causes and actions.</li> <li>• Find the relationships amongst characters, events, places or times with the causes. Link them accordingly.</li> </ul>
<b>HOW?</b>	<ul style="list-style-type: none"> <li>• Find out list of places took place in the reading.</li> <li>• Find out relationship between the events that took place and other factors. Link them accordingly.</li> </ul>
<b>ANSWER</b>	<p>Answer the questions using an outline or graphic organizers</p> <ul style="list-style-type: none"> <li>• Go over all the details you found out.</li> <li>• Make an outline of important details and classify it as the main ideas.</li> <li>• Not every idea needs to be highlighted.</li> <li>• You may use different coloured pens/pencils/fonts to classify/relate above items, for example:                             <ul style="list-style-type: none"> <li>- Who in green</li> <li>- What in red</li> </ul> </li> <li>• It might be useful to draw lines integrating all of the details.</li> </ul>



### Toolbox 5.5 FRAYER Model Technique

<b>Goals</b>	To improve reading comprehension
<b>For whom?</b>	Children with comprehension problems
<b>Methods</b>	
<b>Materials</b>	Chalkboard, or overhead projector, or piece of chart paper
<b>Author(s)</b>	Dorothy Frayer and her colleagues at the University of Wisconsin
<b>Approximate time needed to teach</b>	
<b>Background</b> 	Essential characteristics Non-essential characteristics Examples Non examples
	Adapted from <a href="http://coe.jmu.edu/learningtoolbox">http://coe.jmu.edu/learningtoolbox</a>

Description of the activity



### Toolbox 5.6 SPORE Technique

<b>Goals</b>	To help students understand stories that they read To help students organize their thoughts when writing stories
<b>For whom?</b>	Children with comprehension problems
<b>Methods</b>	<ul style="list-style-type: none"> <li>• Setting</li> <li>• Problem</li> <li>• Order of Action</li> <li>• Resolution</li> <li>• Ending</li> </ul>
<b>Materials</b>	Chalkboard, or overhead projector, or piece of chart paper
<b>Author(s)</b>	Learning Toolbox was developed with a U.S. Department of Education grant on Steppingstones in Technology Innovation for Students with Disabilities. The grant was entitled "Field Testing the Learning Toolbox: An Instructional Resource Website for Students with Mild Disabilities, Parents, and Teachers." (Faculty of James Madison University Special Education Programme)
<b>Approximate time needed to teach</b>	40-50 minutes
<b>Background</b>	When teaching this strategy, establish a story web. Use circles when you need to identify the parts of the story. Each centre circle should contain phrases or words. Complete sentences should not be used. This technique helps students organize their thoughts when writing their paper.
	
	Adapted from <a href="http://coe.jmu.edu/learningtoolbox">http://coe.jmu.edu/learningtoolbox</a>

#### Description of the activity

<b>S</b>	<b>Setting</b> <ul style="list-style-type: none"> <li>• Write the name of the story in a circle in the middle.</li> <li>• Add five other circles containing one part of SPORE strategy</li> <li>• Use one word for each circle</li> <li>• Settings should include                             <ul style="list-style-type: none"> <li>- Who (people)</li> <li>- What (animals)</li> <li>- Where (places)</li> <li>- When (times)</li> </ul> </li> <li>• Give enough details to the above setting items</li> </ul>
<b>P</b>	<b>Problem</b> <ul style="list-style-type: none"> <li>• Find out the major problems in the story or chapter</li> <li>• Study the relationship amongst who, what, where, when and the problem</li> <li>• Write down the problem in to the related circle in the chart</li> </ul>
<b>O</b>	<b>Order of Action</b> <ul style="list-style-type: none"> <li>• Write down all the events happening in the story</li> <li>• Assure that all the events recorded in the same order as in the story</li> </ul>
<b>R</b>	<b>Resolution</b> <ul style="list-style-type: none"> <li>• Write down how the problem is solved</li> </ul>
<b>E</b>	<b>Ending</b> <ul style="list-style-type: none"> <li>• Point out how the story is finished and what happened to the different characters</li> <li>• Look at the chart and read it again to see what has been written is aligned with the story told in the material</li> </ul>

### Toolbox 5.7 K-W-L Technique



<b>Goals</b>	To activate the background knowledge To be able to set purposes when reading expository text
<b>For whom?</b>	Children with comprehension problems
<b>Methods</b>	<ul style="list-style-type: none"> <li>• What do you think you <b>KNOW</b>?</li> <li>• What do you <b>WANT</b> to learn?</li> <li>• What did you <b>LEARN</b>? What do we <b>still</b> need to learn?</li> </ul>
<b>Materials</b>	Chalkboard, or overhead projector, or piece of chart paper
<b>Author(s)</b>	Ogle, D.M. (1986)
<b>Approximate time needed to teach</b>	Varies based on what the subject is.
<b>Where to find more information?</b>	<a href="http://learningdisabilities.about.com/od/readingstrategies/qt/Kwl-What-Is-Kwl.htm">http://learningdisabilities.about.com/od/readingstrategies/qt/Kwl-What-Is-Kwl.htm</a>

#### Description of the activity

<b>K</b>	<b>W</b>	<b>L</b>
What do you think you already <b>KNOW</b> about "freedom"	What do you <b>WANT</b> to learn about "freedom"	What did you <b>LEARN</b> about "freedom"



### Toolbox 5.8 Reading Comprehension: Active reading with reading strategies

<b>Goals</b>	Learn to guide children their reading process
<b>For whom?</b>	Teacher-trainers, teachers, support teachers, children, ...
<b>Methods</b>	
<b>Materials</b>	Text , strategy cards with questions
<b>Author(s)</b>	Leen Stoffels
<b>Approximate time needed to teach</b>	As long as needed
<b>Background</b>	
<b>Where to find more information?</b>	
	
	<a href="http://www.youtube.com/watch?v=RKPf2sfW7ck">http://www.youtube.com/watch?v=RKPf2sfW7ck</a>

#### Description of the activity

You can teach children to improve their reading comprehension by giving questions before, during and after reading. You can mark these questions on a strategy-card they can use. After a time, you suggest them to turn on the cards and use them only when they think they need them

Questions before reading

- Why am I going to read this text? (goal)
- What do I think the text is going about? (orientation)
- What do I know already about this theme? (to invoke knowledge and vocabulary)



Questions during reading

- Do I understand what I am reading?
- What do I do when I don't understand something?

Questions after reading

- I read the text with a goal. Did I reach that goal?
- What am I going to do with the text?

## Toolbox 5.9 Understanding news

<b>Goals</b>	<ul style="list-style-type: none"> <li>• Motivate and excite children about reading</li> <li>• Encourage active participation in reading</li> <li>• Encourage a desire to share books together, read aloud and listen to stories</li> <li>• Give parents confidence to share stories</li> <li>• Give parents an easy and enjoyable way to engage children in literacy</li> <li>• Reading pleasure</li> </ul>
<b>For whom?</b>	Children from 4-8 years
<b>Methods</b>	<p>"Understanding news" is a method for reading comprehension. The purpose is to create lessons reading comprehension with an accent on actual themes. Lessons consist of texts, tasks and instructions.</p> <p>Children determine the themes they will read about. They mail their themes to redaction of the website "news comprehension" (in Dutch: <a href="http://www.nieuwsbegrip.nl">http://www.nieuwsbegrip.nl</a>)</p>
<b>Materials :</b>	Texts, instructions, tasks
<b>Author(s)</b>	Leen Stoffels
<b>Approximate time needed to teach</b>	As long as needed
<b>Background</b>	
	
	Where to find more information?
	<p><b>Video material</b></p> <p><a href="http://www.youtube.com/watch?v=dImvez8RH04">http://www.youtube.com/watch?v=dImvez8RH04</a></p>

### Description of the activity

Children determine the themes they will read about. They mail their themes to the editorial team of the website (news comprehension – <http://www.nieuwsbegrip.nl>). The team makes a selection of articles; they make a mix of bad and good news, national and international, and all kinds of subjects (history, geography, political).

Each lesson has an analogue construction which consists of a text, a vocabulary list and a road map.

The text is the starting point. Children read the text with the help of a road map which includes five reading strategies. The text includes a vocabulary list. Children also have to induce the meaning of words with the assistance of vocabulary-strategies on the roadmap.

Each lesson contains an exercise in which a reading strategy is involved.

Next strategies are used: to predict, clarify ambiguities, ask questions, summarize and recognize relations and signal words.

In addition, different activities can be worked out:

#### Making schemes

Children exercise every week on making schemes in which they exercise constructing the most relevant information. Different schemes can be used for the same text: a time bar, a flow chart.

#### Multiple intelligence

Every week pupils devise a task in which intelligence is used (spatial, visual, musical...). This gives variety to their forms of work.

#### Cooperation

Children work in (heterogenic) groups so they can learn from each other's processes.

#### Reciprocal reading

Texts are read by the principle of reciprocal reading. The teacher is modelling the reading process by showing how he uses certain strategies. In the beginning, the teacher is the expert. Later on, the pupils are experts and the teacher the coach

## Toolbox 5.10 Creating meaningful connections

<b>Goals</b>	<ul style="list-style-type: none"> <li>• Imaging</li> <li>• Being aware of text language</li> <li>• Activating prior knowledge/experience:             <ol style="list-style-type: none"> <li>a. Text to self: comparing and evaluating background experiences and images with information and descriptions presented;</li> <li>b. Text to text: comparing and analysing characters, plots, themes, information, purposes, descriptions, writing styles, and/or versions of texts.</li> <li>c. Text to world; comparing and considering text information with knowledge of the world.</li> </ol> </li> <li>• Questioning such as; ‘How does this character’s feeling compare to mine when I was in a similar situation?’ ‘What images does the language create in my mind?’ ‘How do my connections help me better understand?’</li> <li>• Synthesizing various types of connections and text.</li> </ul>
<b>For whom?</b>	Teacher-trainers, teachers, support teachers, children, ...
<b>Methods</b>	<p>Children learn to connect texts with own knowledge of experiences, with other text or with knowledge about the world.</p> <p>The following steps can be taken:</p> <ol style="list-style-type: none"> <li>a. Explaining the strategy;</li> <li>b. Modelling of the strategy in action by the teacher and pupils;</li> <li>c. Collaborative use of the strategy;</li> <li>d. Guided practical using the strategies with gradual release of responsibility;</li> <li>e. Independent use of the strategies.</li> </ol>
<b>Materials</b>	All kind of texts ; articles, books, a poem, Wikipedia
<b>Where to find more information?</b>	Israel, S., Luckhaupt, S. and Peters, L. (2006) <i>Making meaningful connections</i> . <a href="http://www.uk.sagepub.com/upm-data/10837_Chapter_1.pdf">http://www.uk.sagepub.com/upm-data/10837_Chapter_1.pdf</a>

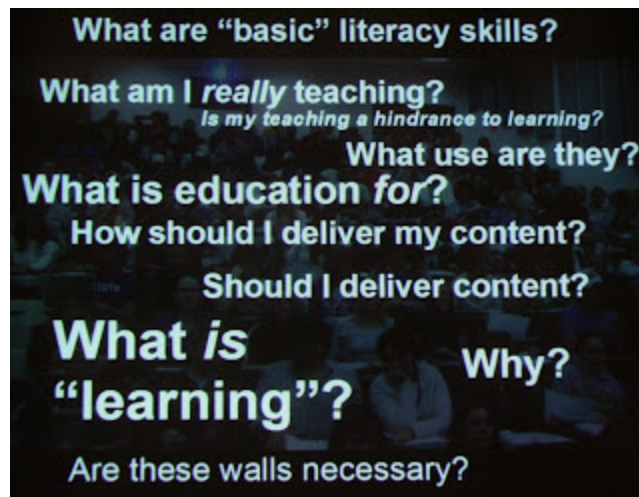
### Description of the activity

Children learn to connect texts with their own knowledge of experiences, with other text or with knowledge about the world.

The following steps can be taken:

- a. Explaining the strategy;
- b. Modelling of the strategy in action by the teacher and pupils;
- c. Collaborative use of the strategy;
- d. Guided practical using the strategies with gradual release of responsibility;
- e. Independent use of the strategies.

To effectively use this strategy, teachers should spend time modelling for students how to make meaningful connections. The easiest connection to teach is text-to-self. Teachers should model text-to-self connections initially with selections that are relatively close to the student’s personal experiences. A key phrase that prompts text-to-self connections is, “this reminds me of...” Next, teachers should model how to make text-to-text connections. Sometimes when we read, we are reminded of other texts we have read. Encourage students to consider the variety of texts they have experienced which will help them to understand the new selection. Finally, teachers should model how to make text-to-world connections. When teachers suspect that students may lack the ability to make meaningful connections, classroom instruction will be necessary to bridge the gap between reading experiences and author assumptions. Building the necessary background knowledge is a crucial means for providing text-to-world support and may be used to pre-empt reading failure. Harvey and Goudvis (2000) caution that merely making connections is not sufficient. Students may make tangential connections that can distract them from the text. Throughout instruction, students need to be challenged to analyse how their connections are contributing to their understanding of the text. Text connections should lead to text comprehension.



Below are some examples of connecting statements for students to use as a reference or teachers can use them as prompts for classroom discussion.

This part reminds me of...

I felt like... (Character) when I...

If that happened to me I would....

This book reminds me of... (Another text) because....

I can relate to... (Part of text) because one time....

Something similar happened to me when....

Below are some examples of questions that can be used to facilitate student connections:

Text-to-self:

What does this remind me of in my life?

What is this similar to in my life?

How is this different from my life?

Has something like this ever happened to me?

How does this relate to my life?

What were my feelings when I read this?

Text-to-text:

What does this remind me of in another book I've read?

How is this text similar to other things I've read?

How is this different from other books I've read?

Have I read about something like this before?

Text-to-world:

What does this remind me of in the real world?

How is this text similar to things that happen in the real world?

How is this different from things that happen in the real world?

How did that part relate to the world around me?

### Toolbox 5.11 Tricks for reading pleasure: Reading circles

<b>Goals</b>	<ul style="list-style-type: none"> <li>• To establish a reading habit</li> <li>• To enhance interest in reading and reading pleasure</li> <li>• To promote reading fluency and reading comprehension</li> <li>• To provide a context for discussion and problem solving</li> <li>• To provide a social context for promoting literacy</li> <li>• To teach readers to find information in printed text</li> <li>• To promote community development</li> </ul>
<b>For whom?</b>	Children from 7 years
<b>Methods</b>	
<b>Materials</b>	Story books, non-fiction book, articles, journals, poems
<b>Author(s)</b>	Leen Stoffels, based on Paulo Freire
<b>Back-ground</b> 	The idea of reading circles is often attributed to Paulo Freire. Freire developed “culture circles”, or problem-solving study groups to guide discussion and learning experiences (Freire instructional programme).
	<a href="http://www.sil.org/lingualinks/literacy/referencematerials/glossaryofliteracyterms/whatisareadingcircle.htm">http://www.sil.org/lingualinks/literacy/referencematerials/glossaryofliteracyterms/whatisareadingcircle.htm</a>
	<a href="http://www.youtube.com/watch?v=T86oxRTYAd8">http://www.youtube.com/watch?v=T86oxRTYAd8</a>

#### Description of the activity

Start by working closely with the children to model working in a reading circle.

Once children understand the way of working, they will be able to work independently.

Think about:

- Giving every one of the group a role (time keeper, ...)
- Clear guidelines;
- Correction key.

Working in reading circles is a kind of contract work.

Examples of rules during working time:

- Circle up for meeting;
- Get started in one minute;
- Discuss quietly and politely;
- Listen carefully to group members.

Guide “polite conversation starters”

- “In my opinion...”
- “I’d like to add...”
- “I disagree because...”
- “I agree because...”
- “I don’t understand...”
- “I’m confused about...”
- “According to page...”
- “I see your point, however...”

## Toolbox 5.12 Mobile reading places; reading cubes

<b>Goals</b>	Motivate and excite children for reading <ul style="list-style-type: none"> <li>• Reading pleasure</li> <li>• Encourage a desire to share books together, read aloud and listen to stories</li> </ul>
<b>For whom?</b>	Children from 4 to 8 years
<b>Methods</b>	The purpose is to look for places where children come together for reading. Having the possibility to read depends on time, place and opportunity. To make some time free to look in books, to read a bit... The idea is to work out multi-functional boxes. In it some books or articles... You can make a reading corner somewhere in the school or work out more places in the school which you make cosy and put in some reading cubes.
<b>Materials :</b>	Story book, non-fiction book, games, articles....
<b>Author(s)</b>	
	Approximate time needed to teach
<b>Background</b>	Gardner, R.C. (2001) "Language Learning Motivation: the Student, the Teacher, and the Researcher". In: <i>Texas Papers in Foreign Language Education</i> , 6, nr. 1, p. 1-18. Gibbons, J. and E. Ramirez (2004) <i>Maintaining a minority language. A Case study of Hispanic Teenagers</i> . Clevedon: Multilingual Matters Ltd. Hoppenbrouwers, C. (1990) <i>Het regiolect: Van dialect tot algemeen Nederlands</i> . Muiderberg: Couthino. Pavlenko, A. (2005) <i>Emotions and multilingualism</i> . Cambridge: Cambridge University Press.
	
	Where to find more information? <a href="http://www.g-o.be/sites/portaal_nieuw/subsites/kinderopvang/Documents/taal%20en%20onderwijs.pdf">http://www.g-o.be/sites/portaal_nieuw/subsites/kinderopvang/Documents/taal%20en%20onderwijs.pdf</a> <a href="http://schooltje.jalbum.net/mobiele%20leesplek/slides/PB200016.html">http://schooltje.jalbum.net/mobiele%20leesplek/slides/PB200016.html</a>
	<b>Video material</b> <a href="http://www.youtube.com/watch?v=T86oxRTYAd8">http://www.youtube.com/watch?v=T86oxRTYAd8</a>


### Description of the activity

A reading place can be furnished by pillows, carpet...

The reading package can comprise different themes: animals, to make a trip, beauty... Children find each other in the places, can read a bit, talk about what they read, working on (meaningful) activities together.



### Toolbox 5.13 Tricks for reading pleasure: Story sacks

<b>Goals</b>	<ul style="list-style-type: none"> <li>• Motivate and excite children about reading;</li> <li>• Encourage active participation in reading;</li> <li>• Encourage a desire to share books with others, read aloud and listen to stories;</li> <li>• Give parents confidence to share stories;</li> <li>• Give parents an easy and enjoyable way to engage children in literacy;</li> <li>• Reading for pleasure.</li> </ul>
<b>For whom?</b>	Children from 4 to 8 years
<b>Methods</b>	
<b>Materials</b>	Story book, non-fiction book, games, audio, crayons, sac, play dough...
<b>Author(s)</b>	
	Approximate time needed to teach
<b>Background</b> 	
	<p>Where to find more information?</p> <p><a href="http://www.uk.sagepub.com/upm-data/9851_039749.pdf">http://www.uk.sagepub.com/upm-data/9851_039749.pdf</a></p> <p><a href="http://www.literacytrust.org.uk/assets/0000/3210/Story_sack_guide.pdf">http://www.literacytrust.org.uk/assets/0000/3210/Story_sack_guide.pdf</a></p> <p><a href="http://www.literacytrust.org.uk/early">www.literacytrust.org.uk/early</a></p> <p><a href="http://www.nwt.literacy.ca/resources/famlit/howtokit/storysac/storysac.pdf">http://www.nwt.literacy.ca/resources/famlit/howtokit/storysac/storysac.pdf</a></p>
	<p><b>Video material</b></p> <p><a href="http://www.youtube.com/watch?v=T86oxRTYAd8">http://www.youtube.com/watch?v=T86oxRTYAd8</a></p>

#### Description of the activity

##### Story Sacks

##### *What is it?*

A story sack is a large cloth bag containing a story book with supporting materials to stimulate language activities and make reading an enjoyable experience.

After finding or making a large cloth bag, include any of the materials as appropriate to the needs and abilities of the children in your setting:

- The story book;
- A CD or DVD of the story;
- Related non-fiction books;
- Models of characters and objects from the story;
- Activities or games related to the story;
- Paper;
- Crayons;
- Play dough;
- ....
- An activity card.

Start off by working closely with the children to model story sack activities.

Once children are used to the idea they will be able to use them independently.

Invite parents to see you modelling the use of the story sacks before offering them the opportunity to borrow them to use at home, or provide a clear activity card.

## Content A story sack based on The Three Little Pigs

### I. A fiction and non-fiction book

A fiction book allows a child imagine and create images in their minds.

The fiction book should have a theme that is interesting and relevant to children and a strong storyline. A non-fiction book gives different reading opportunities to children. Children at an early age are fascinated by facts and information. They want to know about the world around them.

The non-fiction book should:

- Be relevant to the theme of the fiction book;
- Have appropriate content for young children;
- Have nice photos or pictures;
- Interest young children.

### II. Audiotape

An audiotape allows the child to listen to the story again and again. Children love to hear a story over and over again. It helps them understand the story and re-tell a storyline.

### III. Examples of picture fun ideas

- Look at the pictures and tell a different story.
- Draw pictures while you read the story.
- Make a new ending to the story and draw pictures.

### IV. Examples of extended learning activities

- Make crafts about the story.
- Make a picture with x words in the book.
- Draw pictures about the book.
- Write a new ending to the book.
- Research information on the internet about the topic.

### V. Games

Games are an important element to early learning and reading. Make sure the game you make has literacy activities like reading, singing, writing and talking.

Some examples:

- Make a memory game with different items in the book.
- Make a bingo game with different items or words in the story.
- Make up a short crossword puzzle or word search.
- Play charades with different items from the story. Put pictures or words in a hat and act out the picture or word.
- Make word cards and play snap or go fish.
- Make a board game using the theme of the story.
- Make a sequence game where the child has to put the story back in the right order.
- ...

### VI. An activity list: Guide for parents

An activity card lists ideas for how to use the sack helping parents and new staff in using the resource. Ideas to put on the list:

- Talk about the story and children's favourite bits.
- Ask children questions about the characters and the plot.
- Re-tell the story using the models.
- Find out more about the people and places in the story by looking at the non-fiction books.
- Draw a character or model one out of play dough.
- Draw a story map of the plot to help with re-telling the story.

### How to use

Start off by working closely with the children to model story sack activities. Once children are used to the sacks, they will be able to use them independently. Invite parents to see you model the use of the story sacks before offering them the opportunity to borrow them to use at home. Talk with them about the possibilities; give those ideas for sharing a book, information about story sacks, and information about why the extended learning activities are important for their children's learning.





## ▶ Contributing authors

**Ackaert, Leen**, Children's Rights Commissioner's Office, House of Parliament, Brussels, Belgium. From a children's rights perspective she investigates the living conditions of children in Flanders and gives advice to policymakers regarding children's rights.

**Babür, Nalan** PhD in learning disabilities with minor in educational psychology (University of Arizona). She specializes in the areas of reading and learning disabilities. She has co-authored several articles in the area of dyslexia and related issues. She has been working in the department of Primary Education at Bogazici University since February 2004.

**Bengü Börkan**, PhD (Ohio State University), is an instructor in the Educational Sciences Department in the Faculty of Education, Boğaziçi University, Istanbul, Turkey. Her research interests focus on applied statistics and measurement in education.

**Callens, Saar**, MA. Artevelde University College Ghent, Belgium, Department of Education, Advanced Bachelor of Special Educational Needs and Remedial Teaching. Pedagogue trained in combining current conceptual frameworks, methodology and contents with the daily teaching reality and focus on individual education planning and experience based learning. Research in skills development of children with learning disabilities in primary education.

**Candeias, Adelinda**, PhD in Psychology (Socio-cognitive theories and assessment methods). Psychologist, Professor in Psychological and Educational Assessment at the University of Évora, Department of Psychology in the Bachelor in Psychology, in the Master Programme in Educational Psychology and in Special Education, and the PhD Programme in Psychology and in Education. Member of the Research Center in Education and Psychology and coordination of the PhD Programme in Psychology at the University of Evora. Consultant in dynamic assessment and cognitive enrichment with individuals with intellectual impairment.

**Caner, Ayşe**, PhD in Education, is an assistant professor in the Educational Sciences Department at the Faculty of Education, Bogazici University, Istanbul, Turkey. Her research interests focus on policy development, analysis and implementation in education. She is particularly interested in the challenges of implementation of educational policies at school and classroom level in Turkey.

**Chaleta, Elisa**, PhD in Educational Psychology. Professor at the Department of Psychology of the University of Évora, Portugal, both in the training of teachers and psychologists. Experience of teaching and intervention in the area of Special Needs Education and Learning Disabilities. Director of Department of Psychology of the University of Évora. Scientific Coordinator of the Office for the promotion of academic success at the University of Évora, Portugal.

**Cid, Marilia**, PhD in Education. Member of the Department of Pedagogy and Education of the University of Évora, Portugal. Teaching: Learning Assessment; Research Methods in Education (in post-graduate training: MA in Educational Evaluation; MA in Special Needs; Doctoral Training Programme in Education) and Teaching and Learning in Schools (Science Teacher Education). Coordination of MA in Educational Evaluation. Member of several Research Projects in Education.

**Cruz, Vitor**, PhD in Special Education. Professor at the Technical University of Lisbon, Portugal. Teaches assessment and intervention in developmental disabilities, particularly in Specific Learning Disabilities. Coordinates the master degree in Special Education. Works in the field of Structural Cognitive Modifiability (PASS) and on cognitive activation (PREP). Research and practices in Learning Disabilities, Reading and Reading Disabilities, Cognitive Education, Intelligence and Cognition.

**Deniz, Nursel**, Honours in Education, London Metropolitan University, degree in Education. After having worked as an early year's teacher, she became humanities subject coordinator and a part of the management and leadership team for the Noel Park Primary school. Currently year 4 Phase leader, alongside her main position as a class teacher and Gifted and Talented co-coordinator. She is working with a vast age range with different abilities including children with special educational needs.

**East, Marion**, MA, Senior Lecturer in Early Childhood Studies at Bath Spa University, England. She has had a career as a lecturer, tutor and teacher in schools colleges and Universities, and has been a practitioner and pedagogue in early childhood centres. For 11 years she was coordinator of young children's services for a large local authority in the UK. Her specialisms are children's and babies' development, play and learning, education for social justice and anti – discriminatory practice and widening participation in educational opportunities.

**Fialho, Isabel**, PhD in Education. Member of the Department of Pedagogy and Education of the University of Évora. Appraiser in the External Evaluation of Schools in collaboration with the General Inspection of Education, since 2007. Trainer in the Ministry of Education Programme for teachers of the Primary Schools – Teaching Experimental Sciences. Coordinator of scientific monitoring of projects "Turma Mais" within the Programme of the Ministry of Education-More Success at School (programme to combat school failure in primary education). Participation in several Research Projects in Education.

**Fluijt, Dian**, MEd Higher Education College [Hogeschool] Utrecht, Holland, Seminarium voor Orthopedagogiek (Educational Psychology). Re-

searcher on the effects co-teaching. Developer co-teaching classroom strategies. Teacher Challenging Behaviour in Master Special Educational Needs. Coordinates projects Co-Teaching for Primary and Secondary school teams. She participated in the Distinc-project on activities for inclusive classroom strategies.

**Franck, Eva**, works as a project co-worker for the department 'General Education Policy' of the city of Antwerp, specifically in the domain of school innovation. Together with Johan Huybrechts and other colleagues, she supports principals, teachers and other school professionals in implementing alternatives for grade retention. They developed a project "alternatives to grade retention" [Samen tot aan de meet], and published two books. They organize lectures, courses and conference on the subjects. Before that she worked for six years at the University of Antwerp as a researcher on educational topics.

**Gogacz, Adam** PhD University of Social Sciences in Lodz, Poland, Department of Educational Sciences. Philosopher and ethicist with scientific interests by philosophy of education. Tutor of more than fifty Master degrees in pedagogy, author of many articles on education for tolerance and acceptance, intercultural education or values in process of bringing up. For six years he was a Vice-Dean in the Department of Educational Science. Included in a list of soft skill experts in LAPECO European Project.

**Grácio, Luísa**, PhD in Educational Psychology. Professor in the Department of Psychology at the University of Évora, Portugal, in the Bachelor in Psychology, in several Master Programmes, namely in Special Needs and the in the PhD Programmes in Psychology and in Education. Member of the scientific committee of the Research Center in Education and Psychology (CIEP). Member of Portuguese team of international projects since 2006. National responsibility for Portuguese partnership in European DISTINC project. Research and practices in skills development and learning improvement

**Hussein, Tunay**, After completing her teacher training in Liverpool in 1974, she worked in several primary and secondary schools in London. Currently she is the Principal of Noel Park Primary School in North London where she has had the privilege of working with children from all around the world.

**Huybrechts, Johan**, senior expert Innovation and Learning –Education policy division City of Antwerp, Belgium. Johan was for 23 years teacher and headmaster of the multicultural school Regenboog in the city of Antwerp. He developed in 2000 the project 'Koning Matthijsje' where his school created an environment where the learning environment, instructional style and learning styles are matched. The school specialized in the reception of newcomers and refugees. For 7 years he has been the coordinator of a team that supports schools and the local authority in strengthening the policymaking capacity and innovation.

**Leal, Fátima**, Psychologist and a PhD. Educational Psychology Student from University of Évora – Portugal. Her research interests are in the areas of learning, teaching, metacognition, affect, regulation and higher education.

**Lebeer, Jo**, MD PhD, University of Antwerp, Faculty of Medicine, Department of Primary & Interdisciplinary Care, Belgium. Consultant in dynamic assessment and enhancing of learning potential and inclusive education of children and adults with developmental disabilities. Associate professor in disability studies at Antwerp University, visiting professor at the Diego-Portales University in Santiago de Chile and Department of Psychology of Babeş – Bolyai University in Cluj-Napoca, Romania. He conducts a post-graduate training project "Learning Enhancement and Inclusion" teaching Feuerstein's approach and is co-director of INCENA (Inclusion & Enablement). He coordinated the European Life Long Learning Projects "Inclues" (Inclusive and Cognitive Education) and DAFFODIL.

**Özerman Ulcay, Didem**, MA in Guidance and Psychological Counselling at Boğaziçi University. Her master's research focused on coping with test anxiety. She's worked in Education Department at Boğaziçi University for two years as research assistant. She has worked as a school counsellor in Açık Schools since 2007. Her work focus has been in learning disabilities in students who study at primary school. She also has been certified in the creative drama teaching area.

**Ozveren, Burcu**, MA in Special Education for Students with Emotional and Behavioural Disorders, George Washington University. Clinical teaching experience for students with Emotional and Behavioural Disorders in the psychoeducational theoretical framework combining the knowledge, skills, and attitudes necessary to facilitate effective instruction and improve outcomes for students with EBD.

**Pearce, Stephen**, BA(hons) degree in design and Postgraduate Certificate in Education. He has been working in primary education for over 20 years, most of it as a class teacher in Noel Park Primary School. He is the literacy coordinator for key stage 2 (years 3 to 6) and has also trained as a Reading Recovery teacher.

**Rebello, Nicole**, Educational Psychologist and Research Fellow on the Center of Research in Education and Psychology (CIEP) of University of Évora, Portugal. Member of Portuguese team of DISTINC Project

**Saragoça, Maria José**, Special Education Teacher in a public school (Group of Schools nº 3, Évora). PhD student in Sciences of Education in the University of Evora. Participation in two previous international COMENIUS projects: IRIS – Improvement through Research in the Inclusive

School; DAFFODIL – Dynamic Assessment of Functioning and Oriented at Development and Inclusive Learning. She did research in the implementation of ICF in education in Portugal and teachers ICF.

**Sart, Z. Hande**, PhD in Applied Developmental Psychology (University of Pittsburgh) BA in Psychological Counselling and Psychology, MA in Clinical Psychology at Boğaziçi University. Her master's research focused on mathematical disability and neuropsychological deficits in children with seizure disorders. Since 2004 she has taught at Boğaziçi University in counselling and education. Her instructional focus has been in disabilities and advocacy for individuals with disabilities. She is the coordinator of the Disability Unit that oversees the supportive services for students with disabilities and GETEM (the Technology and Educational Laboratory for Visual Disabilities) of Boğaziçi University. Her research areas are neurodevelopmental disabilities, behaviour problems and disorders in children, disability rights and rehabilitation counselling.

**Schraepen, Beno**, MA in educational psychology. Teaches at the Plantijn University College for Special Needs Pedagogy, Antwerp, Belgium. Co-director of Project INCENA (Inclusion & Enablement); conducted research on inclusive education and has extensive experience with school-based inclusive counselling. Participated in European Includes (on inclusive & cognitive education) & Daffodil-project on dynamic, functional inclusive assessment.

**Shamir, Adina**, PhD is an assistant professor and Vice-Head at the School of Education, Bar-Ilan University, Israel, Head of the Special Education Track. Head of the Special Interest Group on Children with Special Needs, the European Association for Learning and Instruction (EARLI), during 2007-2011. Since July, 2011 she has been "President Elect" of the International Association for Cognitive Education and Psychology (IACEP). Her scientific research and publications lie in the area of cognitive and meta-cognitive development. Her work and publications reflect an interdisciplinary approach that combines technology, special education and early childhood education. Her recent research and publications focus on the potential contribution of new technologies to the promotion of learning among young children at risk, including children with special educational needs. As a part of her activity in this area, she edited (Shamir, A., & Korat, O.) a book entitled Technology as a support for literacy achievements of students at risk, published by Springer.

**Stoffels Leen**, Karel de Grote University College, Antwerp, Belgium, Department of Education. Master in Educational Science and Remedial Teacher. Coordinator Advanced Bachelor of Special Educational Needs and Remedial Teaching and Advanced Bachelor Special Educational Needs Special Education. Lecturer in different themes of educational needs; supervising students in professionalization, reflection and experience based learning. Participating in national and international projects in special educational needs in regular and special educational settings. Coaching children with special educational needs.

**Unluhisarcikli, Ozlem**, PhD. Associate professor at Bogazici University, Istanbul, Turkey, Faculty of Education, Department of Educational Sciences, since 1999. She has experience in programme planning and implementation, and has provided consultancy to various institutions. Her research interests are adult education, adult vocational education, and adult literacy.

**Van den Eynde, Ria**, MA. Karel de Grote University College, Antwerp, Belgium, Department of education. Master in Literature and Linguistics. Lecturing primary school teachers in different aspects of reading, writing and linguistics; inclusive treatment in language-based learning disorders. Supervising students in professionalization. Special interest in children's literature and reading promotion. Participating national and international projects special educational needs in regular settings.

**Van den Steen, Luc**, Emeritus professor at Artevelde University College Ghent, Belgium. Co-Founder of "Sprankel", an association for helping parents and children with specific learning difficulties

**Vansieleghem, Nancy**, head of the education department at the LUCA School of Arts Ghent, Belgium. Until recently a Postdoctoral Researcher at the Department of Education at Ghent University, where she explored alternative forms of educational practices in terms of actions that seek to address the forces of the market which exploit educational projects increasingly as consumer products. She is the author of Dialogue as Limit-Experience: A Portrait of Philosophy with Children as Educational Project (2010).

**Vermeire, Ase**, Artevelde University College Ghent, Belgium, Department of Education, Advanced Bachelor of Special Educational Needs and Remedial Teaching. Pedagogue trained in combining current conceptual frameworks, methodology and contents with the daily teaching reality and guiding and supervising students in further professionalization, reflection and experience based learning.

**Wilssens, Marijke**, MA in Special Needs Education. Coordinator of the Advanced Bachelor of Special Educational Needs and Remedial Teaching at the Artevelde University College Ghent, Belgium. Teacher and researcher in different themes concerning children with special educational needs, support to their parents and interdisciplinary cooperation; coach and supervisor of students and professionals in professional development processes. Coordinator and developer of some international projects related to special educational needs. Large field experience in teaching preschool children with intellectual disabilities in inclusive settings.



## ► **DISTINC Project Partners**

### **Boğaziçi University Lifelong Learning Centre, TR. (Project Coordinator)**

*Project Coordinator* **Tamer Atabarut**  
*Project Researchers (in alphabetical order)* **Nalan Babür, Bengü Börkan, Ayşe Caner, Z. Hande Sart, Özlem Ünlühisarcıklı**  
*Administrative Staff* **Ece Gözde Gökakın**  
*Technical Staff* **M.Alişan Kuloğlu**

### **Istanbul Provincial Directorate for National Education, TR.**

*Manager* **Ahmet Koçibar**  
*Project Researchers (in alphabetical order)* **Metin Taşdemir, Mustafa Uslu**  
*Administrative Staff* **Ceren Erdoğan**

### **Noel Park Primary School, London, UK. (withdraw in the 2nd year of project)**

*Manager* **Tunay Hussein**  
*Project Researchers (in alphabetical order)* **Nursel Deniz, Mike Jarman, Stefan Pearce, Lucy Rodgers**  
*Administrative Staff* **Ayfer Cihan**

### **Spo eczna Akademia Nauk (University of Social Sciences), ód , PL.**

*Manager* **Marta Kędzia**  
*Project Researchers (in alphabetical order)* **Anna Bartczak, Adam Gogacz, Rafał Kamiński**  
**Anna Sołtys, Mariola Swiderska, Rafał Szklarek**  
*Administrative Staff* **Damian Kopka**

### **University of Antwerp, INCENA (Study Centre for Inclusion & Enablement), Faculty of Medicine, Centre for Primary & Interdisciplinary Care, BE.**

*Manager* **Jo Lebeer**  
*Project Researchers* **Saar Callens, Ase Vermeire, Marijke Wilssens (Artevelde Teacher Training College)**  
**Beno Schraepen (Plantijn School of Education) Leen Stoffels, Griet Van Balen & Ria Van den Eynde (Karel de Grote Teacher Training College)**  
*Administrative Staff* **Lea Costermans, Cil Leytens, Chris Monteyne**  
*Technical Staff* **Patricia Declopper, Bruno Fleurackers**  
**Linda Springael**

### **University of Evora Research Center on Education and Psychology, PT.**

*Manager* **Maria Luísa Fonseca Gracio**  
*Project Researchers (in alphabetical order)* **Adelinda Candeias, Marília Castro Cid, Elisa Chaleta, Vítor Cruz, Catarina Dias, Isabel Fialho, Nicole Rebelo, Maria José Saragoça**  
*Administrative Staff* **Cesaltina FradelLiliana Rosmaninho**





Boğaziçi University  
Lifelong Learning Center



Universiteit  
Antwerpen



This guide is a (partial) answer to the Education for all- goal of UNESCO, to make the school accessible to all children, whatever their differences or background, and to give them, together with their peers, a good education. Modern teachers are faced with a huge challenge: to create optimal conditions of learning for widely different children, many of whom having learning and behaviour challenges, different abilities and needs, without excluding anyone. Together with six partners from five European countries (Belgium, Poland, Portugal, Turkey and the United Kingdom), the DISTINC project developed a modular in-service training programme for primary school teachers, to improve their understanding, skills and knowledge on inclusive classroom practices, particularly for children with additional educational needs in the area of reading and writing difficulties and/or challenging behaviour. It enables children with learning difficulties and/or challenging behaviours to increase their opportunities in reaching their academic, social, emotional, and physical potential with their classmates.

This guide consists of short theoretical background texts and a set of "toolboxes", which present a selection of evidence-based strategies and methods, in order to develop necessary skills for teaching in inclusive classrooms. The attached DVD contains the elaborated toolbox- presentations and texts which can be used to work with teachers or with children. It may also serve as a reference document in the training of trainers.



The attached DVD contains the elaborated toolbox- presentations and texts which can be used to work with teachers or with children.



Education and Culture DG  
Lifelong Learning Programme

This project has been funded from 2010-2012 with the support of the European Commission Life Long Learning Programme Contract N°510072-LLP-1-2010-TR-Comenius-CMP. This document reflects the views of the authors only, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

ISBN 978-975-518-342-8