IMPROVING LITERACY SKILLS ACROSS LEARNING



CIDREE Yearbook 2015



Improving Literacy Skills across Learning

CIDREE Yearbook 2015

VIOLA BOZSIK





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Foreword

The CIDREE Yearbook 2015 places important emphasis on one of the fundamental elements for helping children and young people to access learning, progress and achieve their potential. Literacy is central to all aspects of learning and in all the contexts within which learners learn. It enables learners to develop the 'tools' that help them to engage in learning, and develop the skills in thinking and expressing that lead to self-confidence and personal identity. Literacy is critical in every subject, right across the curriculum, in enabling and shaping social interactions, promoting cultures, and laying the foundations for lifelong learning.

Through careful, well-planned and systematic progress in literacy skills, our children and young people will develop in every element of their education. Who is best placed to lead this learning? Is it possible for one teacher or subject to take charge of such an important and complex skillset? The articles in this Yearbook make clear that all teachers can and should have a responsibility for supporting learners in acquiring literacy skills. Indeed, a number of education systems are moving to ensure that everyone who supports children and young people to learn in classrooms and across the school environment, at home through parental involvement, and in community activities knows and understands how they can contribute to developing literacy skills.

Looking across the various articles, I can see the clear acknowledgement of the breadth and depth of skills that comprise literacy. Reading, writing, listening and talking are all recognised as key competences, of course. However, the authors also recognise the ways that literacy helps learners to explain thinking, debate, and look critically at the quality and trust to be placed on information, particularly through using the Internet. Teachers also help learners to develop personally and socially through effective literacy skills, supporting them to 'find their own voice', to question and to be aware of when and how others may seek to influence them.

Our learners will continue to be exposed to an ever-increasing range of written, electronic, oral and visual texts in all subjects whilst at school, in their everyday lives, and in their future careers. Fast-paced developments in social and digital media, games, networking, advertising and many other initiatives present challenges to education. How can teachers work together most effectively to prepare learners for the literacy skills they will need to access their learning across the curriculum now? How can they promote a sufficiently deep understanding and enjoyment of literacy that will ensure they continue to develop such skills actively throughout their lives? I am sure that the CIDREE Yearbook 2015 will support educators across Europe and beyond to identify, consider and address the key issues.

On behalf of all CIDREE members, I would like to thank colleagues from the Hungarian Institute for Educational Research and Development (HIERD) for the coordination and editing of the Yearbook. Of course, thanks are also due to each of the authors for their thought-provoking contributions.

Alan Armstrong
President, CIDREE 2014-2016
Strategic Director, Education Scotland

Editorial introduction

Theme of the CIDREE Yearbook 2015

The results of PISA 2009 revealed that 1 in 5 young (15 year old) Europeans struggle with problems of reading comprehension. PIAAC reinforces this troublesome picture: more than 73 million adults in the EU lack basic reading and writing skills, which increases their risk of poverty and social exclusion. The European High Level Group of Experts on Literacy was commissioned by Androulla Vassiliou, European Commissioner for Education, Culture, Multilingualism, Youth and Sport in 2011 to oversee the state of literacy in Europe and come up with recommended steps to improve the situation. Their final report of 2012 talks about a "literacy crisis". The three main directions of the recommended steps are: 1. creating a more literate environment, 2. raising the level of literacy teaching and providing more reading support and 3. increasing participation and inclusion.

Our yearbook aims at presenting how 9 different European countries (Estonia, Finland, France, Hungary, Ireland, the Netherlands, Scotland, Slovenia and Sweden) have undertaken steps to address the problem of low literacy levels. The volume addresses the topic of literacy on several levels. Readers can learn about specific classroom practices, textbooks and exam questions on the micro level, specific local programs, curricular changes and case studies on the mezo level, and also national and international policies on the macro level. Once all this is done, and a great amount of knowledge is conveyed on the *what* and *how*, we take a step back to reflect upon *why* improve literacy levels, what goal does it serve, and where are we headed with literacy education.

Currently, several efforts are being made in Europe to tackle this challenge, perhaps the most comprehensive one is the work of the ELINET network, the antecedents of which project are presented in one of the chapters. By inviting project coordinator Dr. Christine Garbe to contribute to the yearbook, we wanted to converge the efforts and knowledge of ELINET and CIDREE, and our hope is that members of both networks will find it useful to get a glimpse into each other's resources and connections.

A richness of foci and approaches characterise this volume. Our articles come from various countries, big and small, Western, Eastern and Nordic, having various education systems on the spectrum of centralisation, standardisation and effectiveness. Accordingly, the presented cases of CIDREE members are harmonised with EU recommendations to a different degree. For example, the report of the High Level Group of Experts on Literacy discusses adult literacy learning quite substantially, yet only one of the cases presented here include adult education (Scotland). On the other hand, almost all countries presented here are dealing with a wide understanding of literacy, including digitalisation, critical thinking and being able to orientate in today's overflow of information. And in some cases, the education system of countries is in line with some of the EU recommendations, while opposing others: in Hungary, for example, it was recognised that the teaching profession must be attractive and recruitment selective, which is a factor mentioned in the 2012 final report, yet the high degree of autonomy for teachers, also in the report, is less assured.

Last year's topic, implementation of education policy decisions in the classroom appears several times in this volume (including recognising challenges, modifying original expectations accordingly and offering improved support and professional development as a consequence) and the topic of literacy also lays the ground for next year's topic, closing the gap: improving the results of underachieving students.

A Glimpse into the Yearbook

In the 2015 yearbook, 9 member states (Estonia, Finland, France, Hungary, Ireland, the Netherlands, Scotland, Slovenia and Sweden) and the invited author from the ELINET network explore literacy in their respective educational systems. Below you will find a short introduction to each of the articles that are included in the CIDREE Yearbook 2015:

ELINET

Building Content Area Literacy-Expertise among European Teachers of Secondary Schools. A Report about two European Comenius Projects

ELINET Coordinator Dr. Christine Garbe describes in this chapter the four projects marking the arch of literacy education and literacy policy in Europe: Adore (Teaching Adolescent Struggling Readers), BaCuLit (Basic Curriculum for Teachers' In-Service Training in Content Area Literacy in Secondary Schools), ISIT (Implementation Strategies for Innovations in Teachers' Professional Development) and ELINET (European Literacy Policy Network). Concentrating on BaCuLit and ISIT, she emphasises the importance of content area literacy, that is, preparing teachers of all subjects (not just mother tongue teachers) to specifically develop their students' literacy skills within their subject area, throughout secondary school as well. Continuous self-reflection and improvement, innovation characterise these projects, a quality which, together with the scope of the current network-building, carries in itself the promise of becoming the most prominent, un-bypassable lobby force in Europe to promote literacy awareness and actual policy steps towards raising literacy levels in Europe.

ESTONIA

Using Questions to Support Reading with Understanding among Estonian Students

Pilve Kängsepp analyses a very specific problem of teachers, namely, how to enhance reading comprehension by asking questions about the text. In her article, she has conducted research with experimental and control groups of grade 4 and 7 students, one time with a text optimal for 6th graders, and the second time with a more difficult text, optimal for 8th graders. The control group received control questions after reading the text, while experimental group one got inferential support questions after reading. Experimental group two got these questions during reading. Kängsepp has found that impact of asking inferential support questions depends on the complexity of the text, the timing of questions and the students' reading ability (related to their age). For the text with the higher readability index, asking inferential support questions hindered comprehension, regardless of timing and for both age groups. As for the easier text, asking inferential questions improved comprehension in grade 7, regardless of timing. For fourth graders, inferential questions only helped when asked after reading the text; when posed during reading, they hindered comprehension, due to the overload of the working memory. This implies that it would be beneficial to include the

readability index of texts in teacher's books, so that they can decide what sort of questions to pose and when, in order to help their students.

FINLAND

Making Sense of Complexity of the World Today: Why Finland is Introducing Multiliteracy in Teaching and Learning

The Finnish authors' article deals with the new 2016 curriculum reform in Finland, developed during a long process of reaching national consensus. Seven transversal competence areas are identified as to be improved by schooling, one of them being multiliteracy, defined as the ability to interpret, produce and assess various kinds and forms of text (be it visual, numerical, audio, kinaesthetic or digital). Multiliteracy includes the ability of understanding multimedia, selecting information, critical thinking, problemsolving and collaboration The whole new approach is characterised by the recognition of the complexity of the multicultural and diverse world we live in, and concentrating on complex phenomena instead of conveying knowledge strictly divided into subjects. Compulsory multidisciplinary learning modules will be introduced (co-planned by the students), as a recognition of multiliteracy being developed through all school subjects. The goal is to promote pupils' ability to understand interconnectivity between phenomena, to organise their knowledge in larger entities and to notice connections between the issues raised at school and the issues of larger society. Parallel to this process, an emphasis is put on students valuing the language they speak, and the school culture acknowledging bilingualism and multilingualism as an asset. The linguistic paradigm shift also means raising awareness of the languages of different disciplines.

FRANCE

Arts and Literacy: The Specific Contribution of Art to the Development of Multiliteracy The French article argues for the inclusion of art education from the periphery of the secondary school curriculum to its core, as it develops transferable literacy skills. Analysing or producing a work of art, putting into words an aesthetic experience, comparing artistic productions all mobilise oral, reading and writing skills and necessitate the use of verbal, graphic, bodily and sensitive languages. The definition of literacy changes with technological development and social changes. Chabanne argues that C21st skills such as critical thinking and problem solving refer also to solving general human problems, while communication and collaboration is also realised when interpreting a work of art with the help of a teacher or a peer. Yet the author emphasises that the fundamental core of multiliteracy is literacy in the restricted sense (reading, writing and speaking skills). Natural language remains the mediating tool of learning. However, a sensitive component must be added to the definition of multiliteracy, which is laid out in French curricular documents, and this should urge us to introduce pluridisciplinary, interdisciplinary projects. Upper secondary school should provide opportunities for students to link their personal culture to formally recognised culture, their personal literacy practices to that of the school.

HUNGARY

Textbooks in a Knowledge-based Society

The Hungarian authors explore how can adequate study tools support the development of literacy skills. Teachers and textbooks have a key role in preparing students how to find, evaluate, use, share and create information wisely. During the process of the development of a new generation of textbooks – in which great emphasis was put on developing digital materials and making textbooks flexible tools which can be changed according to the feedback of teachers – various steps were taken to include methods and tools which improve the information literacy levels of students, together with interdisciplinary reading and C21st skills. Four textbooks were analysed (Literature, Maths, Physics and History), with the conclusion being that they do enhance the development of reading comprehension, digital skills, ability to collect and select information and to understand various forms of media, however, improvements still can be made in the final editions.

IRELAND

'Reading the World' - Freire, Lyotard and A Critique of Literacy Education under the Postmodern Condition

The Irish article draws attention to theoretical and political tensions behind literacy education policy, building on Paolo Freire's and Jean-François Lyotard's philosophy. According to the author's, Jones Irwin's argument, despite today's rhetoric of education as empowerment and emancipation, there is also a strong anti-progressive force present. It is important not to deal with literacy too narrowly, in the technical sense, but always keep in mind its broader meaning, which Freire describes as "reading the world". The aim of literacy pedagogy should be to bring literate people to existential and political consciousness. Instead of concentrating too hard on improving positions in OECD rankings, literacy education should be problem-centred, and ready to serve the changing of the political status quo, and to have a real emancipatory power. Forces of exam-based education and standardisation struggle with opposite values of formative assessment and locally developed learning, that is, content determined by the target group, based on their life experiences and socio-cultural conditions, with the teacher acting as a facilitator, being in a co-operative relationship with students. This struggle is also discernible in Irish education policy documents. While Better Literacy and Numeracy for Children embraces a broad understanding of these concepts, the National Draft Plan sets as its objective better performance and test scores for low attainments.

NETHERLANDS

Using Genre to Improve Consistency across the Literacy Curriculum in Dutch Secondary Education

This chapter deals with the differences in the language of education and the language what students use in their everyday interactions. The Dutch authors argue that language oriented subject education, that is, being aware of the specific register and genres of school subjects is very important to support students' understanding of complex and abstract subject texts, and familiarising them with academic language. To facilitate this process (mapping the language of schooling), Bart van der Leeuw and Theun Meestringa have analysed some 38 secondary school texts, having as their theoretical frame of reference Systemic Functional

Linguistics and genre pedagogy. The authors provide an overview on and definitions of the prevalent genres (recount, narrative, report, description, procedure, explanation, discussion, argument, response) of Dutch secondary school subjects. These can be classified into three genre families: narrative, factual and evaluative. Characteristic genres of subjects could be identified, such as explanations for Physics, and it was concluded that factual genres are in majority (25 out of 38). Their classification is positioned in the international context, and can help teachers explicitly communicate to students what genre is being read or what genre their writing is expected to be.

SCOTLAND

Improving Literacy - the Responsibility of All Teachers

Literacy (which inlcudes listening and talking, reading and writing skills), together with numeracy, health and wellbeing lay at the core of Scotland's Curriculum for Excellence. The Scottish Governemnent's Literacy Action Plan 2010 - 2015 provides strategic direction for improving literacy, which goal is also supported by the renewed system of National Qualifications. Mary Byrne's article illustrates through an impressive collection of case studies what steps schools took to enhance literacy. These include a wide range of schools in terms of the ratio of disadvantaged students, location and size. Their solutions are also diverse: capacity building of staff, creation of toolkits for teachers, enhancing professional dialogue, making connections across subject areas, focusing on higher order thinking skills of pupils, providing personalised support for developing basic literacy skills, developing employability skills of students including literacy and communication, encouraging reading for pleasure or appointing literacy ambassadors from the student community. Developing literacy skills is the responsibility of all teachers, up to the senior phase of compulsory education. Besides formal education, literacy has also become a focus of youth work. Education Scotland's recent evaluation noted that since the implementation of Curriculum for Excellence, opportunities for learners to develop and apply their literacy skills have increased. The article concludes with a foreshadowing of the 2016 yearbook: it draws attention that many students are still low achievers, despite all these efforts.

SLOVENIA

Empowering Learners through Improving Reading Literacy and Access to Knowledge – the Slovenian Story

Fani Nolimal's and Nataša Potočnik's article presents and evaluates a 2-year national project, which has been introduced in Slovenia in 2011. The three main objectives of this project were creating equal learning opportunities, applying effective teaching strategies and implementing the national strategy for the development of reading literacy. The National Education Institute worked together with 42 volunteer schools, who also drafted their own goals (increasing motivation of pupils, improving reading comprehension and writing techniques, applying reading learning strategies, developing self-regulated learning, paying more attention to the language of instruction and improving results on national and international tests). Participating schools implemented principles of consistent reading instruction, learner-focused instruction, formative assessment, inter-curricular links during planning, teaching and learning and finally, increased autonomy, responsibility and self-regulation of professional staff and learners. Colleagues of the National Education Institute

helped with analysing, planning, implementing, monitoring and redesigning. The main method was the Three Tier approach, which is a form of differentiation in the classroom. The evaluation of the project revealed better motivation, improved reading techniques, speed and comprehension of pupils, mastery of reading strategies, higher expectations from teachers and growing awareness of the importance of literacy, as the responsibility of all teachers. The project also provided a collection of good practices, and exam results also improved slightly.

SWEDEN

Upper Secondary School Students' Encounter with Writing Instructions while Writing Essays at the National Test in the Subject of Swedish

Suzanne Parmenius Swärd's article concentrates on measurement of literacy and dilemmas related to it. She takes a look at the instructions of the Swedish national test, taken at year 3 of upper secondary school, in which students have to write an argumentative contribution, chosen from eight possibilities, with the help of a booklet with sources aimed at stimulating students' imagination. The instruction consists of three parts – introduction to the topic, outline of the situation and the specific instruction – and contains three bolded words which must be followed (e.g. describe, discuss and reason). Based on 85 interviews with students, taken immediately after the test, and the analysis of their texts and the tasks, the author notes that the Swedish national test is complicated, complex, confusing and unfair. The high stakes situation causes anxiety, the artificial situation leads to students not challenging themselves and adjusting to what they think is expected from them. The smallest part of pupils actually enjoy writing. The criteria for assessment is unclear for students, handwriting causes problems, and the test does not contribute to students being able to establish reliance on their language.

What can be Learned from these Examples?

It is interesting to see in this book, the route of EU strategies to national policies, curricular changes, projects, support programs and local implementation. As the different national traditions, compromises and obstacles come into consideration, some recommendations are fully embraced while others do not get included in the practice, or are very slow to gain place. For example, training teachers for content area literacy, that is, making changes in the teacher education system is always a long process. The presented cases also show the tumblers and twists in this process: while there is a widespread and successful national project in Slovenia, in which teachers develop their skills greatly, student results are slower to follow. Various Scottish schools develop exciting innovation to raise literacy levels, however, there are still some pupils who do not improve.

A number of articles reveal the difficulties surrounding the evaluation of literacy. The Estonian chapter sheds light on how teachers unintendedly hinder comprehension by posing questions about texts at the wrong time. The Swedish chapter analyses how exam instructions and the psychological consequences of a high-stakes exam may influence the performance of pupils, and their ability to show the best of their abilities. Many countries have taken measures to improve literacy due to the wake-up call of the low results on the PISA test, yet as the Irish article points out, an argument can be made against focusing

too much on exam or test results. This will be a very interesting question for next year's yearbook, which will centre on raising attainment of low achievers: will we concentrate on quantitative data, better test results and improved indicators, or else, how will we define improvement for low achievers?

The volume also shows that in an increasing number of countries the broad meaning of literacy, sometimes coined multiliteracies is gaining ground. The traditional notion of literacy, focusing on reading written texts of national languages seems not to cover any more the reality characterised by an increasing number of people using often multimedia messages arriving from various cultures around the World. This raises a major challenge to policies aimed at raising the level of literacy as they cannot rely any more just on printed textbooks. New learning environments have to be designed as well as new approaches for assessment.

This book demonstrates well the value of European cooperation in the strategic field of literacy development. Countries can learn much from each other in terms of theoretical approaches, policies, innovative pedagogies and appropriate assessment tools. But it also demonstrates that there is still a significant reserve in this cooperation. While the recommendations of the European High Level Group of Experts on Literacy, and the thoughts behind them, have been well heard and understood in some countries, others seem not yet been significantly influenced by this message. More efforts are needed to make these recommendations available to teachers and curriculum developers, which might require their translation into more national languages.

Viola Bozsik - Gábor Halász

The 'Teeth' of Literacy

Prologue

It is all about the teeth. Or, more precisely, about the message the display of them may convey. When in 1787 Élisabeth-Louise Vigée Le Brun, the celebrated portrait painter of aristocracy chose to exhibit one of her self-portraits at the Paris Salon - the art festivity that dictated and manifested aesthetic taste for the literate - she could not have been prepared for the criticism she received. The lovely painting depicts her embracing her little daughter with an amiable, bright smile. This smile seems the most natural to us, to viewers of today. However, it raised real flabbergasting and harsh critical comments in her contemporaries. Several of them expressed this indignation overtly pointing to the specificity of that very smile, that is, a smile with an open mouth, showing the mother's teeth. As a journalist burst out in public: "An affectation which artists, art-lovers and persons of taste have been united in condemning, and which finds no precedent amongst the Ancients, is that in smiling she shows her teeth. This affectation is particularly out of place in a mother." (Jones, 2014, p. 1.) Apparently, at that time a smile revealing the teeth was the gesture of lower order, a marker of bad origins, bad manners and, without dentistry, bad health. Vigée Le Brun's gracious beam that expressed the joy of motherhood seems to have started a sweet revolution that has brought us the confidence of the full mouth smile. Still, looking at Le Brun's open lips only a few would ponder that this beautiful mother with child image triggered boisterous scandals initiating a change in the politics of taste and culture. Being aware of this, however, provides the viewing experience with a valuable additive: the recognition of bravery and autonomy hidden in the mastery of the picture. This awareness is what liberates us from boredom and socialises us to question. More of an attitude than knowledge, this is the awareness that literacy education aims to develop.

With the advent of the digital era where vast amounts of information are available for vast amounts of people (though not proportionately), where big data governs science and business, where human attention is considered the scarcest resource, literacy has a crucial role to bridge information with meaning, cognition with apprehension, understanding with choice, opinion with ethics. Literacy serves the needs of democracies "that have a fundamental need for informed publics to legitimate public policies and public actions. Yet, we seem to have lost faith in our public's ability to exercise competent judgment. We live at a time when the types of problems confronting a technologically complex and culturally diverse society seem to outstrip the average citizen's capacity to comprehend them, much less to arrive at an informed opinion on their resolution." (Hauser, 199, p. 279)

Nevertheless, this present volume proves that we have not lost our faith in our students' ability to once become good citizens of their societies and responsible members of their culture. Endeavouring to domesticate our students to what is verbally, numerically, aesthetically or ideologically coded we are eager to free them from ignorance, dependence and defencelessness. All the same, the authors of this book seek to present more than intellectual endeavours, they all introduce us to institutionally and methodically applicable

policies, strategies and practices for teaching literacy in Europe – in an old continent facing new challenges regarding cultures, democracies, and thus, curricula.

When Neil Postman, one of the most cited media philosophers of our age published his book *Amusing Ourselves to Death: Public Discourse in the Age of Show Business* in 1985, learned societies awoke to realise the lack of realization of a new kind of ignorance. Postman compared two dystopias – George Orwell's and Aldous Huxley's – in order to exhibit the state of literacy in both the broader and the narrower sense. As he assumed with crystallizing contrasts, "what Orwell feared were those who would ban books. What Huxley feared was that there would be no reason to ban a book, for there would be no one who wanted to read one. Orwell feared those who would deprive us of information. Huxley feared those who would give us so much that we would be reduced to passivity and egoism. Orwell feared that the truth would be concealed from us. Huxley feared the truth would be drowned in a sea of irrelevance. Orwell feared we would become a captive culture. Huxley feared we would become a trivial culture, preoccupied with some equivalent of the feelies, the orgy porgy, and the centrifugal bumblepuppy. (...) This book is about the possibility that Huxley, not Orwell, was right." (Postman, 1985, p. vii.)

Striking as they are, these words will be counter-argued with a third alternative this time. A third alternative presented by our volume that is about the certainty that it is only literacy education that we can fight (and work) against either of the above dystopias and their derivatives.

Literacy education is addressed in four domains (theory, strategy, programs and practices) by the authors representing ten European countries. Theoretical contributions shall introduce the readers to the varieties and principles of cognizing and interpreting literacy. Articles on strategies will show the need and force of cooperation in the field. Texts on curricular programs are to highlight the significance of concerting converging and diverging aims and outcomes. Practices shared here will penetrate educators' set routines with creative, new perspectives that can convert needs into advantages. *Cognizing, cooperating, concerting and converting – these are the four c'-s that best describe this book's intentions and content.*

These four c-s, and the efforts-results grasped by them should represent the teeth on the sometimes too modestly smiling face of literacy education. They should reveal what is there in the fore- and backgrounds, what is better or worse in practice: what the 'dentistry' of literacy education can achieve and head for. So I do humbly wish the reader true intellectual joy in recognizing the incorruptible 'teeth' in the big picture of European literacy.

Petra Aczél

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Using Genre to Improve Consistency across the Literacy Curriculum in Dutch Secondary Education

ABSTRACT

In almost all subjects in secondary education, students experience texts of increasing complexity and abstraction, while also having to demonstrate their command of text at a satisfactory level. Research shows that some students have difficulty in reading and writing texts (Hacquebord et al., 2004; OECD, 2010), that structural text characteristics influence their level of comprehension (Land et al., 2002) and that learning genre-specific language features increases their writing skills (Hoogeveen, 2014). Genre-specific refers to different text types. From analysis of a database containing some 2000 student texts in the subjects of English, Science and History, Christie & Derewianka (2008) illustrate how student writing skills evolve with the use of increasingly genre-specific sources in creating texts. Our study analysing over 40 Dutch secondary education school subject texts (Van der Leeuw & Meestringa, 2014) investigated to what extent the genre classification of Martin & Rose (2008) helps to describe the school curriculum. The aim was to identify which genres are typical of secondary education in general, which genres are more applicable to specific subjects, and what their language features are. Results of the study are an illustrated typology of genres in school and an overview of their distribution in school subjects. Based on these research findings, precise descriptions were made of how language works in different subjects. The outcomes of the study can help to equip teachers of specific subjects with the tools they need to improve the learning achievements of their students, where oral and written texts are concerned.

The results of this study can be seen as a first step towards raising awareness amongst subject teachers of the specific characteristics of their own technical language and training them to work with the genre approach.

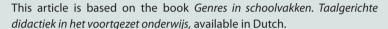
Keywords: *literacy, genre, Dutch secondary education, language and curriculum, teacher training, knowledge about language*

AUTHORS



Bart van der Leeuw (1955) holds a Master in linguistics and a PhD in language arts. From 1992 till 2009 he taught Dutch language and literature at a teacher training college. Since 2009 he works as a specialist in Dutch language and literacy at SLO, the Netherlands Institute for curriculum development. His current focus is on the language of schooling within school subjects.

Theun Meestringa (1952) earned his Master in developmental psychology at the University of Groningen. He started his work at SLO as a curriculum developer for bilingualism in primary education. His current field of expertise is Dutch as a second and first language in secondary education.







The role of language across the entire curriculum of secondary education has been a subject of attention for a long time now. In the early 1970s, several English authors already pointed out the close relationship between language and the curriculum (Britton, 1970; Barnes, Britton & Rosen, 1971; Barnes, 1976; also see Corson, 1990). The first Dutch researchers to systematically develop this linguistic perspective on the curriculum were Van der Aalsvoort and Van der Leeuw (1982). All this work centres on the concept that the language of schooling is fundamentally different from everyday language that students are used to. Students from socio-economically vulnerable groups in particular should receive additional support at school in order to familiarise themselves with the (more academic) language of schooling.

Even now, some forty years later, offering equal opportunities is one of the main driving forces behind the attention to language in the curriculum: "Recognition of the importance of academic language is (...) an essential aspect of working towards equity in educational outcomes." (Beacco, Fleming, Goullier, Thürmann & Volmer, 2015, p. 8). In addition, the development of the language of schooling, or more generally the development of literacy, is now being acknowledged as an essential characteristic of the quality of education; in the Netherlands, nowadays it is part of the generic knowledge base for the teacher education (Onderwijscoöperatie, 2014).

How does this language of schooling appear in education characterised by individual school subjects? In almost all subjects in secondary education, students experience texts of increasing complexity and abstraction. They also have to demonstrate their command of these texts at a satisfactory level in oral and written tests. These are linguistic challenges for the students: they have to get acquainted with the discourse of the subjects that their teachers have already mastered. Each subject has its own perspective on reality, its own programme of knowledge and skills, its own examination requirements and, last but not least, its own language (register). Many students find this double task – learning a subject and at the same time also acquiring the different subject languages – difficult. Research shows that many students have difficulty reading and writing school subject texts (Hacquebord, Linthorst, Stellingwerf & De Werf, 2004; OECD, 2010), and that learning genre-specific language features increases their writing skills (Hoogeveen, 2014). They do not talk at home the way they are taught to speak and write at school: as a geographer, a mathematician, a biologist, etc. The how and the importance of it do not come easily to the students: that requires education.

For subject teachers, the relationship between subject knowledge and the language that is used to express that knowledge is a natural one, albeit unarticulated: teachers often have no clear idea of how their professional language works, apart from the technical terms that are an obvious part of it. Their professional language allows them to address, in class, certain specific elements of their subject in a nuanced and detailed manner (Lemke, 1990). An important goal of their education is that students learn to use this more academic language of the subject, in order to demonstrate that they have mastered a certain subject knowledge and skills. In the Netherlands, when there is explicit attention given to the relation between the subject and the language of schooling, we call that 'language oriented subject education' (taalgericht vakonderwijs).

Recently, several publications came out about the backgrounds, principles and practical applications of 'language oriented subject education', including a clear and concise handbook (Hajer & Meestringa, 2015). 'Language oriented subject education' offers teachers tools to realise general didactic principles – rich in context, with plenty of interaction and the right language support at the right time – when designing the subject lessons, offering explicit attention to the use of language in class. Experiences with this 'language oriented subject education' have shown that the application of general educational principles (context, interaction, language support) by itself is not sufficient. In order to offer students a real 'introduction' into the professional way of thinking, a connection to the subject goals and the pedagogy of the school subjects is required (Hajer, Van der Laan & Meestringa, 2010). This gives 'language oriented subject education' more and more the character of education in the languages of specific school subjects and the language of schooling in general.

In order to develop this education in the language of schooling, a thorough analysis of how language works in subjects in schools is essential. The theoretical framework of *Systemic Functional Linguistics (SFL)*, which implies the genre concept (Halliday & Matthiessen, 2004; Martin & Rose, 2008), offers a usable tool, since it also includes the context of language in the analysis. The term *genre* refers to realisations of text objectives such as recount, explanation and discussion, as they manifest themselves in the concrete context of the use of language. For instance, the SFL concepts for Mathematics were used to explore how meaning is realised in an interplay of language, visual images and symbols (O'Hallaran, 2005). For History, researchers analysed the typical text types that are used in education, how these are constructed, and which characteristic language resources are being used (Coffin, 2006). As a final example: Christie & Derewianka (2008) used the analysis of a database containing some 2000 student texts in the subjects English, Science and History to illustrate how student writing skills evolve with the use of increasingly genre-specific sources in their texts.

We have researched whether this genre-based approach of the language in school subjects also offers perspective for Dutch secondary education, allowing for the description and understanding of the language of schooling, i.e. literacy in the curriculum, and to investigate whether this can create more coherence in a curriculum that is divided into separate school subjects. In this article, we first discuss our process, followed by the results obtained by the investigation, and subsequently we will discuss these results in light of the demand for curricular coherence and in light of international comparison.

Method

This investigation was carried out in the working context of the *Platform 'language oriented subject education' (taalgericht vakonderwijs)*, a collaboration of teacher educators, educational consultants, developers and researchers in the Netherlands. To get a better grip on the specifics of language in the various school subjects in secondary education, participants of the Platform have studied the possibilities of the so-called genre pedagogy. This study went through the following stages: a) orientation and self-education, b) exercise in the analysis of subject-specific texts, c) training of subject matter experts and d) compilation and analysis of a representative body of subject-specific texts.

Orientation and self-education

Schleppegrell (2004) has elaborated on a functional linguistic perspective to get a grip on the linguistic characteristics of languages that students must master for a successful career at school. She shows that the context influences the use of language resources, and simultaneously that the selected language resources constitute the context. However, the Dutch academic world has only limited experience in this approach. That is why, in the first stage of the study, about six participants of the Platform have broadly studied the relevant literature in this field. They have read and discussed texts by Acevedo (2002), Derewianka (1990), Coffin (2006), Gibbons (2006), Love (2009), Schleppegrell (2006, 2007), Schleppegrell & Achugar (2003), and Rose (2006, 2008), among others. The main question they asked during this stage was to what extent the presented – mostly Australian – insights and examples are applicable to the Dutch education context.

In order to share the collected knowledge and the usability question with a wider audience of teacher educators, educational consultants, developers and researchers, the Platform in 2010 organised a symposium on genre pedagogy with speakers from Australia – Pauline Gibbons – and Sweden – Mariana Sellgren and Mikael Olofsson (Van der Leeuw, Meestringa & Pennewaard, 2011).

The literature review and symposium were so promising that two members of the Platform (the authors of this article) travelled to Lisbon in the summer of 2011 to attend the 38th International Systemic Functional Congress. As part of this congress, they took special SFL courses with Hood (2011), Christie (2011) and O'Donnell (2011).

Practice in the analysis of subject-specific texts

Using the learning points from the first stage, we analysed sixteen subject-specific texts from the Dutch secondary education system. The majority were textbook texts, in addition to some student texts and protocols of classroom interactions in the subjects of History, Geography, Economics, Dutch, Biology and Chemistry. The texts were supplied by curriculum experts for the specific subjects (Van der Leeuw & Meestringa, 2014a). In the analyses, we determined what genre was expressed in the text and the global genre specific structure of the text. We also discussed the language resources that are used to expand on the topic (field), to take a position with respect to the subject and the reader or interlocutor (tone), and for structuring the text (mode), respectively.

Analysing the subject-specific texts not only offered insight into the specifics of the professional languages that are taught at school, it also gave us useful ideas for the training of subject matter experts who have no linguistic background. The next stage of the study looked at the design and implementation of such training.

Training subject matter experts

There are some exquisite English introductions into SFL and genre pedagogy available (Rose, 2011; Humphrey, Love & Droga, 2011; Coffin, Donahue & North, 2009; Eggins, 2004), as well as training programmes (Polias & Dare, unlockingtheworld.com). Such materials were not available in Dutch, and we therefore had to create them ourselves.

The sixteen subject-specific texts and the analyses that we had created, as an exercise, eventually formed the basis for a course 'Genres in school subjects' for a number of experts (teacher trainers, curriculum developers) in different subject fields: Physics, Biology, Chemistry, Geography, Mathematics, Dutch, vocational subjects and the Arts. Besides these text analyses, the study material consisted of a brief introduction to genres and genre pedagogy, based on Martin & Rose (2008) and Rose & Martin (2014).

During the one and a half days of training, the experts got acquainted with the genre concept and the applications of it in the school subject education. The experts gained experience with the analysis of subject-specific texts and the reconsideration of the use of such texts in an educational setting. In a follow-up assignment (homework), the participants selected a number of texts that they considered typical of their school subject, and then went to work analysing them according to the instructed method and commenting on them.

Compiling and analysing a representative body of subject-specific texts

In the fourth and final stage of the study, the training participants worked on compiling a representative body of 38 subject-specific texts. The sixteen texts that were the input for the training of the subject matter experts, formed the basis of that body of texts. This collection was complemented by a number of texts that we had in stock (not analysed), but more importantly with texts that were provided as being 'typical for their school subject' by the subject matter experts, following the training.

The selected texts were all analysed using the genre concept. These analyses were usually carried out in several rounds: the expert who selected a typical subject text first commented on certain aspects of the text, regarding genre selection, structure, field, tone and mode. Subsequently, one of the authors processed these rather informal notes into a coherent discussion of the relevant text, and submitted this for approval by the professional expert. In the final round, the second author checked the analysis and discussion again for internal consistency and external coherence with the analysis of other texts from the body of works.

The result of this multi-year study involving numerous language and subject matter experts participated, was the first Dutch-language introduction to the method of Systemic Functional Linguistics and genre pedagogy, applied to eleven subjects in secondary education (Van der Leeuw & Meestringa 2014b).

Results

The most important outcome of the study is an overview of prevalent genres that play a role in the different subjects of Dutch (secondary) education. Moreover, the overview shows how these genres are interrelated. In this context, we speak of genre families, and we can distinguish two distinct narrative genres, four factual genres and three evaluative genres (see Table 1).

Table 1. Genres in school subjects in the secondary education system in the Netherlands

Family	Genre	Purpose	Stages*			
Narrative genres	Recount	Recounting personal experience	Orientation ^ Experiences (^ Personal comments)			
Narrativ	Narrative	Sharing feelings and/or assessing behaviour	Orientation ^ Complication ^ Solution (^ Evaluation)			
	Report	Describing an event	Identification ^ Events			
Factual genres	Description	Specifying and classifying the case or event	Identification ^ Specification			
	Procedure	Describing how to act	Goal ^ Equipment ^ Steps			
Explanation		Explaining and interpreting the event	Identification of the phenomenon ^ Explanation of the sequence			
	Discussion	Investigating the issue from different perspectives	Issue ^ Perspectives ^ Position			
Evaluative genres	Argument	Arguing a statement	Thesis ^ Arguments ^ Confirmation of thesis			
	Response	Reacting to a cultural expression	Orientation ^ Description ^ Evaluation			

 $^{^{*}}$ The $^{\wedge}$ sign means 'followed by'. The brackets indicate that the stage between the brackets is optional.

Below is a short description of and an explanation for each of the genres. We cluster those descriptions by genre family (narrative, factual and evaluative) and offer one concrete example from the body of school subject texts. We conclude with an overview of the distribution of genres within the studied school subjects.

Narrative genres

In the Dutch secondary education, we find two narrative genres: the Recount and the Narrative. We all know about the *Recount* genre from our everyday oral communication with family, friends and colleagues. The goal of a Recount is to tell something about an event from personal experience. Recounting stories keeps people informed about what others encounter every day. Also, Recounts often ensure social bonding. Although recounts occur mainly in oral form, they can also be displayed in writing; previously mainly through letters, but now also via electronic mail.

A recount can consist of the following stages: Orientation ^ Experiences (Personal comments). A recount starts with a brief orientation on the participants, time and place of the action. Subsequently, there is a series of experiences; an event that the narrator has experienced. In some cases, there is some kind of closure, in the form of a personal comment from the narrator.

In many ways, the *Narrative* genre is similar to the Recount genre. This is also about an event or series of events, but the Narrative is not so much focused on the experience of the speaker/writer, but mostly deals with a fictional, unexpected event that serves a different purpose. The goal of a Narrative is to use events to entertain, to share feelings and/or to assess possible behaviours.

The stages are: Orientation ^ Complication ^ Solution (^ Evaluation). A Narrative starts with an orientation on people, time and place of action. Subsequently, the Narrative does not just focus on a series of events, but on problematic events. That is what we call the Complication. A Narrative ends with a Solution to that Complication. In some cases, the speaker/author will add an Evaluation.

In secondary education, the Narrative genre is predominantly used in literature education, both in Dutch and in the classical and modern foreign languages. Narratives are part of the education in those subjects, and are being read and interpreted by the students. In some cases, the students are asked to write their own narratives. The Narrative is not exclusively a part of language education; it is also used in other subjects, such as Economics and Mathematics, where students are presented with a case in the form of a Narrative. This narrative contains a problem (Complication) that must be analysed and solved in a subject specific way. We notice that in textbooks for subjects such as Geography and History, the Narrative is being used to bring certain subject matter closer to the student. The Narrative allows students to form an image of a geographical phenomenon, such as immigration (see Figure 1), or gives them a connection to people from a specific historical era.

119416	. An example of a Narrative (haginent) from a deography book.
Orientation	Paolo is in his early twenties. Two years ago, he got married and he has a son who is one year old. He just couldn't manage to earn a decent income for his young family. The life of a farmer on the plains between the mountains of the Sierra Madre is hard.
Complication	Three days ago, they boarded a bus in their native village on the Mexican Plains, north of Mexico City. This was the beginning of a long and exciting journey, straight through Mexico on their way to Ciudad Juárez, on the border. When they arrived, late yesterday evening, they were met, as agreed, by a human trafficker. 'Travel agent', as Pedro likes to call himself. For \$50 each, he takes them to a place where they can swim across the river. In the middle of the night the four friends start the dangerous crossing. They are lucky: at this time of year, the currents aren't too strong. The trickiest part is to get a garbage bag full of possessions safely across.
Solution	Paolo Montoya crawls through the mud in the final metres to the Northern shore of the Rio Grande. He quickly pulls the plastic bag with dry clothes from the water and hides as fast as he can in the low brushes on the shore. His friends crawl out of the cold water around him. They've made it, they've crossed the border!

Figure 1. An example of a Narrative (fragment) from a Geography book.

Factual genres

The Dutch secondary education shows four factual genres: the Report, the Description, the Procedure and the Explanation. The *Report* genre centres, like the Recount and Narrative, around an event or a series of events. However, in a Report, the story focuses on the facts, and not so much on the way they are perceived. A report is meant to be a chronological description of an event. The stages are: Identification ^ Events. A Report starts with an identification of a phenomenon; this may be a case, a process, or a period, but it can also be about people. It then becomes a chronological description of Events. The factual sequence is typical for a Report.

The subject where the Report is used most often is History. History is, after all, reporting on events in the past. The term we use here is 'historical reports'. In the History textbooks, we find historical reports of certain periods, such as World War II or the Batavian revolt, as well as certain individuals, such as William the Silent or Anne Frank. When these reports are about people, we call them 'biographies', which is a specific form of historical report.

The genres Recount, Narrative and Report each focus in their own way on an event or a series of events. The time sequence is always a central part of this. The *Description* genre shows a fundamentally different approach. In this genre, the focus is aimed not at chronology, but at specification and classification of a certain phenomenon in reality. The stages of a Description are: Identification ^ Specification. A Description starts with an Identification of the case, informing the interlocutor or reader about what is going on. The Identification may appeal to the experience with and knowledge of the particular phenomenon. Next, the characteristics of the phenomenon are described. They may be assigned, for example, to a particular group or type (a cow is a domesticated mammal); this is called a classification. But you can also expose certain properties (this black and white cow still has its horns); with such a specification we distinguish the cases with those characteristics from those without.

In secondary education, students are introduced to historical, scientific and cultural phenomena from the real world, through descriptions of these items. To test their knowledge, students are asked to give descriptions of those items. In all school subjects, the Description as a genre is used to explicate the specific subject knowledge. For instance, Geography is a subject that uses this genre to describe phenomena, such as mountains, seas, nature reserves, means of existence and climates. Some of these things are concrete and directly observable – like a river or a village – and therefore easy to describe. But it can also involve complex processes – such as weathering or migration – that require a more technical description. Figure 2 shows an example of a (shortened) Description from a Biology textbook.

Identification In chapter 6, you learned that plants make glucose. That takes part in the green leaf cells (source 17, page 104). The creation of glucose is called photosynthesis (source 12). Specification This process is not visible on the outside of a plant. To give you an idea of what happens within a leaf, you can compare each green leaf cell with a factory. The factory uses raw materials to create a product. The factory needs energy to do this, and produces waste. The product produced by the green leaf cells is called *glucose*, a kind of sugar. For the production of glucose the green leaf cell uses the raw materials water and carbon dioxide. The energy the green leaf cell needs, is sun light. The waste that it creates, is oxygen (source 12). All plant leafs together contain millions of green leaf cells. The plant has (Completion) millions of little sugar factories.

Figure 2. A Description from a Biology textbook

Like the Report and the Description, the *Procedure* is a factual genre. However, the Procedure does not relate to talking/writing about phenomena in reality, but deals with acting in that reality. The Procedure genre is meant to tell the reader or listener how he or she should do something. The stages of the Procedure are: Goal ^ Equipment ^ Steps. A Procedure starts by naming or describing the end result. That goal can be something material, but also something immaterial, for example, that the operator knows or masters something. After the goal has been clarified, it is followed by a description of the Equipment. For instance, when the goal is to hang a painting on the wall, you will need a hammer and a nail. The final stage in a procedure is a step-by-step instruction that explains how you should act, how – if hanging a painting – you should mark a point on the wall, how you put a nail there, how you should hold the hammer, and so on.

In secondary education, the core activity of teachers is to provide instruction, using the Procedure genre, both orally and in writing. For instance: a teacher wants students to write a summary of a text in the Biology textbook by the end of class. He explicates this goal, indicates where the text can be found and where the summary should be captured (material), and specifies a number of steps that the students can carry out in the creation of the summary.

Just as the Description and the Report, the Explanation is also a factual genre. The *Explanation* is aimed at understanding and unravelling processes, while a Description focuses on specifying or classifying a phenomenon in reality, and the Report focuses on

capturing the chronology of events. The Explanation genre is meant to explain and interpret an event or process. The stages of an Explanation are: Identification of the phenomenon ^ Explanation of the sequence. An Explanation starts with the appointment or designation of a phenomenon with a process-oriented approach, such as a coffee machine, or currencies on the foreign exchange market. This designation is the precursor of the question: how does it work? How can coffee come from that machine, how can it be explained that the dollar is lower than the euro? In the Explanation of the sequence, this question is answered.

In secondary education, explaining something or giving an explanation of something is a frequent activity of both teachers and students. For instance, teachers give an explanation for the battle of Waterloo (History), the jagged coastline of Greece (Geography), lightning and thunder (Physics), or the hardness of plastics (Chemistry). In turn, students are expected to be able to give explanations about complex elements of the subject matter. By explaining a phenomenon, students show their knowledge (naming and describing) as well as their understanding (insight).

Evaluative genres

Finally, the body of subject-specific texts contains three evaluative genres: the Discussion, the Argument (Exposition) and Response. The *Discussion* genre strongly deviates from the genres that were discussed earlier. It is not narrating, like the Recount and the Narrative, and it is also not strictly factual, like the Report and the Description. The Discussion deals with the evaluation of something or someone. The purpose of a Discussion is to explore a subject or issue from different perspectives. The stages are: Issue ^ Perspectives ^ Position. A Discussion starts by determining and describing an issue. This can be a question, a statement or a measure; in any case it is something that offers room for different perspectives. Subsequently, the different Perspectives on the problem are outlined. These multiple perspectives are an essential element of the Discussion. After comparing and weighing these perspectives, the Discussion ends with a conclusion, taking a Position regarding the issue.

In Dutch (upper) secondary education, the Discussion genre forms an explicit part of the subject of Dutch language and literature. The Dutch language education teaches students to use the specific characteristics of contemplative texts, both in reading texts and in writing their own texts. The Dutch language education also uses verbal forms of consideration, for example in discussions and work meetings where views are exchanged in order to reach a decision. It has become apparent that the Discussion genre plays an increasing role in other school subjects. For instance, the subjects of Biology, Physics and Chemistry are increasingly raising subject-related societal and ethical issues. The Discussion is an appropriate genre for these subject issues. Figure 3 shows a student text from the subject of Economics. The assignment was to write an advice; a specific form of a Discussion.

	A Discussion (davice) from a stade it about an economic issue
Issue	I understand that you have some doubts about the distribution of tickets for the upcoming football match between Deurne and Feyenoord*. It seems logical to me that you, as the selling and price-determining party, will want to raise as much as possible. The fans, however, will want to enjoy the match as cheaply as possible. These are opposing interests.
Perspectives	When you charge a price of €50 per ticket, this will mean that 1500 will attend, which yields 75,000. As this means that the stadium won't even be half full (there are 5900 available seats), perhaps you can lower the price to €40. Due to an increase in the number of fans willing to pay no more than €40, you will sell (1500 + 3200=4700 tickets for €40. This would yield €188,000. That would still leave some seats open. However, a price of €30 would only yield 5900 (max. number of seats) × 30 = 17,700. So a price of €40 would seem best, even though this will not fill the stadium completely. However, when you apply price discrimination, and first set the price at €50, then adjust it to €40 and for the final 1200 seats at €30 (after 3200 + 1500 = 4700) that would leave $5900 - 4700 = 1200$ seats. Applying this price discrimination would yield $1500 \times 50 + 3200 \times 40 + 1200 \times 30 = 239,000$, the maximum profit for your club.
Position	The fact that this would fill up the stadium almost exclusively with fans of Deurne would surely be beneficial for the performance. However, make sure the fans do not find out about this, as they will all be waiting for the prices to lower!

Figure 3. A Discussion (advice) from a student about an economic issue

Just as the Discussion, the *Argument* (also known as Exposition) is an evaluative genre. However, while the Discussion focuses mainly on the perspectives that are used to look at an issue, the Argument focuses on underpinning an opinion. An Argument is meant to substantiate a claim. The stages are: Thesis ^ Arguments ^ Confirmation of thesis. An Argument generally starts with determining a position or opinion. This position can be related to a range of topics and may be formulated in various ways. For instance: 'Bad drivers should get higher fines', or more explicitly: 'I think X is a suitable candidate for the premiership'. The Thesis is subsequently supported with Arguments; this stage is also when counter-arguments are stated and refuted. The Argument generally closes with a Confirmation, i.e. a repetition or reinforcement of the Thesis.

In secondary education, the Argument occurs in all school subjects. In all subjects there are possible situations where pupils must form their own opinion, on the basis of arguments. For example, they should be able to formulate informed opinions about labour migration from Eastern to Western Europe (Geography), or the processing of chemical waste (Chemistry).

Similarly to the Discussion and the Argument, the *Response* is one of the evaluative genres. Where the Discussion and the Argument focus on the formulation of views and perspectives on diverse topics, the Response solely focuses on cultural expressions. A response is meant to be a reaction to a cultural expression, such as a book, a film, a concert or a painting. The stages are: Orientation ^ Description ^ Evaluation. A Response starts with an orientation on the cultural expression, for example, in the case of a book to say

^{*} FC Deurne is a small local amateur club that is playing a cup match against Feyenoord Rotterdam, one of the top three Dutch premier league clubs.

something about the author, or commenting on the museum where a painting is on display. The cultural expression is subsequently described. In the case of a book you can give a small impression of the storyline, in a painting you can pay attention to the scene, the use of colour, the details, the effect of light. A Response ends with an Evaluation: a personal reaction that offers the personal experience of the speaker or writer with the piece of art, possibly in terms of appreciation or disapproval.

In secondary education, the Response is mainly used in the cultural subjects, such as arts and languages. In both Dutch and foreign language education, part of the educational time is spent reading and discussing literature. Students are introduced to literary works through reading, but also through the Responses of others, for example, when the teacher discusses it, or when they read a review.

Distribution of genres across the subjects in secondary education

On the basis of a (limited) body of 38 texts from various subjects, we have described above which genres are important in secondary schools, how those genres can be characterised and how they relate to each other. The research material also offers us the opportunity to investigate which genres are used more often and which less often in certain subjects. The results of the study give the impression that the distribution of genres across the subjects is not entirely arbitrary (see Table 2).

Table 2. Distribution of genres across the subjects in secondary education

		ative ires	Factual genres			Evaluative genres			Total	
	Recount	Narrative	Report	Description	Procedure	Explanation	Discussion	Argument	Response	
History										4
Geography										4
Economics										2
Dutch										8
Mathematics										2
Biology										5
Chemistry										3
Physics										3

(To be continued on the next page.)

Arts										3
Vocational subjects										3
Exercise, sports & society										1
Total	1	2	3	8	9	5	3	4	3	38

Legend: One text: Two texts: Three texts:

In History, we encountered two Reports (biographies in fact) and two Arguments. In Geography, we discovered one Narrative in a textbook (see Figure 1), and two Descriptions and an Explanation of geographical phenomena. In Economics, we found a Description of the relation between demand and price, and a Discussion that is typical for that subject: an informed a device based on economic data (see Figure 3). In Dutch language we found a wide range of texts: a Recount, a Narrative, and two Procedures (a recipe and how to give a presentation), two Discussions and two Responses ('book report'). In Mathematics, there was a Description (of a diagram) and a Procedure. In Biology we found a Report of the life cycle of a plant, two Descriptions including one on photosynthesis (see Figure 2), and two Procedures on conducting research. In Chemistry we found a Description, a Procedure and an Explanation. In Physics we encountered three Explanations. The Arts subjects showed a Description (of interculturalism), a Procedure for drawing a self-portrait, and a Response to a work of art. The vocational subjects showed two Procedures (one for setting the table and one on commerce) and an Argument on parenting issues. And finally, the text for the subject Exercise, sports & society, from a textbook about taking care of sports injuries, appeared to be an Argument.

In general, we can conclude that factual genres are in majority: we have found 25 texts of factual genre, compared to 3 narrative and 10 evaluative texts. Within the factual genres, the Procedure (9 texts) and the Description (8 texts) are particularly common. You would expect Narrative texts in Dutch language education, but we have also encountered them in the social sciences, such as Geography. The fact that factual genres predominate in science and social subjects, is in line with the expectations. The evaluative genres are reflected in various subjects, particularly in Dutch language and Art subjects, where the Response genre occupies a special place.

Because of the limitations of the body of texts, this overview only offers a first impression of the distribution and use of genres in the subjects of secondary education. More research will specify and modify this impression.

Discussion

The careful analysis of oral and written texts from secondary education, in collaboration with subject matter experts, has led to the classification of nine genres, clustered in three genre families (see Table 1). In the context of Dutch secondary education, the genre-based approach of Systemic Functional Linguistics has also proven to be a useful tool for mapping the language of schooling. At first sight, this language of schooling is immensely varied; each school subject uses its own professional language, with a specific jargon and ways of verbal knowledge construction. For students, especially students from social groups where academic language is not often used, all this linguistic variation forms an enormous barrier, if not to say chaos; this leaves them with insufficient access to valuable knowledge or education success.

We feel that the genre-based approach to the language of schooling offers opportunities to tackle the negative effects of subject-based education systems. We see that, despite the large variation in specialised languages, there are also some clear constants. In all subjects, the language is characterised by a limited number of similar genres. In all subjects, the teacher and students use the language of schooling to describe, to explain, to argue, to recount. The nine genres that resulted from this small-scale study form an expression of the linguistic coherence in the curriculum.

We expect that explicit attention to genres will benefit education in all subjects. In order to achieve this, teachers should explicitly indicate the genre that is used at a certain point, both when a text is being discussed, and when students are given assignments. The knowledge of genres, both of their linguistic and subject-specific elements, offers teacher and students a powerful tool to decipher the meaning of subject texts.

The classification into nine genres is on the one hand based on what we have encountered in the body of texts, and on the other hand we were inspired by reports and formats in international literature. We want to conclude this article by directing further attention to a number of these sources of inspiration, in order to achieve a small international comparison (see Table 3).

Table 3. Genre classifications in four sources from four countries (shaded is category)

The Netherlands	US	Sweden	Australia
Van der Leeuw & Meestringa 2014	Schleppegrell 2004	Olofsson 2010	Rose & Martin 2012
Verhalende genres (Narrative genres)	Personal Genres	Personliga genrer (Personal genres)	Engaging
- Vertelling (Recount)	- Recount	- Återgivande (Interpretation)	- sequence of events
- Verhaal (Narrative)	- Narrative	- Berättande (Recount)	- not sequenced
Feitelijke genres (Factual genres)	Factual Genres	Faktagenrer (Factual genres)	Informing
- Verslag (Report)	- Report	- Beskrivande (Description)	- chronicles
- Beschrijving (Description)	- Procedure	- Instruerande (Instruction)	- explanations
- Procedure (Procedure)	Analytical Genres	Analytiska genrer (Analytical genres)	- reports
- Verklaring (Explanation)	- Account	- Redogörande (Response)	- procedural
Waarderende Genres (Evaluative genres)	- Explanation	- Förklarande (Explanation)	Evaluating
- Betoog (Argument)	- Exposition	- Argumenterande / Diskuterande (Argument / Discussion)	- arguments
- Beschouwing (Discussion)	Expository Essays		
- Respons (Response)			- text responses

In the US, Schleppegrell (2004, p. 83-88) arrives at a categorisation of seven *Genres of Schooling: two personal genres: Recount, Narrative; two factual genres: Procedure, Report; and three analytical genres: Account, Explanation, Exposition.* What we call narrative genres, she calls personal genres. It is remarkable that she classifies two of our factual genres (Account/ Description and Explanation/Statement) as analytical genres, along with the Argument genre. The evaluative genres Discussion and Response are missing in her overview, rather unassumingly titled 'Some Genres of Schooling'. Texts as argument, discussion and response are dealt with separately as Expository Essays (ibid, p. 88-111). Schleppegrell further distinguishes the genres in the specific subjects of Science and History (ibid, p. 115,

127), which we have left out of this table for clarity. This deals, for instance, with the science report and the historical explanation.

In Sweden, Olofsson (2010) more or less follows the Schleppegrell categorisation, where he merges Discussion/Diskuterande (from the Expository essays) with the Exposition/Argumenterande. In the Netherlands the distinction between Discussion and Exposition is emphasised, because these genres are part of the curriculum Dutch language in the senior years of secondary education.

In Australia, Rose & Martin (2012, p. 128-132) give an overview of a total of 24 genres, divided into three families and eight genre subgroups. Table 3 shows the subgroups. They take the refinement that Schleppegrell introduces even further, e.g. by distinguishing sequential, conditional, factorial and consequential explanations. The classification into families that they propose, is similar to other formats presented here. They distinguish Engaging, Informing and Evaluating genres. What also attracts attention is that in the Engaging genres, the (personal) Recount and Narrative fall under the group 'sequence of events'; the news report is an example of a genre 'not sequenced in time'. In the Arguments, they make a distinction between the Expositions (supporting one point of view) and Discussions (discussing two or more points of view).

These genre classifications are broadly similar, for example in the division into families. The differences between the classifications reflect the fact that this genre approach arising from the SFL, is descriptive in nature. Depending on the circumstances and the need for detailing, the researchers make choices and come to a more or to a less extended classification. The differences can be explained and argued, and the classifications offer a basis for further analysis and research.

Martin & Rose (2008) conclude their basic introduction to the genre theory, underpinning what has come to be referred to as the 'Sydney School', with a chapter entitled 'Keep going with genre'. In it, they stress that there is obviously more than just the 'canvassed' overview of genres that they have offered. Chats and dinner table conversations, for example, can be in part analysed as a series of recounts and narratives, but the successive turns people take often serve mainly as a way to keep the conversation going. Those texts have a more serial nature, instead of the focused texts we are envisioning. Each context has its own requirements and can lead to other genres. Other cultures lead to other interpretations of genres, or to new genres. The descriptions on the basis of distinct stages in the text, as well as the linguistic means that are used to give meaning, offer the opportunity to engage in conversation about the similarities and differences, and arrive at custom-made categorisations. The classifications are not exclusive, normative, or prescriptive. They therefore do not inhibit the creativity, as some fear, but offer room to express that creativity.

In addition to the Sydney School (Johns et al., 2006), there are other genre theories, such as English for Specific Purposes (ESP, Swales, 1990; Bhatia, 1993), which focuses on the subject-specific content of the texts (what we would consider 'field'), the New Rhetoric perspective (e.g. Freedman, 1999) that emphasises the relationship between text and context, and the theory of Hyland (2005), which explores how the writer is positioned (stance) in relation to the subject and the reader (which falls under 'tone' in our analysis). These theories focus primarily on texts in (second language) education at colleges and universities, and are hardly useable for primary and secondary education.

Our choice for the Sydney School offers opportunities for continuing the work on genres to increase consistency in the curriculum of secondary education. To achieve more coherence between the subjects (horizontal) and across the years (vertical), we need more research into the use of genres in the different subjects at school. A more thorough knowledge of the use of subject languages by students can lead to better learning lines for the teacher. Furthermore, insight into the objectives of texts and the linguistic tools that are used to realise them, will offer teachers and students the necessary tools to take a critical look at texts and to create new, good texts.

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Using Questions to Support Reading with Understanding among Estonian Students

ABSTRACT

Students are working with texts most of the time during lessons, and teachers want to promote and assess their understanding. Asking the reader some questions while reading might be an effective tool for guiding his or her understanding of the text. The main objective of this study is to clarify how questioning (referring to educational texts specifically), assists reading comprehension, and to specify the effects that questioning has on reading comprehension in Estonian schools, depending on the circumstances surrounding the questioning. In the study, factors affecting the differences in the questioning circumstances are discussed, including timing of the questioning, the differences in general reading skills and grade level, and the differences in the complexity of the texts read. A comparative analysis of the mean scores of the students' answers to the control questions, taken as indicators of comprehension of texts to be read, revealed that the impact of asking inferential support questions depended on the student's reading proficiency, the readability of the text, and when the support questions were asked – during or after reading the text.

Keywords: reading comprehension, questions, timing of questions, readability of text

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Introduction

It is well known that poor understanding of written texts is a reason for many learning difficulties. Furthermore, reading with understanding is an essential component of functional literacy, not only limited to schooling. A lack of functional reading skills can seriously impede the attainment of knowledge and skills and participation in social practices. An undeveloped capacity for reading comprehension at the elementary level can constrain further studies and options in life. According to the Programme for International Student Assessment (PISA), functional reading skills, that is, understanding the text and the ability to use it, is relatively good among Estonian students. Most Estonian students (about 90%) have reached reading results of the second level, which is the baseline level in PISA investigation. Our reading results are similar to that of Poland, Liechtenstein and the Netherlands, and this places Estonia from the 3rd to the 6th place among European countries. In all participating countries Estonia ranks from the 9th to 15th place. However, the percentage of students whose performance is below the second level of proficiency in reading is 9.2% (PISA, 2012). Thus, there are students in basic school who have difficulties in understanding reading and whose reading skills should be improved. A number of factors interfere with the development of students' text comprehension skills. These factors range from efficiency of decoding, catching meaning at the level of single words to inference making and integrating the ideas in the text as a whole (Oakhill & Cain, 2003). Good text comprehension by students means that they integrate the text information with their previous knowledge and acquire new information (Kängsepp, 2011, 2014). Mikk (2000) notes that many texts contain too many terms, they are too abstract and students cannot acquire their content. The students' textbook should ensure that the students encounter readings at their own grade level and are able to understand it. There is no professional classification on the complexity of the texts in Estonian school textbooks nowadays. However it would be beneficial to introduce a unified criteria in the future in order to avoid the situations where texts will be too complex for students. So the factors that influence reading comprehension may be also the text characteristics and readers' skills.

One possibility to support reading with understanding is to ask support questions about the text and to answer them. The results and findings from studies conducted in other countries have proven to be inconsistent and dependent on specific conditions. According to Olson, Duffy, and Mack (1985) answering questions can be considered as an indicator of understanding the text to be read. Answering questions to the text to be read enhances learning from it (Pressley et al., 1989). Questioning after reading the text increases text comprehension of adults (Anderson & Biddle, 1975). However, Kirschner (2002) notes that asking support questions may cause cognitive overload of students' short term memory and be ineffective. This means that not all ways of questioning are helpful for reading comprehension.

From an analysis of related publications and the results of the carried out empirical study, the goal of this research was to give advice to teachers as follows:

(1) what teachers should consider when they use questions to support reading comprehension and (2) how the teaching methodology might be developed to improve skills for reading with understanding.

The following research questions were put forward for this study:

- How do inferential questions about the text to be read affect reading with understanding, depending on the timing of the questions?
- How do inferential questions affect reading with understanding, depending on the age of the students?
- To what extent does the effect of inferential questions on reading comprehension depend on the complexity of the text?
- What are the methodological possibilities of using inferential questions to support reading with understanding, depending on the total effect of the following three factors: the age of the students, the timing of the questions and the complexity of the reading text?

Theoretical background

This study is based on a number of theoretical models of text comprehension, with a special focus on the theory developed by van Dijk and Kintsch (Van Dijk & Kintsch, 1983; Kintsch, 1994). In this theory the process of reading with understanding is considered as a construction of semantic representations of the text (called *text-based models*) and the creation of mental representations integrated with the reader's prior knowledge (called *situation models*). At the text-based level, memory representations of the words and ideas are constructions as they appear in a text. The words and phrases themselves are encoded as linguistic relationships. In situation models, information extracted from the text is elaborated and integrated with prior personal knowledge.

When reading texts, the readers' perception is not limited to the individual sentences conveying isolated pieces of information. Rather, they perceive the sentences as being interconnected, forming a coherent whole. So, good text comprehension by students means that they integrate the text information, perceived from the text to be read, into their previous knowledge and, consequently, they create new knowledge structures (situation models) to acquire new information. This results from the extensive inferential processes that take place during reading. Therefore, making inferences is an essential cognitive operation used to construct meaning and the ability to making inferences is a necessary ability for reading with understanding. From this point of view, one possible way of supporting students' understanding of what they read, as revealed by former studies (Bintz et al., 2012; Cain, Oakhill & Bryant, 2004; Davoudi, 2005) in this field, is by asking students to answer inferential questions presented during or after reading the text.

Numerous classifications have been devised on how to categorize questions. The most common is to categorize questions by their cognitive level. According Bloom's (1956) taxonomy, the questions are (1) knowledge based, (2) comprehension, (3) application, (4) analysis, (5) synthesis and (6) evaluation questions. Knowledge based questions require to identify information basically in the same form as it was presented in the text. Comprehension questions ask students to combine information from the text as whole. Application questions require to take information they have already known and apply it to the new situation. Analysis questions ask students to identify reasons, motives and so on. Synthesis questions

ask students to produce original ideas and solve problems. The evaluation questions require to make decisions, and to think at this level (Bloom et al., 1956).

Questions can be asked before, during and after reading. Van den Broek et al. (2001) demonstrated that questions that were presented during reading helped the 7th grade students to memorise information targeted by the questions. The same effect was not documented with 4th grade students. In the light of the notion of cognitive overload, the explanation for that is that questioning during reading calls for simultaneous processing of general information drawn from the text and of specific information targeted by the questions. Due to their poor reading skills, younger readers fail to implement these task simultaneously, and the presenting of inferential questions asked during reading rather interferes with their text comprehension than it supports it. This means that not all modes of questioning support reading comprehension, a conclusion that is confirmed by conflicting results of former research (see e.g. Anderson & Biddle, 1975; Pressley et al., 1989; Van den Broek et al., 2001; Cerdan et al., 2009). This questioning methodology has not been investigated in the Estonian school context and this study is an attempt to rectify this.

The experimental study methodology

The empirical part of this study was carried with Estonian students from schools willing to co-operate with the researcher. The sample involved students in grades four and seven. The impact of asking support questions on the reading comprehension of students was tested using two different texts. In phase one, carried out in 2007/08, a text with a readability index of 15.7 was used in grade 4 and 7. In phase two, carried out in the 2008/09 school year, a more difficult text (with a readability index of 17. 4) was used in both grades. Both texts were taken from the third grade textbook. The readability indices of the texts were determined using Mikk's (2000) readability formula and the determination shows that the first text was optimal for grade six students and the second for grade eight level students. In total, 274 students (133 boys and 141 girls) participated in the first phase of the study and 294 students (155 boys and 139 girls) in the second phase.

In both research phases, participants were randomly divided into three groups at each grade level – experimental group 1, experimental group 2 and a control group. Both the control and the two experimental groups received special booklets with the necessary materials needed for their participation in the study. The students read themselves the text and the questions. The students in the experimental groups were asked to read the text under two different conditions, and afterwards to answer control questions to test their understanding. In experimental group one, the students were asked to answer the inferential support questions after reading the text and just before answering the control questions. In experimental group two, the support questions were posed during the reading of the text, i.e. after reading through the single passages. The students in the control group only answered control questions after reading the text. In this work, the inferential support questions used were knowledge based questions and control questions were comprehension questions according to Bloom's (1956) taxonomy. In each phase of the study three different versions of the booklets were used for presenting the text to be read: the support questions and the control questions for the two experimental groups and the control questions for the control

group. The control questions were located on the back of the text page to be read in order to prevent consulting the text when answering the questions. In both phases, five support questions and five control questions were used.

Answers to the support and control questions were scored by assigning one point for each correctly answered question and zero for each incorrectly answered question. In total, a student could obtain a maximum of five points for correctly answering the support questions, and a maximum of five points for correctly answering the control questions. Next, the data obtained were tabulated and processed using descriptive and inferential statistical methods.

Main findings and conclusions

According to the analysis of variance in the experimental condition one (in grade 4) when the support questions were presented after reading the text, the average scores of answering control questions was 2.1. But in the experimental condition two when the support questions were posed during reading, the mean score in answering the control questions was 1.4 (F=1.7; df=2; p<0.05). The mean score in the control group was 1.8. The mean was statically significant. In the experimental groups of grade 7 the exposure to support questions caused a statistically significant increase in reading comprehension in comparison with the control group. The means were 2.9 and 2.8. The control group's mean was 2.2 (F=4.1; df=2; p<0.05).

Table 1. Comparison of mean scores in answering control questions by experimental
and control groups in phase one (easily readable text).

	Control Group	Experimental Group I (Support Questions After Reading)			Experimental Group II (Support Questions During Reading)		
Grade	Mean (SD*)	Mean (SD*)	Diff**	p	Mean (SD*)	Diff**	p
4	1.8 (1.3)	2.1 (1.1)	0.3	0.05	1.4 (1.2)	-0.4	0.05
7	2.2 (1.3)	2.9 (1.3)	0.7	0.02	2.8 (1.4)	0.6	0.02

^{*}SD - Standard deviation.

In phase two of the study the mean score of answering the control questions in the control groups (2.0 and 2.5) were higher than in the experimental groups at the both grade levels. The means in experimental groups on grade 4 were 1.6 and 1.4. In the 7th grade the means were 2.0 and 2.2. The differences were statically significant. It means that answering inferential support questions, independently on timing, hindered comprehension of the text with the higher readability index.

^{**}Diff – Difference with the mean score of the control group.

	Control Group	Experimental Group I (Support Questions After Reading)			Experimental Group II (Support Questions During Reading)		
Grade	Mean (SD*)	Mean (SD*)	Diff**	p	Mean (SD*)	Diff**	р
4	2.0 (1.0)	1.6 (0.8)	-0.4	0.03	1.4 (1.0)	-0.6	0.05
7	2.5 (1.1)	2.0 (1.2)	-0.5	0.04	2.2 (1.0)	-0.3	0.06

Table 2. Comparison of mean scores in answering control questions by experimental and control groups in phase two (difficult text).

A comparative analysis of the mean scores of the students' answers to the control questions, taken as indicators of comprehension of texts to be read, revealed that the impact of asking inferential support questions depended on the student's reading proficiency (correlating with the mean age of the students), the readability of the text, and when the support questions were asked – *during* or *after* reading the text. The effect of the questions was stronger in phase one of the study, when the text with lower readability index (optimal for grade six students) was used. However, even in this case the impact of inferential questions depended on the students' grade level (which is associated with reading proficiency), as well as on when were the questions asked. Asking inferential questions improved the students' comprehension of the text in grade seven, regardless of when the questions were asked. On the other hand, the exposure of grade four students to inferential questions only caused a positive effect on text comprehension when the questions were posed *after* reading. When questions were asked *during* reading, the text comprehension indices of the students of the experimental group proved to be even lower than that of the control group.

When a more difficult text, that is, a text with a higher readability index (optimal for grade eight level students) was used in phase two of the study, asking inferential questions did not have any positive effect on the text comprehension by students in either grade level. Instead, the mean scores for the control question answers were significantly lower for both grade levels. Furthermore, the higher scores of the control groups in answering the control question, in comparison with the experimental groups at both grade levels, suggest that, under these conditions, answering inferential questions rather interfered with the understanding and remembering of essential information. The explanation may be that answering inferential questions *during* reading may overload the young readers' working memory, because they need to simultaneously deal with their basic reading processes and with answering the questions. Questions posed after reading also taxed the young readers' ability to construct a coherent representation, but the effect was weaker than that of questioning during the reading. These findings are in line with the findings of Van den Broek et al. (2001). The authors investigated the effects of inferential questioning, and the

^{*}SD - Standard deviation.

^{**}Diff – Difference with the mean score of the control group.

timing of questioning, on narrative comprehension by 4th, 7th, and 10th grade and college students. According to this, questioning appears to interfere with young readers' (4th grade) comprehension because the questions compete with other ongoing processes for the limited working-memory capacity available to the reader. As working-memory capacity increases (by 7th grade) the effect of this becomes weaker (Van den Broek et al., 2001).

One clearly documented factor that might eliminate the positive impact of inferential questions on reading comprehension in phase two was the use of a text that was more difficult to read and understand. Van den Broek et al. (2001) point out that the questioning might even interfere with skilled readers' comprehension if the reading task is highly demanding; for example, when the content or structure of the text is complicated, or unfamiliar to the reader. That this text called for higher reading and memorising skills was also corroborated by the negative and significant correlations of scores in answering inferential and control questions. Also, a significant difference in the mean scores in answering inferential questions, correlating with their timing, was identified at the grade seven level within phase two, that is, the students had higher scores in answering the inferential questions when they were posed *during* reading. This would mean that answering inferential questions was more appropriate for grade seven students when posed during reading, but this approach interfered with the overall comprehension of the text.

The correlations found between scores in answering inferential support and control questions were also very informative. The correlation was significantly higher for phase one compared with phase two (r=0.51 and r=0.33 respectively), and this suggests that answering support questions had less impact on answering the control questions when a more difficult text was used. This conclusion was also supported by correlation differences calculated separately for grades four and seven for both phases of the study. In phase one, where the text was more within the powers of grade four students, the correlations in answering these two types of questions for grades four and seven were almost equal (r=0.42 and 0.54 respectively). In phase two, the correlations, while still statistically significant, were lower (r=0.37 and 0.22 respectively). A more detailed analysis of this last correlation revealed that, in the experimental condition one, the correlation for grade seven was statistically significant (r=0.32), but insignificant for experimental condition two (when the support questions were asked during reading). A low correlation between the scores of answering inferential support and control questions in phase two at the grade seven level, when the support questions were presented during reading the text, in comparison with phase one, allowed us to conclude that inferential questions had practically no impact on the comprehension of the entire text in this condition.

In summary, this study answered its four research questions put forward. It proved that asking inferential questions about a text to be read only has a positive effect on text comprehension in Estonian schools under certain conditions. The impact of asking inferential questions for supporting reading with understanding manifests itself as a combination of students reading proficiency, text readability, and the timing of support questions. Research findings suggest that asking inferential questions can be used to direct the students' attention to specific information and to make specific connections when reading a text. The outcomes of this study have practical implications for elementary grade teaching of reading with understanding and promoting students' reading skills by using support questions. These outcomes can be helpful in providing texts (study aids) used for

exercising reading comprehension with inferential support questions. When preparing these assignments the combined impact of both factors – the readability of the target texts and the timing of inferential questions – must be taken into account. When using the text with lower readability index, answering inferential questions promotes text comprehension almost independently from when they are asked. In the case of texts that are more difficult to read, but still within the power of students, inferential questions that are posed *after* reading may be more effective for promoting comprehension of the texts. When the text is clearly beyond the capabilities of students, answering of inferential support questions generally has no positive effect on text comprehension and corresponding reading assignments can barely promote students' skills of reading with understanding.

The research finding that the effect of asking and answering inferential support questions on reading comprehension is dependent on the students' age, serves as a notice to teachers to be cautious about asking inferential support questions until their students have attained adequate technical reading skills (see also Seretny & Dean, 1986; Tal et al., 1994; Van den Broek et al., 2001). Also, it should be noted that the effect of posing inferential questions to help understand reading depends on text complexity. Special attention needs to be paid to fourth grade students. Sanacore and Palumbo (2009), McNamara (2011), McNamara, Ozuru and Floyd (2011) and also Gallo and Ness (2013) indicate that in elementary grades the narrative texts are basic. Texts typically become more abstract from the fourth grade. Also, students need to cope with differently structured texts and some students may not have acquired the skills to work with these texts (Manset-Williamson & Nelson, 2005; Nation & Norbury, 2005). When the text is beyond the capabilities of students, the inferential questions have no positive effect on text comprehension. In conclusion, this experimental findings suggest that inferential questions affected comprehension, and the effect depended on the reading proficiency, the readability of the text, and when the support questions were asked.

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Textbooks in a Knowledge-based Society

ABSTRACT

Literacy does not only mean knowledge and widespread reading, but also the skill to select from and manage an exuberance of information. Being literate today means being able to orientate in the informational environment of the 21st century. Our study first sets the theoretical framework for the most recent definition of information literacy. The second part explores the concept behind the development of a new generation of textbooks, which begun in Hungary in 2014. This includes a student-centred educational paradigm, development of competences – in accordance with European trends –, and the shift from printed textbooks towards digital materials. By the promotion of the use of specific study tools, information literacy can be developed effectively. Such study tools include the formation of a good reader attitude, the teaching of reading strategies, tasks and guestions oriented at comprehension, teaching how to write and edit a text, use of graphic tools to support understanding of the logic of the text, use of previous knowledge of the reader, reflection on the newly gained knowledge, characteristics of understanding printed and digital, static and dynamic texts. In the third part, we evaluate four chosen textbooks (Literature 6, History 9, Physics 7 and Mathematics 9), concentrating on how these concepts and tools for improving information literacy were implemented, concluding that the new textbooks do improve information literacy levels of pupils, but there is still more that could be done.

Keywords: information literacy, new generation of textbooks, study tools, reading comprehension

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In the 2014 CIDREE yearbook, the Hungarian authors explained how are public education reforms implemented in our country. A major part of this transformation in the education system is the development of a new generation of textbooks. In this article, we examine how our new textbooks - developed in the Hungarian Institute for Educational Research and Development, complemented with newly created digital materials - serve the development of students' literacy skills. In the first part, we define media and information literacy and what it means in the 21st century. Then the article goes on to present the process of textbook development, and how specific points were considered in it, such as the role of textbooks in a digital environment, in personalised learning and the development of skills and competences and in supporting the effectiveness of the learning process. In the third section, we examine in what ways the new textbooks develop interdisciplinary reading, media and information literacy and the 21st century skills of pupils. The specificities of the development process allow for the continuous improvement of the textbooks, based on feedback from pupils and teachers. We have measured how some chosen textbooks (Literature 6, History 9, Physics 7 and Mathematics 9) improve literacy. Our findings show that the new textbooks mean a step forward towards this goal, however, there is still room for improvement in the future.

The notion of literacy in a knowledge-based society

The notion of literacy is going through a significant paradigm shift in knowledge-based societies. It includes knowing the basics of the national culture, being well-informed, behaviour standards, digital competences and also the skills of applying knowledge learned. Modernly educated people have extensive knowledge because they have accessed a lot of information – they have formed their knowledge by selecting, organising and integrating all this information. They are able to mobilise and use the information they learned. Thus literacy is not only about being well-educated and well-read but also includes the skill of being able to select from the wealth of information and manage it. The current interpretation of literacy places emphasis on the ability to navigate in the information environment of the 21st century. "The illiterate of the 21st century will not be those who cannot read or write, but those who cannot learn, unlearn and relearn." (Toffler, 1970)

One of the main challenges of current day education is to teach students to succeed in a world reliant on information and technology. Today's students find it much easier to use modern technology and devices than their parents. They do not only acquire knowledge from their teachers and textbooks but also from a wide range of information sources. However, it is still our task to teach them how to think, assess and select. One of the most important goals of upper-secondary education is to encourage students to think, plan and work in purposeful way, make informed choices and assess information critically. It also aims at preparing them for 21st century workplaces and successful higher education studies. Fast-changing information and technical environments require increasingly more advanced skills in terms of navigation, assessment and information usage – and teachers and textbooks have a key role in supporting students with developing these skills.

No matter how the technical devices of information transmission and opportunities for accessing information are changing, effective learning and work continues to be based on a high level of reading literacy. Research shows that while there have been profound changes

in the field of digital information in the past 20 years, requirements related to understanding basic information at workplaces have not changed (Catts, 2012). However, work processes have undergone considerable changes: there are more and more jobs where employees do not only execute tasks but also participate in producing knowledge. Therefore it is only possible to succeed in the labour market if acquiring complex information literacy.

Media and information literacy is obviously the basic skill of the 21st century. It includes the competences and knowledge required for finding one's way in knowledge-based society, selecting information responsibly and competently and create new one. It includes skills that are important in all areas of life such as learning, research, manufacturing and leisure (realising the need for information, search for information, selecting, interpreting, critical thinking and the creative usage of new information). These specific 21st century skills should be treated both in a uniform and differentiated way. According to the Alexandria Proclamation adopted by UNESCO in 2005, media and information literacy is essential for achieving one's personal, social, occupational and educational goals. These skills are necessary for lifelong learning and becoming an efficient member of knowledgebased society. The Information for All Programme (IFAP) of UNESCO regards media and information literacy as a human right (Koltay, 2007). Along with problem solving and communication skills, it is used as an element of an integrated set of skills, vital for efficient operation in all areas of life. If handled separately from other adult competences, it sheds light on a specific dimension to complex skills and makes it possible to differentiate between the efficient usage of information as well as accessing and acquiring information. The global project of OECD on the assessment of social progress reveals that complex information literacy enables people to terminate dependency from information brokers (experts selling selected information) and become real "knowledge accumulators". This competence provides one with knowledge and attitude that protect someone from the negative, harmful effects of information.

There is no widespread agreement on the definition. Some think that certain elements of this complex skill set are also included in other categories (e.g. information search skill, reading comprehension skill, problem solving, creativity etc.) and thus do not deem it necessary to create a new term. Others think that it is digital literacy that differentiates media and information literacy from general literacy and therefore it should be addressed separately. Essentially, addressing, teaching and developing these skills, knowledge and literacy elements together, in a unified system are qualitatively different from addressing them one by one. It is not only about knowledge and skills but also attitudes and approaches.

Media and information literacy may be considered an umbrella term or threshold term (Meyer, 2010). As an umbrella term, it includes all literacies needed by today's individuals: traditional literacy, digital literacy, library literacy, internet usage, critical thinking, media literacy, information ethics etc. According to another approach, it is a threshold term, mastering which gives access to acquiring knowledge. By mastering complex information literacy (as a threshold term), learners understand that information has value attached to it, science is a dialogue, research is asking questions, authority depends on context, producing information is a process and information search requires strategic thinking (Association of College and Research Libraries, 2014).

Media and information literacy is built on several literacies but it is not identical to them. It is often confused with digital literacy or media literacy.

- Computer/digital literacy: a set of skills and knowledge essential for understanding information and communication technologies, including the knowledge of hardware, software, systems, networks, the Internet and other ICT elements.
- Media literacy: a set of skills and knowledge essential for understanding the channels and forms data, information and knowledge can take, how they are produced, stored, transmitted and presented (e.g. the press, radio, TV, CD-ROM, DVD, mobile phones, PDF, JPEG).

However, complex information literacy is a more complex term. It is a set of skills enabling people to realise their need for information, to search for, assess and efficiently use information, including of course the usage of digital technology and media. These competences are increasingly important in fast-changing technical environments and exponentially increasing information sources.

Metaliteracy and transliteracy are new terms emerging in literature. The first focuses on skills information users use for actively producing and sharing contents on community media and online community platforms – that is, they are active participants of knowledge-based society, not only as consumers but also as producers of information. Transliteracy implies that complex information literacy also involves transition between various information platforms and formats i.e. the continuous modification and transformation of information (Z. Karvalics, 2012). These tendencies indicate that the complexity of the term requires a multi-perspective approach.

Considering skills and competences, a media and information literate person is able to (American Library Association, 1989):

- define his/her need for information,
- obtain the necessary information efficiently and effectively,
- critically assess the information and its sources,
- integrate the selected information in his/her knowledge base,
- efficiently use the information for achieving specific goals,
- understand economic, social and legal issues related to information usage and use information lawfully and ethically.

The above skills and activities do not develop linearly, one after the other but are interconnected (German Information Literacy Association, 2011). It is possible that someone obtains information, realises its usefulness and uses it but only later acknowledges the value of the information source.

According to constructivist learning theory, learners are to find out the solutions to problems by using information; they are to arrive at new conclusions through active research and thinking – and this is more important than memorising facts and data presented in the classroom. Such pedagogical approach enables students to become competent learners. Thus media and information literacy has to be based on source-based learning, independent exploration and problem-based learning. It requires pedagogical sophistication, giving opportunities to students to experience as many learning styles as possible.

Media and information literacy should be integrated in the curricula and textbooks of all school subjects and courses, in the work of school and university libraries as well as the management of educational institutions. During classes, lectures or debates, teachers

should encourage students to explore the unknown, support them in fulfilling their need for information and monitor their progress. Librarians should assess and select sources needed for curricula and educational programmes, manage collections and information access points and also provide training on library usage. Strategies requiring students to actively participate in formulating questions, finding answers and communicating results should be in place. In a learner-centred learning environment asking questions is the basis for everything, there is emphasis on problem-solving and critical thinking is an essential element of the process – and this kind of learning environment requires complex information literacy.

Textbook development in a modern learning environment

To promote media and information literacy, we must create a supporting learning environment. In Hungary, we are taking major steps to digitalise public education to adapt to the needs of the 21st century and to provide study tools which are adequate for developing literacy as defined in the previous section. Within the framework of a project (SROP 3.1.2/B-13) funded by the European Union, new-generation textbooks has been and are being developed for the school subjects mother tongue and literature, mathematics, science and social sciences (in 2014 and 2015). Printed textbooks are accompanied by digital content, which will be accessible for free by teachers, students and parents on a website. The aim is to create a teaching-learning environment inspiring learning and teaching and utilising the opportunities of modern technical devices.

As opposed to earlier textbook writing practices, these textbooks are published after a three-year development period. The draft textbooks and digital materials are prepared in the first year; they are piloted in the second year and revised in the third year on the basis of opinions and suggestions of teachers and students. Based on the findings of the pilot phase, the amount of knowledge to be learned as well as the questions and exercises may be modified. It is also possible to check whether the various parts of content are built on one another in a systemic way.

In order to create a 21st century learning environment, textbook developers have to apply the results of learning-related research. They have to find the best ways to integrate new methodological inventions that improve teaching and learning in teaching materials. They also have to consider that a modern textbook is not only a book but a *development tool* including worksheets, competence development and assessment tools as well as guidance for teachers. Developing and testing it requires the innovation and cooperation of developers of various expertise, researchers and teachers.

Piloting textbooks may also be considered *design-based research*: the piloting of a new teaching aid is organised and documented in a way that it does not only enable revising and improving the teaching aid concerned but the findings also lend themselves to drawing more general conclusions – e.g. on the effectiveness of methodology elements used in the textbooks, on other impacts of the textbooks and other teaching aids or on the requirements of successful usage (Reeves, 2000).

The role of textbooks has to be reconsidered because of the increasingly wide range of learning aids and information sources available on the Internet. Textbook functions reinforced and those that are weakened or made unnecessary by the appearance of digital materials have to be identified. This article only covers those that are still relevant in the new learning environment: the role of text books in structuring knowledge, providing authentic information and supporting learning.

Textbooks arrange the infinite realities of the natural environment, human culture and history into a meaningful structure and they provide adaptive frameworks to interpret and comprehend them. The approaches and principles applied by textbook developers to organise the huge amount of human knowledge in logically structured chapters are permanently integrated in the thinking of students and will even influence their thinking in their adult life. Textbooks have a crucial role in establishing relationships between information sources of various type and content and teach their joint usage. Debate on thematic arrangement (pl. chronological versus thematic; disciplinary or interdisciplinary) clearly shows the significance and topicality of the issue.

On the Internet there is accessible information about virtually anything but it is more and more difficult to verify its accuracy and credibility. It highlights the importance of the traditional role of textbooks – providing reliable reference information.

The learning support function of textbooks involves supporting skill development and the usage of modern technology and devices as well as ensuring personalised learning. The most important prerequisite to effective skill development is the integration of well-structured information and developmental exercises. The quality of teaching and learning highly depends on how well-designed the content and exercises of textbooks are in this respect.

New textbooks provide opportunities for using modern communication technologies in teaching and learning. The opportunities provided by technology and new media should be taken into consideration already at the time of designing the textbooks. It also has to be considered how the content of printed textbooks, digital modules of curricula and ICT services may be linked effectively in the whole process of learning and teaching. The authors and editors of the new generation of Hungarian textbooks can design the content of printed textbooks knowing that there will be digital curricula accompanying the textbooks in order to support the understanding of the content of the printed textbooks, learners' activities, competence development and personalised practice.

When designing and preparing these ICT devices, the most important task is to ensure the conditions for *personalised learning* (Sampson, Karagiannidis, & Kinshuk, 2002). Digital curricula of printed textbooks offer opportunities for individual learning paths: either the teacher gives personalised tasks to students or students themselves select from the different possibilities (Gaskó, 2009). The results and products of students may be compiled in individual portfolios. The teacher may give tailored tasks to individual students or small groups of students. Students are provided various genres: they can select from different contents and tasks. It also supports tutoring and communication between teacher and student. Students can cooperate in teams and share their products with one another. They can also make notes and comments related to the content of textbooks.

In addition to activating prior knowledge, providing reliable new information and structuring it and mobilising students, textbooks and related digital materials also make learning more effective by continuously increasing the independence and accountability of students. To this end, they have to be considered partners, their tasks should be explained

precisely and their metacognitive skills helping them to monitor and assess their own learning should be developed (Bransford, Brown, & Cocking, 1999).

The activity of students is another factor considerably improving the effectiveness of learning. "Learning at school can only be effective if both curriculum developers and teachers realise the importance of the *autonomy of children in learning*. ... Both teacher-assisted and autonomous learning can only be lasting if it is *productive*, i.e. it offers problem solving, task completion, creativity and activities developing flexibility, originality and inventiveness but at the same time provides opportunities for *reproductive learning*, which is ideally also connected to completing tasks. ... children acquire competences and attitudes in the course of activities" (Zsolnai, 1986).

The new generation of Hungarian textbooks have to enable teachers to apply the above principles in their everyday teaching practice. Textbook developers have to apply solutions that meet the requirements of effective learning (Kojanitz, 2007). Therefore there is special emphasis on the following elements:

- Introductions briefly describing the aim and the topic
- Teamwork for assessing prior knowledge and experience
- Well-structured information
- Tasks requiring the independent work of students
- Texts, graphs and questions introducing problems
- References to personal experience
- Questions encouraging students to give opinions
- Exercises for re-thinking prior knowledge and assumptions
- Exercises testing the comprehension (not reciting) of new information

When designing textbooks, the skills and competences to be acquired and practiced should be defined precisely and aligned with the information content. For the purposes of this study, skill is defined as *identifying and collecting data and sources relevant to the solution of a problem*. Competence, on the other hand, is specific knowledge that can be adapted to new situations: *e.g. using viewpoints and analytical methods needed for the multifaceted presentation of war conflicts*.

The usability of textbooks require well-chosen and not too much information content, a system of concepts and tasks built on one another and the multiple use of graphs of the textbooks in conveying knowledge. However, if students find it difficult to understand the text of the textbook, it is unusable even if it applies the most cutting edge learning methodology principles.

In order to improve the clarity of texts, it has to be kept in mind that reading comprehension depends on several factors such as:

- Motivation of students and their ability to focus on the task
- Prior knowledge necessary for the comprehension of the text
- Technical terms used in the text
- The number and types of deductions needed for comprehension
- Experience of students in reading and processing the type of text concerned

The above factors were also taken into consideration when developing the new generation Hungarian textbooks.

The difficulty of texts in textbooks is crucial to ensuring optimum learning conditions. Pedagogical texts can only be used effectively if students understand them. Texts too simple or to complicated – either in terms of content or phrasing – for actual knowledge and skills of students are to be avoided. Ideally, they convey as much information and in a way that comprehending it presents a feasible challenge for students. Graphs, maps, questions and exercises related to the text provide effective help. The difficulty of the textbook has to be in the potential development zone of students (Vigotsky, 1967). This is the level where individual skills may be surpassed if efforts are made and some conditions are provided. Students should be able to understand the texts of textbooks if they get assistance from both teacher and textbook – e.g. by presenting and teaching them the necessary reading strategies.

Reading is an interactive activity, in the course of which information gathered from the text is continuously supplemented by contents retrieved from one's prior knowledge (Oakley, 2005). Therefore in order to improve reading comprehension it is necessary to extend knowledge and utilise it in new contexts as well as acquire and practice techniques and strategies needed for reading comprehension. The content of texts, the terms and definitions describing it as well as the specific language are closely interrelated. Thus even the effectiveness of subject learning may be significantly improved by systematically developing reading comprehension skills that are necessary for understanding the text of the subject area or discipline concerned (Garbe, 2013).

At HIERD, we aimed at compiling the texts of the textbooks so that they gradually provide more opportunities for improving *content-related reading literacy/comprehension skills*. It was also our goal to give exercises which continuously provide patterns for subject teachers on how to link teaching content with developing students' specific reading comprehension and text production skills.

Another important precondition to successful subject learning is establishing metacognitive awareness, which involves the following:

- mobilising prior knowledge and experience needed for comprehension;
- preliminary definition of one's goals (what information one needs and for what purposes they are going to use it);
- recognising the inner structure and logic of the text, which is usually significantly different in case of social sciences and natural sciences;
- processing the information obtained from the text in several ways: note taking, writing an outline, organising and classifying, discussion etc.;
- evaluation of the learning process, taking further the lessons learned.

The content of textbooks has to assist with the development and improvement of these metacognitive skills too.

In short, the new textbooks follow several guidelines defined in the report of the EU High Level Group of Experts on Literacy. The textbooks are free of charge, which is also a recommendation of the High Level Group. Digital materials are made available on a Public Education Portal, thus granting access from home and adapting to the 21st century environment. They include texts encouraging critical thinking, reflection and empathy. The use of both canonical and contemporary literary examples in the literature textbook is also in adherence with the recommendations of the high level group's report. The new generation of

textbooks and the related digital learning materials provide reliable, structured information, support personalised learning, develop skills and competences of pupils (including digital ones) and improve learning effectiveness and literacy skills.

Meeting the requirements of reading literacy development in new generation textbooks

Four published textbooks (in their pilot phase) are analysed below in accordance with the principles of design-based research, to see how they meet reading literacy development requirements:

- Literature in Grade 6,
- History in Grade 9,
- Physics in Grade 7 and
- Mathematics in Grade 9

It has been of special focus whether the following are given consideration in the textbooks:

- requirements of cross-curricular development of reading comprehension as it was defined in the general policy of textbook development,
- the new approach to media and information literacy,
- the aim of developing 21st century skills.

The analysis of the textbooks showed that curriculum developers and editors were successful. The texts are useful for developing reading literacy, visual appearance is consistent with the content to be learned and the textbooks contain questions and problems that encourage students to take further the information learned.

The Literature textbook for grade 6 primarily aims at complying with curricular regulations. The national Literature curriculum gives cultural content priority over developing reading literacy or endearing reading to students. Accordingly, the textbook puts an authentic literary text in the focus of each lesson. Except for six lessons of the last chapter, they are from "canonised", classic literary works selected from the national curriculum, which, in terms of language, are a long way from the capability (and interest) of the age group. This "distance" is bridged by footnotes and explanatory exercises following the texts. This characteristic of the textbook develops reading comprehension by raising awareness to the challenge of understanding texts. At the same time, processing the texts makes students realise that meaning is possible to construe by using appropriate support routinely. On the one hand, the usage of instruments has to be acquired; on the other hand, one has to learn how to ask questions, based on the model of questions after the texts, and get absorbed in the text to find its meaning. Nevertheless, it has to be admitted that these texts do not necessarily support reading for pleasure. For this purpose, works that the age group is more interested in, which are closer to their own world and are usually more exciting and are of a more simple language would be more suitable - but these, from popular youth novels, can only be found in the last chapter.

Authentic texts are followed by providing factual information in each lesson. The language of these parts is much closer to the knowledge and skills of six-graders. Sentences are relatively short and technical vocabulary of the subject is provided in small amounts and always in a supportive context (two or three technical terms in each lesson but only one which is new to students). Then another section of each lesson, titled *Letters and Graphs*, organises new knowledge with the help of graphic organisers. This does not only serve to develop knowledge but also to teach students how to use graphic organisers. (In Grade 7 this section is replaced by *Pictures and Literature* for developing visual literacy skills.)

There is a set of questions at the beginning of each lesson, orienting students to one of the elements of the content of the literary text – not to its direct meaning but usually to a social or moral problem that may be familiar to students. This calls attention to their involvement and encourages them not to stick to the primary meaning of the text (following from its inner logic) but try to discover a deeper and more general meaning. These questions are usually accompanied by a research task to be carried out in a library or via the Internet. The textbook does not give help with research methodology but the teacher can do that when describing the task. (Teachers will be supported by a digital methodology guide.)

Each lesson has a section titled *What Do Others Think?*, presenting the moral or societal problem revealed through the interpretation of the literary text of the lesson. It is often a journalistic text, which is in accordance with the recommendation of the EU High Level Group of Experts on Literacy. When reading this text, students realise that many questions may be relevant in all ages, and that very different answers may be given to the same question in the past and in the present. Such text supports the development of critical thinking – a 21st century skill – and establishes the need for examining questions from multiple aspects, not disregarding answers given in the past.

All lessons include tasks for teamwork. They intend to develop the skills of distributing work, organising and cooperating, which are also listed among the OECD's key competences (OECD, 2005). They are typically based on sharing individual experiences and knowledge gained at home and thus they enable students to experience that they are indispensable and that it is efficient to learn from one another.

The **History textbook for grade 9** is significantly different from the Literature textbook in many respects: the main text is an organised and direct transmission of information (divided into sub-chapters and important phrases highlighted in bold). The text is, at some places, multimodal since explanatory tables and graphs and questions focusing on prior knowledge are embedded.

Pictures also accompany the text – not only as illustrations but as a source of information (supported by captions). In the same column as the pictures, there are a series of questions for retrieving prior knowledge, making conclusions as well as consolidating, summarising and organising what is learnt so far. A specific section is titled $R\acute{a}@d\acute{a}s$ (Encore), adding Internet websites as additional resources.

Source analysis is an important tool of studying History. Each lesson of the textbook provides sources: at first mainly secondary sources but then also primary ones. One of the two exercise types at the end of the lessons is source criticism, the other encourages reflecting on the reasons and consequences. All source analysis exercises are very effective for developing

reading literacy: they provide models for formulating questions and identifying the agenda of the source and the supporting language elements, thus encouraging critical thinking.

The textbook itself rarely offers opportunities for cooperative forms of learning but teachers may decide to do so. (One of the few examples is when two groups of the class have to discuss whether it was sensible to sacrifice the 300 valuable Spartan warriors at Thermopylae. One group has to argue for "leading by example", the other has to underpin it with facts that it was irresponsible.)

The introduction of the textbook describes a new method, **history-movie**: "Groups of the class have to prepare five-minute videos about historical conflicts using their mobiles or tablets acted out by themselves, toys or even beans. They may have background music and arguments may be expressed in songs. The videos may be presented in the classroom, checked by the teacher if they contain no factual mistakes and the class may vote on which to share in a file sharing system, where it becomes accessible for everyone using this textbook." The textbook suggests topics for making history-movies seven times and it provides a good model for teachers on how to make studying history interesting.

The summaries at the end of the six chapters include exercises and questions to assist students with organising the knowledge obtained and they specify which parts of the information learned are included in curricular requirements. This strongly supports the consciousness of the development of knowledge.

The textbook recommends the implementation of a large project: it describes work procedures and provides assistance with organising it. It recommends several topics for the project. The project can start at the half of the textbook and last until the end. (The next edition may be improved by practical advice on evaluating and utilising the products of the project.) This element of the textbook contributes greatly to the development of 21st century skills. At the end of the book, all newly learnt concepts re-appear in a structural manner, which supports the development of meta-cognition.

There is a larger stock of digital content, the exercises of which are more closely related to the topics of the textbook than in the case of the Literature textbook. The types of exercises are: clickable maps, supplementary texts with relating exercises, summary and playful tasks, videos (e.g. guided tours) and animations. (The textbook and the digital content were developed simultaneously and in a coordinated way.) The textbook makes references to them at numerous places. Communication skills will probably be effectively developed by the synergy of the two types of gaining information (from textbook and digital materials). However, this ready-made, obviously reliable information base will not encourage students to do independent research and undertake information criticism. Thus it is to be fulfilled in another way and time.

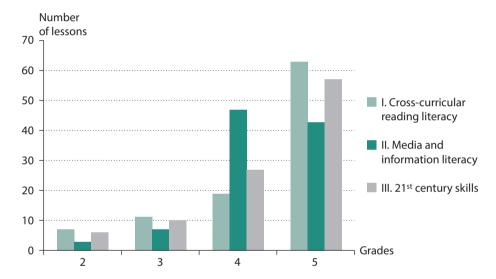
The **Physics textbook and workbook for grade** 7 became completely available on the Internet in April 2015 and schools have received it in August 2015. The developers and editors of the physics curriculum were selected on the basis of their disciplinary expertise and their commitment to literacy requirements.

The textbook introduces new concepts and pieces of information in relation to simple physical phenomena relevant to everyday life. It describes curiosities and problems that are of interest for the age group. Physical experiments are described briefly and using technical vocabulary only when necessary (and are also illustrated) so that the majority of students be

capable of understanding them after reading. The majority of the experiments may be carried out independently or in small groups, i.e. they support, active, activity-based learning.

The information learnt is consolidated by questions to be discussed in each lesson, which are followed up by independent research (*Check it up, Make observations*). The questions and suggestions of this section of the lessons encourage students to use other sources of information, such as the Internet, consciously and purposefully. Discussion of information obtained on the Internet and drawing conclusion are guided by the qualified teacher in this age group (age 13-14).

Graph 1. Evaluation of the lessons of the Mathematics textbook for Grade 9 in respect of developing cross-curricular reading literacy, media and information literacy as well as 21st century skills



Frequency histogram

The Mathematics textbook for grade 9 has been used by schools since September 2014 three times a week. Feedback from teachers is collected continuously but they will be fully processed and evaluated only after the end of school year 2014/2015. The Mathematics textbook was reviewed thoroughly by other authors and thus it is possible to also rely on their opinion in this study. To evaluate this textbook, a scoreboard has been established in order to assess to what extent the lessons meet the requirements specified above (cross-curricular reading literacy development, media and information literacy and 21st century skills). The grading is as follows: 1 (fail), 2 (poor), 3 (satisfactory), 4 (good), 5 (excellent). The rounded average scores of the lessons are shown in the table below:

¹ The team included Gergely Wintsche, László Számadó and Veronika Gedeon, mathematicians who have participated in the development of the new generation of textbooks, but not in the development of the Mathematics textbook for ninth graders.

	Mean	Standard deviation
I. Cross-curricular reading literacy	4.38	0.9405
II. Media and information literacy	4.30	0.7317
III. 21st century skills	4.35	0.8919

Table 1. The mean score and standard deviation of grades

Although there are a few lessons that received a 2 for one of the criteria, the average score of the 100 lessons ranges between 4.30 and 4.38. This indicates that the requirements were consistently fulfilled when designing and writing the lessons. The textbook has a unified structure, and fulfils literacy standards to a very high degree. More than 60% of the lessons introduce new concepts through describing problems (embedded in a text) and another 19% include problems embedded in text in parts of the lesson other than the introduction.

First opinions at road shows and training courses show that many teachers have understood and like the introductory parts; however, some teachers are unaccustomed to mathematical problems embedded in text in this way. This is natural because they rarely experienced such approach during their initial training. (At university it is more typical to present the beauty of mathematics than focus on teaching methodology. Consequently, some teachers tend to have this attitude when teaching, even though many students are not interested in such high level of abstraction).

Reading comprehension and interpretation problems among teachers show that providing the best possible training and in-service training for teachers should be of high priority, in line with European trends. The development of high quality textbooks will have to be accompanied by the in-service training of teachers in the future too. It is of pivotal importance to attract and retain well-qualified and motivated people to the teaching profession and to provide conditions to support teachers through initial and in-service training. (Conclusions..., 2007). As the executive summary of the report of the EU High Level Group of Experts on Literacy puts it, "Raising the quality of teaching begins with the introduction of high qualification requirements for all teachers." The report emphasises that literacy-specific teaching strategies (with their digital aspects) must be covered both in initial teacher training at universities and also in teachers' professional development, as well as adequate assessment techniques and diagnosing literacy-related problems. (EU High Level..., p. 8.)

Summary

A large scale development of textbooks was launched in Hungary, at the Hungarian Institute for Educational Research and Development in 2014 with the aim of accelerating the process of replacing printed textbooks and teaching aids by digital curricula. However, it requires the transformation of attitudes towards literacy. A new learning environment and new learning strategies are needed so that future generations acquire and master complex information literacy.

Complex information literacy is based on reading comprehension/literacy and a special attention was paid to this when designing the new generation textbooks and digital materials. The development policy required in case of all subjects that the new textbooks offer opportunities for expanding knowledge, applying it in new contexts as well as learning and consolidating techniques and strategies needed for reading comprehension. The textbooks have to play an especially significant role in the systematic development of reading comprehension skills that are necessary for understanding the texts of the subject area or discipline concerned.

In order to improve their utility and quality, the textbooks may be revised after the pilot phase. When preparing for the revision, it may be assessed whether the goals of textbook development have been fulfilled in respect of developing content-related reading literacy skills. The analysis and evaluation presented in the second half of this study is part of the methodological preparations for such assessment. The findings of this preliminary evaluation show that progress has been made in the area of complex information literacy, including reading literacy. Nevertheless, in the revision phase it will be advisable to make better use of the specificities of the various school subjects for enhancing learners' motivations for reading and learning.

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Upper Secondary School Students' Encounter with Writing Instructions while Writing Essays at the National Test in the Subject of Swedish

ABSTRACT

One of the objectives of the national curriculum in the subject of Swedish is to give students an opportunity to establish reliance on their language, and make full use of it, by giving them tools for expressing themselves in everyday life, at work, and as members of society. This article takes a social-semiotic and multimodal perspective in order to point out some dilemmas for students in upper secondary school when interpreting and understanding the instructions introducing the task of writing an essay in the national test in the subject of Swedish. To pass a writing test as it is formulated in the curriculum of Swedish, students have to be able to follow quite complicated instructions. The article will show what can happen when students try to understand these instructions; what signals the instructions convey and how students respond to these signals. The results point out that most of the students act in an instrumental way or show reluctance while completing the task. The instructions convey implicit norms and rules, and are also perceived as confusing and difficult to understand, making it harder for students to use optimal verbal resources and establish reliance in using their language in writing.

Keywords: literacy, testing writing, language of instructions, Swedish upper secondary national test

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Introduction

In recent years, three main literacy related issues have been discussed in national media and have as a result entered the political agenda in Sweden.

The first issue concerns upper secondary students' skills in writing when they leave school and enter higher education. Alarming headlines tell us in very general terms that "University students have lost their ability to write readable texts". The debate focuses on whether students have not gotten adequate training at writing, or if it is simply the case of a generation of students that differ from previous generations. The concept of digital natives is used, to explain how instead of reading and writing in a traditional way, young students leap around cyber space using hyper-links and hence, compared to previous generations, have different needs in their daily lives when it comes to both reading and writing longer texts (Prensky, 2001).

The second dominant issue in the debate concerns poor results in the PISA test. A closely related issue is students', especially boys', lack of interest in reading fiction. Many students also seem to lack strategies for reading longer and more advanced texts (Liberg, 2010). The latest OECD report on education shows huge gaps between the results of men and women, particularly in reading skills. Differences in reading and writing abilities between boys and girls are also increasing in Sweden, more than in the OECD countries in general. Many boys find school uninteresting, meaningless and a waste of time (OECD, 2015).

The third issue to point out is related to the latest school reform (2011) and concerns assessment and grading. One fairly predominant view in the political debate over recent years has been a call for testing, assessment and grading from an early age as a tool for achieving better results. In order to achieve this, a new national curriculum and a new grading system has been designed and implemented with the ambition of obtaining a high level of consistency in how schools interpret the new system and its rules and regulations. However, more recently, it has been argued by some professors and pedagogic researchers that on the contrary, the focus on both national and international tests and assessment may lead to widening the gap between schools and students (Alexandersson, Carlgren, Erixon, Liberg, et al., 2014).

With this as a background, this article aims to illustrate problems related to literacy (i.e. writing) from a student's point of view. Using a theoretical perspective of a social semiotic way of analysing texts, readers, writers and context (Halliday, 1978) dilemmas appearing while upper secondary school students write essays in the subject of Swedish, will be discussed. The article will also focus on students' encounters with instructions. Can writing instructions and the way they are constructed have an impact on how students develop writing skills?

The article is divided into three parts. Part one is an overview of recent research in the field of writing, writing tasks and instructions. The second part presents some results from the study¹ *Students encounter with instructions for writing*. Finally, in part three; there will be a discussion pointing out problems and dilemmas, concerning upper secondary school students' writing development in the light of the interpretation of instructions and the aims for literacy development in the subject of Swedish.

¹ Financed by the Faculty of Educational Sciences at Linköping University.

Previous research

Over recent years, the construction of writing instructions has been under discussion as well as the question of whether there are ways to explicitly teach writing. In a book chapter, Troia states that the research on writing instruction is "relatively immature and receives too little attention from key educational stakeholders" (2007, p. 27). Research is lacking especially on methods of improving writing skills among so called struggling writers. We know a lot about the problem but not enough to really know what to do about it (Troia, 2007). Under the influence of Martin and Rose (2012) and others, the Australian Genre School has suggested forms of teaching, based on extended knowledge of genres and modelling by reading and deconstruction of texts. In their opinion, these methods are very effective and also democratic.

Recent research in writing in secondary and upper secondary school in Sweden has been under the influence of the social semiotic perspective of writing and the theories of educational (applied) linguistics (Martin & Rothery, 1993). The project of TOKIS (*Text activity and Knowledge Development in School*, Holmberg, Ledin, Wirdenäs, & Yasson, 2013) studied how upper secondary school students learn genres and how teachers give writing instructions. The researchers in the project have applied linguistic ways of defining genre which means that they see genre codes as ways of *acting (text-activities)* verbally in text. In short, the result of the project pointed out that explicit teaching of genres and genre codes is an effective way to learn writing. The importance of talking about text (text-talk) and teachers' support given to students when learning genre, is crucial.

Studies of students' *strategies* when writing have been made by Randahl (2014). The study investigates how experienced writers in upper secondary school used different strategies when writing depending on the subject (e.g. Physics and Swedish). Using a multimodal perspective on writing, Randahl could identify writing as a multimodal and recursive action. Her results also point out the necessity of text-talk and support from teachers to students to be able to develop their writing skills.

Skar (2013) studied validity of assessment of texts. One important finding is that students care more about the grades than the comments teachers give after the writing test. He also focuses on the relation between *the construct (the task) and validity in assessing.* The correlation between the construct (task) and the criteria for assessment is low. In the same area as Skar, Borgström and Ledin (2014) discuss the balance between technical and hermeneutic rationality in the assessment of writing tasks. Is it even possible for teachers to properly assess written texts in a valid and reliable way?

There has been some research on how instructions are formulated and how students may perceive them. Berge (1988, 2005) raised the question of why dilemmas and paradoxes appear in instructions and writing tasks. Among other things, he identified that the crucial paradox is about communication and the different positions students take in the text. In writing essays in general, the writer has to build his or her text out of their own statements or questions, but in essay-writing in school, there is always an expected text controlled by an instruction. Students will never be able to construct their own statements when others are controlling the circumstances (Berge, 1988). It's always a situation of "role play", he says.

Parmenius Swärd (2008) also discovered problems and dilemmas of writing tasks by showing how the relation between the formulation of the instructional text in the task, the

implicit criteria for assessment of the text and the students' interpretation of the instructional texts caused problems and lead to paradoxes and dilemmas. The test-like premises of writing, and the disparate signals the instructions were sending, lead to misconceptions which in the long run had a negative effect on both the development of the students' writing and of their ability to write. The students in the longitudinal study from 2008 carried out many writing assignments on numerous topics where the teacher had expectations and demands in relation to form and genre. However, students chose topics primarily to make the writing relevant in a subjective way. Students solved the task by writing intuitively or with support from parents (Randahl, 2014). The text which the teacher expected was either totally or partially concealed from the students who were told what to do, but not how to do it. The consequences were devastating for the literacy development of the writers (especially those with low self-esteem when it comes to writing). Each time they did a writing assignment, the demands increased, while the ability to write decreased. They were unaware of the expectations from the intended reader. The study from 2008 also put forward a theory concerning signals in the instruction and to what extent students perceived different signals. It turned out that students pay attention to what they interpreted as the most important signal in the instruction (Berkenkotter & Huckin, 1993). However, unexperienced writers were not able to see the *implicit criteria*.

Borgström (2014) analysed tasks in the national test in the subject of Swedish in upper secondary school, from 2007 to 2012. Borgströms' analysis brings out four distinct and recurrent task types in the test from which a reconstruction of the aims of writing within the school subject of Swedish was made. Fifty-two writing tasks were analysed in terms of themes, structure and students' act of writing, as well as the writers' roles or positions "implied" by the tasks. The results showed that aspects of cultural norms were hidden in the tasks. Depending on the tasks' underlying norms, the student took a certain role. This means that the test construction presupposes certain acts of writing which only can be mediated through certain textual conventions. The students should in other words decode and use the "correct" inner structure (Borgström).

Parmenius Swärd (2008) analysed students' emotions, strategies and positions concerning writing. The result of the analysis pointed out some dilemmas.

The students (most of whom are experienced and motivated writers):

- feel that writing in a test situation creates feelings of insufficiency
- do not see assessment as a way to improve their writing and develop, instead it is a label of ability (cf. Skar, 2013)
- feel powerless and vulnerable when writing is performed under strictly normative and test-like premises
- develop negative self-images with reference to writing.

Concepts as *adjustment*, *adaption*, *inclusion* and *exclusion* were used in order to describe different students' strategies and positions in relation to the teachers' norms and textual conventions. To follow up and scrutinize these identified dilemmas, a research study was carried out in 2011, focusing on the problems of instructions. The aim was to dig deeper in the relations between the instructional texts and their readers. If the inner structure of the instruction must be rigorously decoded, it is of fundamental importance to investigate *in what ways* it can be understood. The text the student writes is, as a matter of fact, dependent on how the student interprets the instructions.

Students' encounters with instructions – the study

Context of the test

The national writing test in Swedish is performed on the same date in all parts of Sweden. It consists of a test sheet with eight tasks (topics) that are subordinated to a main theme. In five hours, the student has to choose one out of eight tasks, follow the instruction for that task, write a text and finally transcribe the text to a readable product. At the time of the study all of the students wrote their essays by hand, they were not allowed to use laptops.²

Every task is constructed in the same way and divided into three different parts: 1) an introduction to the topic, 2) an outline of the *situation*, and 3) the specific *instruction* (cf. Borgström, 2014).³ All of the eight tasks follow a standard formula, although the topics, the three most important words highlighted in bold (the text-activities), and the demanded text-type differ depending on the task. The students are given a booklet in advance. The booklet contains texts in different genres, sampled to stimulate the students' way of thinking. The booklet is also supposed to serve as text source for the students' arguments.

Below is an example of a task given in the national test analysed in the study:

"Escape from reality or relaxation"

Many people spend a lot of time playing computer games such as World of Warcraft, Counterstrike or Guild Wars. Some say that it is a well needed relaxation but others argue that playing computer games is a destructive escape from reality. [subject]

The computer magazine *Level* wants to know their readers view on computer gaming and want contributions showing what experiences and views their readers have on gaming. You have decided to make a written argumentative contribution. [situation]

Write your contribution. **Describe** your and/or others' experiences of computer gaming. **Reason** about why people of all ages are lured into the fictional worlds that games offer. **Discuss** positive and/or negative consequences of gaming. Use the information from the booklet together with your discussion.

Title: Escape from reality or relaxation? [instruction]

Scale of grading: IG-MVG 4

(National test in the subject of Swedish and Swedish as a second language, autumn 2011: B3)

² From 2012, decided in the new curricula for upper secondary school, there are two mandatory national tests in the subject of Swedish; one test in year one, and another in year three. Students who study in programs leading to a profession, only have one course of compulsory studies in the subject of Swedish, while students aiming for higher education have three courses of compulsory studies. Before 2012, all students, regardless of their study program, had two compulsory courses in Swedish.

The National test in the former subject of Swedish took place in year three when the students were 18 years old. The study presented in this article was done in the light of the former curricula for upper secondary school.

³ The test construct is made by a group of researchers and lecturers from Uppsala University on commission of the National Agency for Education. They make all the materials used in the test and choose different themes for every test. They also construct the material used by teachers for assessing the texts.

⁴ The grading system in Sweden has been changed recently. When this study was carried out, the Swedish school system used a grading scale of four grades IG – MVG, IG being the lowest grade, and G the grade considered as "passed". VG means very good, and MVG is the highest grade. Now, with the new curricula, there are six grades from F-A, were F is the lowest and A the highest grade. E is considered as "passed".

On the day of the test, students gathered together in the aula and in classrooms to take the test. Nobody knew what tasks would appear when the teacher opened the sealed envelope. However, about a month before the test, they had been informed of the main theme, "What a trip!" The students had been provided with different kinds of preparation depending on how much time each teacher thought their class needed. The booklet had been distributed about a month earlier. They had all done a speech test which was in some ways connected to an article or a picture of the booklet. They also had had some lessons where they discussed the general assessment criteria for the test. The more substantial information, stating the importance of following the instruction, especially the last part – "follow the three bolded words", were also given. A preparation sheet, with information and definitions regarding different text-types, were also available for studying in advance, however it was not allowed to be used during the test.

Design of the study

Written interviews were carried out immediately after the students finished the writing test, which took place in one school in November 2011. There were 120 students taking the test and 85 students from four different study programs were interviewed. The interviews were analysed according to the positions, roles and strategies the students claimed they had chosen during the test. The tasks were analysed using text theory based methods, and the students' essays were gathered and analysed after they had been assessed and archived. Inspired by activity theory (AT) analysis, a triangulation between the subjects (i.e. the students as writers of the text), the object and tools (i.e. the task/instruction and the situations of writing), the situated norms and the settings of the test, and the outcome (i.e. the comments and grading made by the teachers) were carried out.

Theoretical framework

When analysing language and texts, a comprehensive view is needed to see language as embedded within – and inseparable from – mental and social aspects (Fairclough, 1992; Ivanič, 1998; Kress, 1989). In a social-semiotic way, texts are seen as a relation between a writer, a reader, the text and the context. Instructional texts that are supposed to create verbal actions are complicated. They are at the same time texts to be interpreted and tasks to be carried out, and like all other texts, carriers of discourses and cultural norms. The instructions (tasks) were analysed from three meta-functions: 1. the ideational function telling the idea, meaning and purpose of the text, 2. the textual features describing the verbal/textual instruction as such, and 3. the interpersonal function showing the relations between the text and the reader and how the text signals these relations (Halliday, 1978 and 2004).

Parameters – the inner structure of an instruction

The perspective used was "a student's point of view". In what way does the student understand the structures and content of the instructional text (test construct)? In analysing the instructional text, a concept of parameters was used. A parameter can be understood as a part (a word, sentence or a metalinguistic sign) of the instruction that the reader has to observe, understand, balance and act upon in order to solve the task properly. The reader/ writer must therefore relate to the parameters in some way to be able to encode the given instruction. If the students observe, understand, balance and act upon these parameters, there is a possibility they will solve the task as expected. Every instruction in the field of teaching and education consists of exhortations or requests. These can be explicit like the instructions in mathematics: "Solve the equation" or "Calculate the distance between point A and B!" Such an instruction consists of one parameter. The only thing a student has to understand in order to show his or her knowledge is "solve the equation". Other examples are tasks in subjects of foreign language. Here's an example from a test in English: In each of the following mini-texts there is a gap indicating that **ONE** word is missing. Study the text, and then put in the missing word so that it makes good sense and is correct English. In this example, we deal with three parameters. One is "put in one word in the gap". The second is that it should be in correct English and the third is that the word should be reasonable. To write the right answers and to show their knowledge, students in this case have to see, understand and balance *three explicit* parameters.

The instructions/tasks in the national test in Swedish are of a totally different kind. They consist of a complex of parameters that are at the same time explicit, implicit and concealed cultural norms (Berge, 2005; Borgström, 2014). To clearly see what kind of parameters we are dealing with, we have to peel off layers in the instruction and closely analyse each layer.

Problems and dilemmas with the instruction

The instruction was easy to read but hard to understand (girl, SP).⁵ This quotation can serve as an introduction to the following paragraphs. It illustrates the problems students are facing when trying to understand and interpret the instructional text.

From an encoding perspective, in order to present a solution (i.e. a text), students have to balance several *ideational* parameters which are presented in the task in different ways. This means that the students have to decode the *suggestions* and *statements* made by the author of the instruction and make them understandable to themselves. For instance, the students' ideas in the text (the message they want to convey) have to be consistent with the idea the writers of the instruction have. If the title of the topic is "*Escape from reality or relaxation*" they have to connect this title to the main theme "*What a trip*". There is nothing in the instructional text that indicates that this has anything to do with trips or travelling. Instead, the students have to do imaginative connections while creating the text. Another parameter

⁵ There are only students from three study programs represented with quotations; Social science program (SP), Natural science program (NP) Aesthetical program, music (EST). The fourth program participating in the study is a combined Natural and Social science program (NS).

connected to the ideational structures is the dichotomisation of statements. In the example above the students have to accept computer gaming as either being something relaxing *or* an escape from reality. They must relate to *a stated fact* given by some anonymous grown-ups. To dichotomise statements is a standard procedure in all of the instructions.

A third ideational parameter to be decoded is to imagine themselves in a situation that is totally strange and fictive for most of them. If the writer of the test is a frequent reader of the *Level* magazine and knows in what way contributions should be written, he or she must rely on both the developers of the test and the assessing teacher that they have the same definition of "contribution" in the computer magazine as the writer has experienced. If the situation and text-type is unknown for the writer, he or she has to believe that it is cognitively *possible* to write a text in a text-type of a magazine they know absolutely nothing about. So, first they have to know what kind of magazine it is and in what style the articles are written, and then they have to know how to write it. If they do not know, which is the most possible scenario, they have to ask themselves if it is important for the solution or if they can ignore it without risk?

Words of action

On a textual level, we can look at words as *actions of writing* expressed in the instruction. In some of the eight instructions, the *actions of writing* are explicitly expressed, in others, however, they are more or less hidden. Two sentences illustrate the differences: "Use at least one quotation from the booklet". In this case there is no doubt what you are expected to do. Other instructions however, can be phrased like this: "use your own experience *and/or* experiences taken from the booklet". This example opens up for several interpretations of what is required of the students. Is the student allowed to choose or does he or she have to guess what the correct option is? What happens if the student does not use references from the booklet? What are the effects on the assessment of the text?

Another important parameter is the request of text-type. There is an extreme amount of text-types in the test: *contribution, argumentative contribution, review, article* and *column*. Contribution or argumentative contribution is the dominant required text-type. Many of the students whom we have interviewed were very confused regarding the concept of *contribution*. The word in Swedish, "inlägg", can have at least four different meanings. Oddly, one text- type (column) is clearly explained in one of the instructions/tasks. But for all of the other text types, the writer has to know the meaning of the words, or have to guess at the meaning.

There are three rather explicit textual parameters in the text – the three bolded words. All of the students interviewed managed to detect them and *tried* to act in relation to them. In the example above the three words are **describe, reason** and **discuss**. There is a distinction with a nearly invisible difference between **reason** and **discuss**. One student says: "I saw all three of them and did them both". To mark the words in bold is the same as indicating the most important criteria and that following and acting on these words, would, in the students' view, probably lead to an acceptable solution.

Interpersonal factors

The text-type comes with the chosen topic and the students really have no escape route. This is most clearly seen in this sentence: You have decided to make a written argumentative contribution. This sentence is of course meant to be a command but it is written as if the student had an option and could have decided for him- or herself. Other interpersonal parameters are the demands of a specific title and the grading scale. In one of the eight tasks you cannot get a higher rating than VG (see footnote 4). If the student does not discover this before he or she chooses this particular task, the possibility to get the highest grade is gone. Students in the study specifically commented on that particular problem: I had written the whole essay before I saw that I could only get a maximum of VG on the task. By the time it was too late to change subject and task (girl, SP). The metalinguistic signal; the bolding of the three words, (e.g. describe, reason and discuss), also signal necessity.

Taken together there are at least ten different parameters in each instruction for the student to balance, accept, understand and act upon. In order to play safe, the student has to detect the parameters, make choices and decide how to deal with them.

Apart from these challenges, there are many other factors to relate to in the situation of writing. An important part deals with the question of the usage of language. When analysing the comments made by teachers who assess and grade the texts, language use, e.g. grammar, spelling and sentence structure, seem to be the most important grading factors.

Another important parameter is the relation between *handwriting and time*. The implicit norm tells them that time (five hours) must be divided into three parts – planning, invention and collaboration with the booklet first, then writing the text and finally editing and transcription. The consequence is that the test-writer has to start immediately. There is no time for trying out a thought or changing the subject. Another aspect of handwriting and time is editing and revising as well as the question of structure. Cohesion, coherence and text-binding are vital criteria for a good grade. But writing by hand is a messy business. In a multimodal perspective it is rather difficult for a person who never writes texts by hand to suddenly be in a position where he or she has to think and write in a linear way. Texts are in fact never written like that (Flower & Hayes, 1981). It is very difficult to move parts, alter sentences and put them in alternative positions. Some students also have difficulties with the act of handwriting. It hurts after a while and the script looks bad.

The most significant problem, compared to other instructions in other subjects (e.g. Maths or foreign language) is the *measuring of knowledge*. When analysing the instruction, it is quite impossible to see what knowledge in writing the students have to show in this test, and how it is measured. Neither of these factors is explicitly explained. It seems as if regardless of the quality of text the writer produces, there would always be something missing that the assessing teacher can hold against him or her.

Student voices of positions and strategies

Some of the questions in the interviews regarded feelings about writing essays in that particular environment and how the students positioned themselves in relation to both writing in general and the test as such (Parmenius Swärd, 2013). After analysing the interview data the results fell out into three concepts concerning the students' role and positioning towards the test: *adjustment, anxiety* and *enjoyment* (Parmenius Swärd, 2014). These concepts point out the positions taken by the students towards writing an essay during the five hour test (cf. Parmenius Swärd, 2008).

a) Adjustment

The analysis shows that most of the students adjust to the situation. Their aim is to follow the instructions. They do not hesitate and they take the test with different levels of confidence. Being serviceable task solvers, they do not care much about the content of the essays. Instead, they undertake the assignment to get over with it. A typical voice from "the adjustment group" is a girl saying that she follows the instruction to the letter: The text will pass somehow (girl, EST). Another student says: I wanted to get the best result possible. It's an incredibly nice feeling to never have to write another national test in Swedish (girl, EST). An example of unwilling adjustment is when a boy writes: The text simply had to be done, and he continues: I think it's a bit of a problem really, that they demand that if you want to write a column, you have to write about a certain subject. I wanted to write a column about how it is to become a grownup in today's society, but that possibility was not given. Because of that, the piece I wrote wasn't a result of my first choice, but more of a forced solution. It is not fair to the students. (boy, EST). Typical for this group is their aiming for high grades, though the average grade is G. There are no risk takers and because of the high stake situation, they do not want to challenge themselves. (cf. Hertzberg, 2005). Their aim is to pass the test, with the highest grade possible (cf. Troia, 2007).

b) Anxiety and reluctance

About a fourth of the students belong to the category of those experiencing *anxiety* and feelings of reluctance. Most of them are boys with minor experience or interest in writing, or so called struggling writers (Troia, 2007). They are feeling nervous, totally blocked and have nothing to say or express. One young man says: *The task wasn't so easy to understand, I'm too tired, too nervous and I feel anxious* (boy, SP). Another says: *I was totally blocked. I felt as I was in a daze* (boy, EST). When asked about the situation of writing they say that they feel *shaky* and *nervous* and have a slight *revolting feeling to their stomachs*. During the test they stare at the paper, give up and write something down on the spur of the moment, or pretend not to care about it. Some also say that none of the instructions were stimulating enough and that they tried out (pressed out) different thoughts without succeeding. This feeling of reluctance and anxiety stopped them from using the optimum of their skills. Some of them say that they tried to remember the advice given by the teacher, but that they at the time of the test, they could hardly remember anything.

c) Enjoyment

A group of students actually likes to write. They are driven by an eagerness for reflecting and discussing. They grab the opportunity to be argumentative and like to see their thoughts

in written text. They act in a situation of role play or "writing in school play" (Berge, 1988; Parmenius Swärd, 2008; Borgström, 2014, p. 136). The students with great confidence in writing belong to this group. A relaxed attitude towards the task and to assessment is the common feature. Here are some of their voices: *I wanted to point out how people in my age feel when times are tough* (girl, SP). *I wanted to connect to my feelings and try to get people to relate to what I wrote* (girl, NP). *It's important to get the reader to understand my point concerning the problem I discussed* (boy, EST). These students sense the power to influence others. Writing really has a meaning to them. The sad thing though is that the text never reaches an authentic reader and that the content of the text plays a minor part in the assessment. The urge for writing does not automatically lead to high grades. The "risk takers" who do not care about the instruction because of their eagerness to tell their opinions to "the world" and be creative at the same time, belong to this group (cf. Herzberg, 2005).

The most frequent position is that of adjustment, second is that of feeling anxiety and reluctance and third is the feeling of enjoyment. Why is it that most students act in such instrumental adjusting way? Or why are they feeling anxious and reluctant? They have practiced writing in the subject of Swedish throughout their school years and ought to be able to rely on the knowledge they have obtained regarding writing.

Discussion

The results of the interviews show that the students in most cases really tried to follow the instructions carefully and tried to perceive the parameters hidden in the text. The comments made by the teachers suggests their texts are considered to be fairly good. Despite this, their texts were still only graded as passed (G). Since assessing is done with the help of a matrix specially designed in advance for each task, the teacher is per definition looking for factors that are missing and not consistent with the criteria in the matrix. This is an extremely difficult task (Borgström & Ledin, 2014). The assessing teacher has to search for every criterion and has to disallow well written texts, just because the student did not use the right title from the instruction or failed and/or forgot to find a quotation from the booklet or did not write the references in the right manner.

From a student's perspective, the consequences of low grading and summative assessment lead to doubts about their own ability. The written interviews show feelings of disappointment and frustration. The talk about grading moves focus away from the text and the development of writing. The "adjustment group" who writes in an instrumental way and solves the task just to pass the test and the unexperienced writers, who feel confused when reading the instructions, develop feelings of insufficiency and guilt. Afterwards, when they see the comments made by the teacher and realise that they never can undo the mistakes, they feel powerless (cf. Parmenius Swärd, 2008). The test with its complicated instructions and grading criteria, reinforce the notion of writing as an unreachable ability. Focus on testing and grading, writing, has become a dead end for especially unexperienced writers such as for instance digitally experienced students, particularly boys. In their opinion, writing essays in school has very little connection with writing in everyday life in work and society.

Many things can go wrong when students are trying to understand and encode the instructional tasks. The instructions are complex; students are confused and/or take the test

in an instrumental way. There are problems with what the student wants to, or are obliged to communicate through the text, in correlation with the high-stake circumstances (Borgström, 2014). This could lead to the conclusion that students probably are under-performing and furthermore, that they are far from the aim in the curriculum saying "students shall be given the opportunity to establish a *reliance* on their own language" (National Agency for Education, 2011).

Focus on assessing and grading starts to create problems for students' literacy development. There are many dropouts in the system and the segregation both between schools and students is increasing. Both teachers and students are in some way encouraged to believe that the writing tests and assessment criteria for written texts are valid, reliable and driven by a technical rationality (cf. Borgström & Ledin, 2014). There is an extended risk of a reinforced attitude among teachers together with their students in the class, to *conquer the test* instead of focusing on literacy development for each individual.

The result of the study confirms that writing-tests are complicated and complex and at the same time confusing and deeply unfair. In order to measure and assess student ability to write we must take into account that every situation of writing an essay in school means an encounter between a reader (the student) and a text (the instruction). It is not only about understanding instructions in a literal way, the problem and dilemma is about the situation of writing and the lack of clarity in the instructions. An instruction and the criteria for assessing must be valid and reliable not only in the assessors' point of view, as described in Borgström and Ledin (2014), but also from the student's perspective. Ability in writing is not synonymous with decoding and *guessing* what is correct and what is not. The student has to know what knowledge he or she has to show. An instruction should be constructed in a way that the readers can be sure of what is demanded and, as a consequence, are stimulated to write a text using *optimal verbal resources*.

The aim for the subject of Swedish in order to improve students' literacy skills ought to be to create an awareness for and knowledge about texts. To let students of all ages write in different text-types with different tools, to read, analyse and use models of texts and to negotiate about texts and ways of writing, with the support of the teacher (cf. Holmberg et al., 2013). The tests should of course be consistent with the way of teaching, not the other way round. The curricula in the subject of Swedish tell us that the students must be given the opportunity to take an active part in their studies. The classroom can be a great opportunity for students to be active, something that can lead also to an understanding of the importance of texts and reading and writing development (literacy). If, on the other hand, the writing test is the goal, it will probably lead to subordination to the premises of the test.

Conclusion

Literacy skills are extremely important for all people today. More and more students enter higher education upon leaving upper secondary school, where effective reading and writing comprehension of advanced texts is needed for succeeding. To develop a critical view both in connection with reading and writing is also of extreme importance in the world of media overflow. The most important goal for teaching writing and reading must be to create opportunities for empowerment in reading and writing, for all students, in all subjects.

The capacity to read, understand and critically appreciate various forms of communication including spoken language, printed text, broadcast media, and digital media." is only possible by being exposed to, practice and discuss various forms of communication in a supportive climate (Literacy and Numeracy, 2011).

However the knowledge gained by literacy-based research has started to make a breakthrough in Sweden. The National Agency for Education has been given a mission from the Department of Education to support teachers in primary, secondary and upper secondary school with current theories and methods for reading and writing across the curriculum. With this huge investment in further education for teachers and at the same time collaboration with researches on literacy, this project (*Literacy Boost – Collaborative Learning for Development of Students' Literacy*) will set focus on literacy development for students in all subjects.

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Empowering Learners through Improving Reading Literacy and Access to Knowledge — the Slovenian Story

ABSTRACT

According to PISA 2012 results, Slovenia has a high percentage (21%) of underachieving 15-year olds in reading literacy. Having been concerned about it, we started the 2-year national project *Empowering learners through improving reading literacy and access to knowledge* in 2011. The article sets out a general theoretical framework, shows basic factors of reading literacy development, while also presenting the process of implementation. We describe outcomes and characteristics of the project aimed at improving the level of reading literacy with the Slovene primary and lower secondary students. The whole project took an action research approach, which was supported by in-depth consulting with instructional leaders and teachers, various forms of professional support, didactic solutions for the development of basic reading skills, and implementation of various strategies including differentiated approach. Furthermore, there is an overall assessment of the project's results, evaluated for achievements as well as against general and project specific theoretical framework. In the conclusion, the authors highlight the challenges important for further literacy development.

Keywords: reading literacy, three-tier method, differentiation, action research, Slovenian primary schools

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Compared to the results of PISA 2006, the PISA 2009 research for Slovenia revealed a negative achievement trend in reading literacy. On average, Slovenian 15-year-olds achieved 483 points, which is below the international average (500 points), as well as the EU average (490.5 points). Over one fifth of all fifteen-year-olds (21.2%) did not achieve the second – fundamental – level of reading literacy, while the proportion of students who made it to the higher level (5% of Slovenian students compared to the average 8% of the OECD) and to the highest level (only 0.3% of Slovenian fifteen-year-olds, as opposed to 0.8% OECD average) was also unsatisfactory. PISA 2012 brought similar results. The problem was also confirmed by the results of the national examination tests¹, where a high proportion of pupils do not reach the average of national percentage points and only a small proportion of pupils from one generation master higher level reading literacy skills. The international PIRLS (2001, 2006 and 2011) research showed more promising and better² results for Slovenian fourth graders, compared to the international PIRLS average and the international indicator (Doupona, 2012). However, this cannot compensate for the above-specified unsatisfactory situation.

Thus the improvement of reading literacy throughout compulsory education is a fundamental national development priority in Slovenia in the period until 2020. An important contribution to the implementation of this objective was the decision of the minister for education to implement a two-year (2011-2013) national ESF-funded³ project "Empowering Learners Through Improving Reading Literacy and Access to Knowledge", with the aim of contributing to assuring equal learning opportunities; improving access to quality education (integration of effective teaching strategies to achieve higher levels of reading literacy in formal education); and contributing to the implementation of the national strategy for the development of reading literacy (RL). Within those aims the schools participating in the project also defined their own goals based on their needs with respect to reading literacy, i.e. to: improve motivation for and interest in reading, improve reading and writing techniques and reading comprehension; train learners for the application of various reading learning strategies (RLS); develop the meta-cognition processes and self-regulated learning; to dedicate more attention to the language of instruction and instructional conversation; to improve the results at the national examination and in international studies. The project was managed by the National Education Institute of the Republic of Slovenia and on the basis of a public call for participation, 424 primary schools participated. Pupils from over 80% of these schools have been achieving results which were statistically significantly below average

Ompulsory national examination tests are taken at the end of the 9th grade (14 or 15-year-olds). Curricula standards are measured and similarly to the PISA research, they measure levels of reading literacy. The analysis of exam achievements serves as a feedback for students, schools and parents. Results can be compared among different regions in the country.

² In the PIRLS (2011) research, Slovenian fourth graders achieved on average 530 points, which is higher than the PIRLS average (500 points) and higher than the Slovenian average in 2006 (522) (Doupona, 2012, p. 9).

³ European Social Fund

⁴ 9.5% of all primary schools in Slovenia.

at the national examinations in maths and Slovenian for several consecutive years before joining the project.

Factors that impact the development of reading literacy

International theoretical framework

"There are no quick fixes for poor literacy. Achieving our ambitions will take time. What do we need, is for all players to work towards the same goals and more transparency what to work and what does not work."

(Final report: For 1 in 5 Europeans the world is hard to read, 2012, p. 32)

The final report of the EU High Level Group of Experts on Literacy concluded that a higher level of literacy can be achieved through a *common vision* and *common literacy strategies* of EU countries, which shall be supported by *awareness*, provided *records* and creation of a *sustainable commitment* to work in this field. The **national literacy strategies** must receive adequate funding support and include a clear vision for each level and all age groups. They must ensure activities at national and local level, high quality of education of teachers and of teaching, including the testing of new approaches, provision of support to learners with reading difficulties, continuous monitoring, assessment and awareness of progress, based on records (ibid., p. 35). Each country must find the most suitable approach for itself and provide for the following joint **performance indicators** (at EU level):

- to create a literate environment and promote reading culture, to increase motivation for literacy and promote reading in all possible forms through the application of various online and printed materials and resources;
- to improve the quality of learning and teaching with respect to reading and writing throughout the vertical dimension of education; to improve the identification of difficulties and support⁵ when learning to read, as well as other communication activities; to ensure *cognitive challenges* for learners in the proximal development zone (Vygotsky, 1977).
- to improve participation and inclusion (ibid. pp. 38, 42) through the application of various cognitive strategies, by providing special professional support, monitoring and formative assessment and grading techniques of individual results, coherent learning plan, with a vertically aligned framework for the development of reading skills and including the learning of reading learning strategies (ibid.; Byrnes as cited in Wasik 2009; Mathematics Education in Europe, 2012; Science Education in Europe, 2012; Teaching Reading in Europe, 2011).

Provision of quality teaching and a literate, cooperative and inclusive environment requires the continuous capacity building of teachers and development of the learning

⁵ E.g. with suitable learning discussions, guided participation, modelling.

capacity of learners, as well as provision of *real-time*, *quality*, *evidence-based feedback* on achievements (Fullan, 2011; Levin, 2013). Moreover, effective work also requires a decentralised management strategy whereby the state provides for the initiative and formal framework, while the implementation of the framework (specification of objectives, operationalisation of plans, their monitoring and evaluation) falls within the shared or non-shared responsibility of the local and school level (Glaze, Mattingley, & Levin, 2012). The strategy is implemented through distributed, flexible, group leadership and management, based on **participative school culture** (Bečaj, 2012).

Basis of the Empowering Learners project

The *Empowering Learners* project followed the international framework and/or factors that impact the development of reading literacy and thus encourages schools and provides them with professional support in the design and implementation of *a cooperative, inclusive and literate environment*, while empowering them to provide *quality classes*. Moreover, the project also followed the *current didactic trends in the field of teaching, learning and observing of teaching*, as well as the national theoretical findings on *teaching strategies for successful literacy instruction and development of higher levels of literacy* (Pečjak, 2012, 1999). The orientations and basis for the project work further included the general empirical findings with respect to Slovenia, recorded in international studies (PISA, PIRLS, TIMSS) and national examinations, as well as all parallel secondary qualitative research and evaluations⁶ focused on the studying of factors with a significant impact on learners' achievements in the field of reading literacy. Accordingly, we empowered participating schools to implement:

- the principles of **holistic reading instruction**;
- **social constructivist, learner-focused** instruction;
- **formative** assessment of knowledge;
- **cross-curricular links** during planning, teaching and learning;
- increased autonomy, responsibility and self-regulation of professional staff and learners.

In accordance with the **principles of holistic reading instruction** (Pečjak, 1999, 2012) teachers were developing all communication skills (reading, writing, listening and speaking) of pupils through creation of authentic situations and while reading various literary and non-literary works, digital and printed texts and materials (comp. Pečjak, 1999, p. 57). During reading they were systematically developing a *positive attitude and position towards reading, the meta-cognitive*⁷ reading process and different activities for understanding the

⁶ E.g. A qualitative study of school characteristics with respect to results in the studies examining the knowledge in mathematics, science and reading literacy (Štraus, Dupona et al., 2008) and several OECD publications which study in detail different factors that impact learning achievements.

⁷ Teachers trained students for conscious reading. They encouraged reflection in reading: before reading they encouraged awareness (What do I already know?), wishes (What would I like to learn?) and expectations (What is your prediction about the plot?); during reading they monitored how they met their expectations (How successful am I in reading, is the selected strategy suitable for me?); after reading they assessed the reading learning process content wise (Have I met my expectation, have I got

content (ibid.). The last two objectives were implemented by promoting reflection processes when reading or learning and the use of reading learning strategies (RLS) before, during and after reading (Nolimal, 2012a). Social constructivist teaching practice was enabled by organising students in study groups with various learning strategies and approaches to reading texts. Thereby students had the opportunity to gain a social and learning experience, which influenced in-depth comprehension, exchange and building knowledge and experience. For this purpose we encouraged schools to implement different teaching strategies based on the social constructivist teaching paradigms, individual learning and learning within various social groups; e.g. project-based, experimental, research/problembased classes and collaborative learning. Learner-focused instruction and formative assessment were implemented through including learners in all phases of the learning process, including planning and evaluation, and by providing an active role for pupils in the learning process. Special attention was also dedicated to the management of the learning discussion, awareness-based learning, monitoring and observing of the learning process. For this purpose, we empowered teachers and promoted the organisation of a learning process, including building of awareness of preliminary knowledge and making it meaningful (identification of strengths and weaknesses), definition of common and individual objectives, learning plan design (Which content must one learn? How to learn effectively?), (Komljanc, 2008), which includes the definition of achievements that constitute the framework for formative assessment and aggregate evaluation and reflection of teachers and learners in the function of regular management of the learning process (Metodološki načrt projekta, 2012).

In order to achieve an in-depth comprehension, as well as inter-linked and meaningful knowledge, we trained the participating teachers for the creation of horizontal or vertical **cross-curricular links**. Horizontal links have been defined as the linking of learning topics and (subsequent) linking of subject teachers within a single grade or a single study group, while vertical links comprised the linking of learning topics and (subsequent) linking of teachers of different grades and/or different study groups in the vertical (Nolimal, 2013, p. 10). Furthermore, with this approach, we wanted to ensure the coordinated realisation, observing and evaluation of the project objectives.⁸

The autonomy, responsibility and self-regulation of participants (teachers, headmasters and other professional school staff) in the project were ensured through distributed leadership and management of the project, as well as the application of *action research principles*. For this purpose we appointed **strategic and operational teams** at the national level. The strategic team consisted of education advisors from the National Education Institute of the Republic of Slovenia and external experts in the field of literacy, teaching, education psychology and education research, while the operational team consisted of education counsellors. Moreover, the participating schools appointed interdisciplinary **school project teams**, consisting of representatives of professional staff in different subjects from the entire vertical education (including preschool institutions if they were operating as a part of the school).

the answers to ...), success rate (Have I been successful, have I got all answers), and methods (How did I find the selected reading strategy, shall I use it again, what would I change).

⁸ E.g., knowledge of specific RLS, which is gained at one subject, is logically applied in other subjects and there is no redundant repetition of work, inconsistent learning load and related overload and demotivation for work and learning.

All project activities (national and school level) were implemented according to the action research methodology (Marentič-Požarnik, 2013). The project was divided in three action steps, within which the participating schools cyclically planned specific activities, tested them in teaching practice, and regularly monitored, analysed and recorded their strengths and weaknesses. On the basis of the latter, specific improvements to be made were drafted, which were included in the next action step. When implementing specific phases within action steps, school trustees¹⁰ provided support to schools. In the beginning, school administrators in cooperation with members of school project teams and headmasters analysed (quantitative and qualitative) of the multiannual results of a specific school at the national examination, and helped them to gain an insight of the neuralgic fields (e.g. types of assignments or level of knowledge, which are not mastered by learners), on the basis of which the schools selected their *short term* priorities that were included in the project's **operational** plan for the first school year. Afterwards the trustees reviewed the operational plans and warned the schools about potential deficiencies and weaknesses; e.g. non-compliance of the planned activities with the selected priorities, expected achievements and evidence. The schools were not used to such planning and they consequently welcomed the support. This was followed by joint professional training, consistent with the schools' common priorities and specific training at schools, which was consistent with specific priorities of each school. In this case the trustees also provided schools with support and advice, and assisted them in the acquisition of selected lecturers when needed, while several trustees also carried out the training programmes.

The next step was the introduction of new knowledge and approaches acquired during training in education practice (in this case the trustees helped schools with friendly criticism, and co-designed and implemented sample approaches through the application of new knowledge and skills in cooperation with teachers. This was followed by *observing* (of work), which was the responsibility of heads and members of the school project teams in consultation with the staff and school trustee. In doing so they presented examples of implemented learning activities and proof of progress. In this case the school trustees once again took on the role of the unbiased, critical friend, who participated in the analysis of proof of progress that served as the basis for *planning of improvements, modifications and implementation* of the next action step. In the figure below phases and activities of the 1st action step are shown. Phases of the 2nd action step were cyclically repeated.

⁹ Analyse – design – implement – monitor – redesign.

These were the education consultants, members of the operational team. Each trustee was responsible for up to four schools participating in the project. All 42 schools thus received professional support from 14 school trustees.

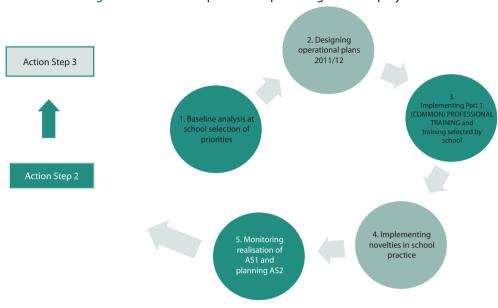


Figure 1. 1st action step of the Empowering Learners project

In the last (third) action step we dedicated special attention to monitoring and evaluation of results, as well as the promotion and dissemination of the project and organisation of the closing conference.

School activities for implementing project objectives

General and specific objectives of schools in the project were implemented with two¹¹ focus points:

- Empowering learners through improving reading literacy development of education strategies and
- The increase of cultural and social capital.

Within the first section we focused on strategies for the development of reading literacy from preschool age until the completion of primary school in all subject fields, and the promotion of flexible organisation of work that supports the development of cross-curricular linking models for supporting reading literacy. In the second section we developed internal differentiation models to support specific groups of learners and individuals from disadvantaged backgrounds (learners with unfavourable socio-economic status) and thus foster the development of an encouraging, participative school culture. The

¹¹ All participating schools implemented the first one, the second one just some of them, depending on the specific objectives of schools.

activities between the two groups were inter-linked and mutually supplemented. The mutual cooperation with and professional support to schools focused on:

- empowering teachers for implementation of education strategies that improve in-class discussions, motivation for reading, reading techniques, reading comprehension and critical reading;
- development of a supporting learning environment based on high expectations and active role of learners, consideration of their individual learning and other abilities (differentiated, individualised and personalised education process), learning in diverse social groups, development of shared responsibility for learning and knowledge (metacognitive processes);
- compensation of learners' deficiencies originating from the discouraging family and/or social environment;
- development of professional materials to support good project-related practices;
- increasing responsibility (of headmasters and teachers) through regular observing, (self-) evaluation and subsequent balancing of activities for achievement of the general project objectives and specific objectives of each school.

The entire course of events for the project and mainly its impact with respect to the *general project objectives* and *objectives of specific schools* as well as expected results were included in the monitoring, self-evaluation and evaluation, which is presented below together with the methodological framework.

Methodological framework for project monitoring and evaluation

In line with the general and specific project objectives the monitoring and evaluation of the project encompassed the changes at the *level of school, subject and classes*, and thereby recorded the experience, positions and opinions of *headmasters, teachers and learners, as well as individual development and results of learners*. The main **aim of project monitoring and evaluation** was to examine the successful implementation of general and specific project objectives listed in the introduction, and expected results, which are based on objectives specified in the joint *Metodološki načrt projekta* (2012) and the operational plans of participating schools, e.g. increased social and cultural capital of pupils and knowledge of professional school staff, strengthened responsibility, higher expectations towards students, higher awareness of teachers of the development of reading literacy, increasingly differentiated education/learning process, better motivation for reading and learning, improved reading techniques, improved reading comprehension and RLS mastery, a more conscious reading and learning process (meta-cognitive processes), and development of practices that reflect all of the above.

Considering the aim of the project and general and specific objectives of schools, the monitoring and evaluation included the following **research questions**:

- how successful were schools in the implementation of their operational plan objectives;
- how are the changes reflected in the pupils' results at the national examination;

• how successful were schools in responding to differences originating from the demotivating backgrounds (cultural capital and socio-economic status) (*Metodološki načrt projekta*, 2012).

The research questions of the project evaluation included the following **research fields**: motivation for reading, reading and writing techniques, reading comprehensions, reading learning strategies (RLS), reading literacy in all subjects, metacognition processes, and results at the national examination. Furthermore, we specified the main variables (for more information, see Nolimal, 2013b) for all fields in accordance with the project objectives and theoretical findings. Then we selected the relevant measurement instruments¹², offered by the Slovenian school sector, and modified and/or upgraded them when needed. For fields where instruments were not available (e.g. RLS and monitoring of reading abilities in class) we designed new ones. Evaluating metacognitive processes was integrated in all research fields. The questions and variables were adjusted accordingly. We also encouraged schools to prepare at least one video clip which reflects the development of literacy skills.

Since the project was managed according to the action research methodology at both the national and school level, the monitoring and evaluation of results were shared between schools and the project coordinator (the National Education Institute). For the purpose of monitoring and (self-)evaluation the schools could use an entire range of instruments. The project management team promoted the application of the *Questionnaire on the motivation for reading* and the *Scale for monitoring reading literacy-related activities (scale)*, which enables the monitoring of progress at school and self-evaluation of teaching through multiple applications in different time periods. The scale was used at the national level for monitoring classes (teaching observation), while we performed the final and aggregate evaluation with the *Questionnaire on the application of RLS in the fifth and seventh grade, Common reading test for the third grade* and an *Analysis of results at the National examination tests in Slovenian and Mathematics of ninth grade pupils in 2013*, compared to the results of the same generation of learners in sixth grade from 2010 (before the project started) and the results of ninth grade pupils from the schools which were not involved in the project.

In the summative project evaluation, qualitative and quantitative methodology of pedagogical research was used. We were processing the data by using several statistical treatments, e.g. arithmetic means, standard deviations, the Rasch-model for analysing categorical data and preparing index of SES status, correlations and linear regression.

¹² Reading tests for the first education era, Questionnaire on motivation for reading, National examinations in Slovenian and Mathematics for the sixth and ninth grade.

¹³ Both instruments were used in all 42 schools.

¹⁴ There was no control group of pupils, so we could not control the influence of individual teachers and many other factors that affect learning outcomes. The assumption on the impact of the project *Empowering learners* on the pupils achievements is derived on the basis of the evaluation of a number of activities which were taking place in the project.

An overview of empiric findings with respect to reading (and writing) techniques and reading comprehension

A majority of schools were focused on developing reading (and writing) techniques and reading comprehension for which the following authentic instruments were developed at the national level: Grading scheme for learners' reading skills from Grade 1-3 of the primary school and Reading test at the end of the third grade. These standardised instruments were created within the project: "Development of reading literacy: Diagnostic tools for assessment of reading literacy and design of reading literacy models", funded by the Ministry of Education, Science and Sport.

For the needs of our project we tested at the beginning and end of the school year how many and which reading abilities have the pupils of first cycle of the primary school (grades 1-3) already developed. With the reading ability grading scheme we measured the ability of phonological awareness, comprehension of text, motivation for reading and quality of loud reading techniques (in the second and third grade). Moreover, in the first grade we tested pupils' understanding of the print concept and knowledge of letters, while in the second grade we also tested their ability to apply the syntax and phonological key when reading. Besides the above-specified abilities, in the third grade, we also measured the speed of silent reading. In every grade we use two versions of each test – one for the initial and one for the final measurement (Pečjak et al., 2011, pp. 5–14). The measurement results served as an important feedback for teachers when planning further activities and intensive support to those who have been found to have specific weaknesses or deficiencies.

The fundamental guideline is to allow learners to progress from a specific initial level of literacy development. As a result, the training courses were aimed at empowering teachers for planning and provision of classes adjusted to pupils' specific needs. We have encouraged the implementation of the 3-tier model, which has been designed as an upgrade of the Reading First programme (a programme of the US government for the promotion of scientifically verified effective literacy instruction methods and approaches). (Pečjak, Potočnik, 2011)

The 3-tier classes comprise:

Tier 1 – Basis of the curriculum and lessons in any grade of the first education cycle at any level (of initial literacy) are classes for all pupils. These classes must be well-devised and represent a challenge for pupils, build knowledge, skills and strategies, while being linked to the curricula standards; they must take into account modern research in the field of literacy. At the first level the classes do not have to be frontal, despite being intended for all students. Teachers change and adjust mainly the social forms of learning. The combination of such instruction with work in smaller groups usually allows the anticipated progress for the majority of learners.

Tier 2 – The work at this level is more complex and targeted. Pupils work in groups which are formed and transformed by the teacher as needed. One group always works with the teacher while other groups independently carry out preliminary literacy learning activities (the recommended daily duration is 30 minutes). Such work aims to accelerate work with children who achieve or could achieve more than the average. There is also a special focus on those who achieve the fundamental level of skill and on pupils with deficiencies or problems in a specific area of literacy.

Tier 3 – This level is used for pupils when a combination of the first two levels is not adequately effective. Classes at level 3 are even more targeted and especially systematic and explicitly oriented. If needed, they can occasionally or permanently include learners with special needs and those with whom the teacher identifies greater problems. The classes are usually provided outside regular classes (e.g. supplementary classes or work with a reading specialist) (Walpole as cited in McKenna, 2007).

The 3-tier classes model shows that students spend most of the time in heterogeneous groups, while occasionally – when working with teachers – they work in homogeneous groups. The teacher forms groups for differentiated work after collecting relevant information on the needs and abilities of a specific child. Although identification of knowledge and daily monitoring of children's achievements constitute the basis for formation of groups and planning of work, the teacher's opinion remains one of the most important sources of information (Morrow, 2010; Pečjak & Potočnik, 2011). Walpole and McKenna (2007), who recommend tier based classes, believe that teachers have a hard time deciding when and how to teach and develop specific abilities and skills. In order to assist them, they propose the concept of balanced instruction with guidelines for attainment of pupils' individual objectives. The concept specifies how many and which types of fundamental literacy knowledge should be integrated in 3-tier instruction. The concept is used primarily for education of reading specialists, which are still rather unknown in Slovenia, although they are urgently required to assist teachers and, what is even more important, learners with reading problems.

Balanced instruction – according to Walpole and Mckenna – foresees the quantity (in %) of fundamental topics, which should be included in the instruction of literacy (from vocal awareness to writing). These are changing from one grade to another. Walpole and McKenna draw from the finding that children of different ages need a varying amount of time for specific fundamental elements of literacy.

Their model of group work, which foresees either group work or instructions for all learners for each element of literacy or proposes that a specific element is instructed only within the intervention programme, can be more easily applied to the Slovenian environment.

We further integrated in the model the elements of literacy listed at the beginning of the section and we created the following 3-tier classes in practice:

Table 1. 3-tier classes in practice

p			
FUNDAMENTAL ELEMENT	1st GRADE	2 nd GRADE	3 rd GRADE
Phonological awareness	In groups	In groups, intervention programme	
Reading and listening comprehension	Whole class	Whole class, in groups	Whole class, in groups
Vocabulary	Whole class	Whole class	Whole class, in groups
Concept of print	Whole class, in groups		
Vocal-letter key	In groups	In groups, intervention programme	
Reading	In groups, whole class (global reading and decoding)	In groups, whole class	In groups, intervention
Writing	In groups (for readers and for the development of graphomotor skills), whole class (global, free writing)	In groups, whole class	Whole class, intervention
Speech development	Whole class	Whole class	Whole class
Interest in reading	Whole class, in groups (elective content)	Whole class, in groups (elective content)	Whole class, in groups (elective content)

Our model anticipates the optimum development of all literacy foundations by taking into account holistic instruction of literacy. Nearly all elements are developed together in joint classes, while specific elements are developed only in groups with the teacher. When the teacher works with the homogeneous group of learners, the other (heterogeneous) groups work independently in activity centres. The aim of these centres is to promote autonomous work (independent of the teacher) and peer learning and cooperation. Learners carry out activities linked to common work (compulsory), as well as activities which they select on their own (elective); i.e. from the field of listening comprehension, reading, writing, phonological awareness, graphomotor skills and visual awareness. (ibid.)

Upon application of the model in school practice, we tested the pupils of all participating schools with a standardised *Reading test for measuring the speed and level of comprehension*. We measured general reading competence at the end of the 3rd grade with the reading comprehension test which measures the speed and level of comprehension. We wished to learn whether students who were included in the project surpassed the national average. The measurement took place in the spring of 2013, at the end of the second year of the project. 35 schools out of 42 participated and they varied in number of students (6 – 103 students). The sample included 1501 pupils. Although we had not measured their speed and level of comprehension before the three-tiered model was introduced, we compared their results with the results which were acquired in 2009 in the process of standardisation with the population of 3rd graders. We then compared the outcomes of our testing with the result of the Slovenian average.

The speed of comprehension measures how fast a pupil can read and understand relatively short texts. This is the only indicator of automated reading techniques, since automated reading is fast and facilitates the comprehension of the text. The results showed major discrepancies in the reading achievements among pupils from specific schools. These results fluctuate from the significantly below national average results of pupils at two schools (5.7% of pupils), below-average results of pupils at six schools (17.1% of pupils), slightly above average results at 12 schools (34.1% of pupils), above-average results of pupils at 12 schools (34.1% of pupils) and significantly above-average results in the speed of comprehension with pupils at 3 schools (8.6% of pupils). These results show that teachers at participating schools were successful in achieving fluent automated reading with good comprehension with over three quarters (76.8%) of their pupils, which is above the Slovenian average. Only 23.2% of pupils achieved results under the Slovenian normative average. This indicates that systematic work with pupils in the first cycle of primary school resulted in better improvements of speed of reading comprehension of these pupils compared to pupils from schools, which did not participate in the project (Pečjak & Potočnik, 2013).

The dispersion of results shows significant differences in reading comprehension speed among students of a single grade or school. This means that there are still pupils within the same grade who have not yet mastered the reading technique and read slower than pupils with a fully automated technique, who read fluently. This also shows the need for regular and consistent differentiation.

The second sub-test measured the level of **reading comprehension** which shows how much students understood.¹⁶

The second subtest measured the level of reading comprehension, i.e. how much of the text do pupils understand. The results show significant differences between the levels of reading comprehension at different schools. Overall the reading comprehension results were

We tested the whole population of 3rd graders, who participated in the project. The participating schools had different numbers of students in the 3rd grade, ranging from 6 (in a primary school for students with orthopedic and other health impairment) to 103.

There are various criteria about what certain percent of the reading comprehension test means. However, researchers agree that the frustration level of comprehension takes place at 50% of understanding (Johnson, 1990). When the level of reading comprehension is below 40 percentiles, the result shows weak (below average) reading comprehension; and below 30 percentiles students need immediate and systematic help.

worse than the effective reading speed. Of 35 schools, only results of pupils at a quarter (9 schools or 25.7%) of schools fall in the group of above-average results, while at 26 schools (74.3%) pupils achieved below average results in reading comprehension compared to their Slovenian peers' national average. Differences in the level of comprehension among students are even greater than with speed of comprehension (Pečjak & Potočnik, 2013).

The results are partially expected since the first cycle of primary school is focused mainly on building the ability to read (reading techniques), while in the second cycle we should continue with the systematic development of reading strategies which help learners to better understand the text.

A summary of empiric findings and an overall assessment of results at the level of schools, subjects and classes

Summary of empiric findings

With the **final aggregate evaluation** of the project (for more information, see Nolimal et al., 2014) we found that pupils from the entire vertical of participating primary schools improved their motivation for and interest in reading (in the first five grades of primary school these two elements are approximately 20% higher than in the remaining four grades) as well as reading techniques and reading comprehension (Pečjak et al., 2013). With the aim to support participative and individual learning the teachers and pupils were trained for the *implementation of various reading learning strategies (RLS) and strategies for working with texts*, which contributed to improved focus and comprehension, improved awareness during the reading and learning process, higher quality of knowledge and development of higher levels of literacy.

The results at participating schools reflect the position that overall, during the project, pupils with learning difficulties in the field of literacy received *adequate support*, since the lower boundary of results at the national examination tests was higher¹⁷ and less dispersed than the results of pupils from other schools (Cankar, 2013, 2014). Joint average results or percentage at the national examination achieved by participating schools were slightly lower (participating schools: SLO 51.0; MAT 54.06) from other schools (other schools: SLO 51.61; MAT 55.13), however, *the difference was not statistically significant* (ibid.), despite the fact that the sample (of participating schools) did not include a population of schools with normalised distribution¹⁸ of pupils' results. A *significant step* was also made in the field of raising awareness of teachers and other professional staff of the significance of literacy development with respect

¹⁷ The results at participating schools are concentrated around the centre of Gaussian curve, pupils in the left side of it, both in Slovenian and mathematics, do not achieve such low achievement than students of other schools (in Slovenian is the lowest result in the schools involved in the project -37.98 percentage points, in the other schools -68.52, in mathematics at schools in the project -39.64, in the remaining schools - 79.12).

As stated in the introduction pupils from over 80% of schools participating in the project have been achieving statistically significant below-average results at the national examination tests for several subsequent years.

to successful education and inclusion in the narrow and broader social environment and of the fact that literacy falls within the domain of responsibility of all teachers, not only class teachers or teachers of languages. The project also produced a bank of good examples of practice for the development of literacy. Professional school staff introduced different forms of peer learning, exchange of experience and knowledge (mutual teaching observation and critical friendly advice, team planning, teaching and evaluation), experience with the methodology of action research and how to take on various roles; e.g. the role of researcher of one's own practice, i.e. a new element for many participants. Furthermore we found that the results between schools differ significantly, similar to results among pupils at specific schools. The differences occur due to several external and internal factors such as the integration of project objectives in the work of schools (main school priority), consistency of work by levels and throughout the vertical dimension (distributed leadership throughout the vertical dimension and among subject), clear responsibility of professional staff, compensation of deficiencies, personalisation of teaching and learning as well as learning support, regular observing and analyses of work, gathering of evidence and continuous introduction of improvements (for more information, see Nolimal et al., 2013b, 2014).

An overall assessment of results at the level of school, subjects and classes

We hereby provide an overall assessment of project results on the basis of quantitative and qualitative empiric findings which were compared to the *project objectives and the expected results of schools*. The assessment of results is based on common findings, recorded through the central (national) monitoring and evaluation, as well as the findings, recorded in the self-evaluation reports of schools, published in interim and annual reports.¹⁹

An overall assessment of results at the level of schools

At the level of schools we expected the increase of the social and cultural capital of pupils, who fail to achieve the desired level of reading literacy; improved professional knowledge required for the creation of encouraging learning environments; higher (adequately high) level of expectations with respect to all students and higher level of responsibility and awareness of professional school staff (from the project objectives). With respect to findings of the impact of the socio-economic status on the results at the national examination (Cankar, 2014; Žakelj et al., 2009), where the results do not show a significant change of results of students with a lower SES index²⁰ due to their participation in the project, we found that the schools yet have to meet higher social and cultural capital but there is an evidence on the higher level of responsibility and awareness, since the heads of school project teams often write in the Reports on the analysis of attained objectives in the 2012/2013 school year that individualised and personalised support as well as to compensate the deficit to learners

¹⁹ Interim report for the period from September 2011 to January 2012; School Report on the analysis of the achieved objectives for the 2011/2012 school year; Interim report for the period from September 2012 – January 2013; School Report on the analysis of the achieved objectives for the 2012/2013 school year

²⁰ Socio-economic index– in the analysis of *Questionnaires on the impact of SES on the results at national examinations* the specified index ranged from -2.0 to 2.08 (Cankar, 2014, p. 42).

with deficiencies remains a field, which must be improved in the future, and that they will dedicate more effort thereto.

Consequently, we indirectly conclude that professional school staff have raised the level of expectation with respect to all pupils, including specific groups of learners. Prior to the project we observed a trend of resolving these problems with additional professional support which was provided outside classes and by special teachers. Several teachers stated in the report that they have gained a different perspective on their profession and that they feel more responsible for study results of all pupils (Interim reports for the period from September 2011 - January 2012). They agree that the project provided for their professional empowerment (for more information, see: Marentič-Požarnik, 2014), while one head of the school project team wrote that the project "brought lots of information and knowledge on the significance of reading for school and life, use of the Slovenian language, RLS ..." as well as "plenty of leadership experience and a great model for teamwork ... and participative learning ... and facilitated creativity and research" (Lota Kahnem, head of school project team, Cirius Kamnik). The teachers also agreed that project work motivated them for further education, personal studying and introduction of innovations in teaching. Among other findings, some teachers stated that participation in the project equipped them with team work and public speaking skills, while improving their self-confidence.

An overall assessment at the level of subject

At the level of subjects we expected examples of good practice in connection with project objectives within one or several subjects, or better overall results in national examinations and international benchmarks. If we reach a conclusion regarding successful attainment of the first objective on the basis of presentations by professional school staff at joint professional training courses, the answer is yes, since we were able to see numerous examples where pupils in various subject fields built their knowledge through independent processing of texts; either in the form of instructions which guided pupils through the implementation of scientific and other processes, as well as in the function of upgrading and/or building knowledge. Much lower share of cross-curricular links was observed in the development of reading literacy throughout the horizontal dimension and even less throughout the vertical dimension, despite training of staff for these tasks. Consequently, the (double) learning of the same RLS during different subjects occurred at some schools, which constituted an additional workload for pupils and resulting demotivation. Although cross-curricular links, as a form of regular daily practice at schools, has not yet been fully implemented, we are definitely pleased with improved results at the national examinations. Albeit the improvements are minimal, they indicate a positive trend.

Overall assessment at the level of classes (in all subjects)

At the level of classes the list of expected results was the longest: *motivation for reading and learning, improved reading techniques and reading comprehension, mastery of RLS, development of metacognitive processes* etc. As indicated by empirical findings, these expectations were met; participating schools have noted increased motivation for reading²¹

²¹ These conclusions come from schools through self-evaluation, questionnaires for detecting reading motivation which were used at the beginning and the end of the project. 9th grade students were

and learning and found that pupils improved the speed and fluency of their reading, and became familiar with some complex reading learning strategies (RLS). All of the above has, as stated by many teachers, provided for improved activity of students during classes and made the classes more interesting and fun. Pupils have found that the application of RLS facilitates their learning (see: written reflection of pupils, in: Case study²² of Lava Celje Primary School). However, reading comprehension and learning differentiation, individualisation and personalisation of the pedagogical work and giving meaning to the metacognitive processes still need to be improved, since they encourage teachers and pupils "to improve overall literacy, critical thinking and development of inter-personal social and self-regulation skills" (N. Pignar, head of school project team, Ivanjkovci Primary School).

Conclusion

"It is a shame that the project doesn't continue. Now everything will depend on the headmasters; how they will continue to manage and support these activities."

(M. Kokalj, head of the school project team, Selnica ob Dravi Primary School)

With all empirical findings, analyses and evidence which are accessible through individual studies, self-evaluation reports, reflection, videos and examples of pupils' products²³, we conclude that the project was successful at the national level and contributed to the empowerment of teachers and pupils for the development of reading literacy.

To ensure sustainability, we created a thematic network in which teachers were organised according to the areas, which were successfully developed within the project. The thematic network was to promote continued professional growth, expand the knowledge and experience in school collectives, develop good practice in the field of literacy, and help pupils to raise their level of reading literacy. In the context of thematic networks, we can offer support to schools for example in reading and writing techniques, motivation for reading, reading comprehension, formative assessment.

At the end of the project, the regional units of the National Education Institute took over the dissemination of findings and examples of good practice. In the year 2013/2014, the developmental work started in 120 primary schools across Slovenia. All schools determined developmental priorities with regard to resolving the problems identified in the field of literacy. The heads of each regional unit, according to the needs of schools and their selected priorities, decided which members of thematic networks to engage.

The members of the development teams in participating schools were held aware of the results of the evaluation and the findings of the project to show what we achieved, they were

questioned at the end of the project as a part of central summative evaluation. We compared results with the PISA 2009 secondary study on reading motivation. Students in the project had 10 - 15% higher interest in reading (for example they visit libraries more often and with greater eagerness, they read books for fun and for study, they favour books as gifts).

Three collaborating schools presented the results and the whole happening in the project as a case study, and the rest of them produced the final report.

²³ Videos are available in the virtual classroom »Bralna pismenost«, at http://skupnost.sio.si/course/view. php?id=8425

introduced to reading and other teaching strategies in the instruction, strategies to increase reading motivation and creating and maintaining a supportive learning environment. Using the information obtained and the identification of problems in the field of reading literacy of each school involved, we empowered participants to plan the action steps independently.

The school trustees have reviewed, commented on and proposed amendments to the operational plans of all 120 schools. In 2014 in all of our regional units, we conducted 25 joint meetings with lectures and workshops with examples of best practices. Attendees could familiarise themselves with the instruments to measure progress in reading, teaching reading strategies, reading techniques reading motivation, and measurement tools that were developed in the project. Some schools have used these questionnaires to measure the initial and final state, which in the initial project has not yet been able to provide to all participating schools. Principals in all regions were informed and held discussions about literacy teaching management that supports the development of literacy.

Heads of the regional units and consultants have carried out a number of consultancy services in the field of literacy for whole schools in the project. The principals and the Institute's pedagogical consultants have accomplished over 150 lesson observations and evaluations, and in this way took care of raising the level of literacy and planning new action steps work. The activities continued with the same intensity in 2015 as well. This year, there are 109 primary and four secondary schools involved in the developmental work. We have conducted numerous expert meetings and presentations on promising practices. Our consultants have conducted around 90 lesson observations, interviews and other forms of support for school development team and other teachers.

We will continue with these activities in the coming year, for we believe that with this method of work, strategies and content generated in the project we can help students raising their level of reading literacy.

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Improving Literacy – the Responsibility of All Teachers

ABSTRACT

In Scotland every teacher is responsible for developing and reinforcing young people's literacy skills, whatever age group or curriculum subject they teach. This article describes the rationale behind this and explores the policy context within which it sits. The article also describes how this policy translates into practice with a particular focus on the upper secondary curriculum. It describes how schools are developing the capacity of staff to develop literacy across all learning and what this looks like in schools and classrooms. The article ends by describing the impact this is having on young people's learning and achievements. Throughout the article case studies, drawn from secondary schools across Scotland, illustrate practice.

Keywords: Curriculum for Excellence, literacy, implementation, Scottish Literacy Action Plan

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Introduction

Literacy, in *Curriculum for Excellence*, is defined as:

"the set of skills which allow an individual to engage fully in society and in learning, through the different forms of language, and the range of texts, which society values and finds useful." (Literacy and English: principles and practice paper, 2009b, p. 3)

The literacy framework has three elements: listening, talking and reading and writing. These skills, alongside numeracy and health and wellbeing, sit at the heart of Scotland's curriculum as the foundations of the knowledge, skills and attributes which equip children and young people for learning, life and work. The Final Report of the EU High Level Group of Experts on Literacy (2012) identifies improvement in literacy as essential to greater economic prosperity, social cohesion and the improved wellbeing and participation of all citizens. In Scotland, we recognise that levels of literacy are closely linked to children's and young people's overall achievement in school and their life chances. This fundamental principle has led to a stronger focus in Scottish education on developing literacy skills from 3 to 18 with the aim of raising attainment, reducing inequity, and improving life chances and employment prospects. The requirement that all teachers in Scotland develop young people's literacy skills pre-empts the recommendation of the EU High level Group of Experts on Literacy to adopt a coherent literacy curriculum and make every teacher a teacher of literacy. This article explores how policy translates into practice in Scotland's upper secondary curriculum and the impact this is having on young people's learning and achievements. It describes how schools are developing literacy strategies that ensure a whole school commitment to raising levels of achievement in literacy. Throughout the article case studies illustrate the implementation of policy in different secondary schools. These case studies have been identified from inspection and review activities carried out by Education Scotland HM Inspectors.

Scottish Policy Context

Curriculum for Excellence is the curriculum framework in Scotland which applies to all children and young people age 3 to 18, wherever they are learning. It aims to raise achievement for all, enabling young people to develop the skills, knowledge and understanding they need to succeed in learning, life and work. The framework includes a broad general education from ages 3 to 15 followed by specialisation leading to National Qualifications in the senior phase (ages 15 to 18). The curriculum is not governed by legislation in Scotland. However, the Scottish Government sets broad national policy for all aspects of Scottish education. A range of national guidance and policy advice drives curriculum development, while allowing scope for local flexibility and determination of priorities. The Scottish Government, in partnership with Education Scotland (Scotland's national improvement agency for education) and the Scottish Qualifications Authority (Scotland's national awarding and accreditation body), have developed a framework of policy advice, based on a strong evidence base of research and analyses, to support the implementation of Curriculum for Excellence in the form of the Building the Curriculum series.

The first in this series, *Building the Curriculum 1* clearly establishes literacy as the responsibility of all teachers. It emphasises the key role language and literacy skills have in gaining access to all learning and the need for these skills to be developed across all contexts for learning and by every teacher in each curriculum area.

"Competence and confidence in literacy, including competence in grammar, spelling and the spoken word, is essential for progress in all areas of the curriculum. Because of this all teachers have responsibility for promoting language and literacy development. Every teacher in each area of the curriculum needs to find opportunities to encourage children and young people to explain their thinking, debate their ideas and read and write at a level which will help them develop their language skills further." (Scottish Government, 2006, p. 4)

Other documents in the series emphasise the expectation that all teachers should continue to develop young people's literacy skills beyond the broad general education into the senior phase. Building the Curriculum 3: A framework for learning and teaching, states that there should be "a focus on literacy, numeracy and health and wellbeing at every stage" (Scottish Government, 2008, p. 6). While Building the Curriculum 4: Skills for learning, skills for life and skills for work puts this policy in the context of equipping individuals with the skills necessary to fulfil their social and intellectual potential and benefit the wider Scottish economy. It identifies the skills for learning, life and work central to the curriculum and highlights literacy as essential for young people to access all learning and succeed in life (Scottish Government, 2009). Scotland's language learning policy also sits within this policy context. Language Learning in Scotland A 1+2 Approach is based on the first language plus two additional languages model recommended by the European Union. In developing language and literacy skills across a range of languages (including Scotland's own languages, Gaelic and Scots), children and young people develop a deeper understanding of the possibilities of language and communication, including those relating to the learner's first language.

The Scottish Government's national improvement agenda drives this policy framework. For example, the Scottish Government's Literacy Action Plan (2010 – 2015) highlights the key role *Curriculum for Excellence* has in driving up literacy standards for all learners.

"We will ensure a continued and on-going focus on literacy within *Curriculum for Excellence* as it develops. Teachers will be supported on literacy development across all curricular areas and assessment from primary 1² onwards will focus on identifying individual learning needs, improving learning and raising standards. Reporting of achievement will provide reliable information to parents, young people and others about progress being made. National Qualifications will support the development of literacy skills across the curriculum and provide valuable formal recognition." (Scottish Government, 2010, p. 9)

The Literacy Action Plan was created to raise standards in literacy in Scotland from early years to adulthood. It provided strategic direction for improving literacy and encouraged local authorities across Scotland to develop local literacy strategies which reflected their own needs. Children and young people from areas of deprivation were especially highlighted in the report which noted the adverse effects poor literacy levels can have in terms of "poor

Barcelona European Council – Presidency Conclusions (2002) recommended that at least two foreign languages should be taught to all pupils from a very early age. This was reinforced by the Council Resolution on a European strategy for multilingualism (Council of the European Union, 2008).

² Primary 1 is the equivalent of ISCED level 1.

educational attainment, limited employment prospects, poverty, health inequalities and lower social and political participation." (Scottish Government, 2010, p. 1)

In the same way, recommendations from the Commission for Developing Scotland's Young Workforce (tasked with bringing forward a range of recommendations designed to improve young people's transition into employment) and the current Scottish Attainment Challenge (which aims to close the gap in attainment between the most and least advantaged children in our primary schools) are shaping the on-going policy and curriculum advice. Literacy is a core element of this improvement agenda and it is within this overall policy context that schools are implementing strategies to develop the literacy skills of all young people.

In secondary schools, the focus has been on developing literacy skills across all areas of learning and ensuring young people leave school not only with the highest possible levels of literacy, but also with the ability to apply these skills in a range of relevant contexts whether this is in further education, employment or their daily lives. The challenge has been to support teachers who are not literacy and English specialists to implement this in their own subject areas. The following case study (Case Study 1) illustrates the approach one secondary school has taken to address this challenge and build the capacity of staff to teach literacy across the curriculum.

Case Study 1: Knightswood Secondary School, Glasgow

Embedding the teaching of literacy across the curriculum

Knightswood Secondary School is a large comprehensive school in Glasgow with around 1500 pupils and 100 teachers. It has developed highly effective approaches to support the implementation of literacy across learning. The school has always recognised that literate pupils learn better; however, previous whole-school approaches focused on one-off events to raise awareness of literacy across the school. With *Curriculum for Excellence* and the clear policy directive that literacy is the responsibility of all teachers, the whole-school literacy group changed its focus to building the capacity of staff to deliver this.

One of the ways this was achieved was through the creation of a Literacy Toolkit for teachers. Listening and talking became a targeted focus across the school, with success criteria created for both group discussion and individual presentations. Feedback sheets were created to support teachers to provide focused feedback on young people's literacy skills. The same approach was applied to writing to develop consistency in expectations and standards across all subject areas.

Members of the literacy group took a strategic approach to developing capacity across the school. They began by developing their own practice, working closely with teachers in the English department to develop resources and approaches. These teachers were then able to support staff across the school to plan and develop learning activities that develop and extend literacy skills as well as subject knowledge. Staff training days were also used to develop teachers' abilities to develop young people's literacy skills.

The school has involved parents well throughout this process. The literacy group has produced a guide for parents and offered literacy workshops to enable parents to support their child's literacy development more effectively.

Literacy as the responsibility of all teachers

In the broad general education (ages 3-15), the curriculum is structured around all the experiences that are planned as part of learning and teaching. These Experiences and Outcomes are organised into eight curriculum areas³ and set out in lines of development which describe progress in learning. The terminology, Experiences and Outcomes, recognises the importance of the quality and nature of the learning experience as well as what is to be achieved. The statements in the Literacy Experiences and Outcomes define progression in more than just functional skills. They promote the development of critical and creative thinking as well as competence in listening and talking, reading, writing and important personal, interpersonal and team-working skills. Children and young people not only need to be able to read for information, they also need to be able to analyse and evaluate texts, explain their thinking, synthesise ideas and appreciate language and a wide range of texts both written and spoken.

"In the early years of schooling the focus is on acquiring basic literacy skills but our objective is to ensure more of our young people develop their advanced literacy skills. Many pupils cope well with functional literacy development, but the skills of understanding, interpreting and analysing texts are more challenging. The development of these advanced literacy skills which will assist learning across a range of curricular areas is a key focus within *Curriculum for Excellence*." (Scottish Government, 2010, p. 9)

Since Curriculum for Excellence was implemented in August 2010, Education Scotland has supported secondary schools to develop the capacity and capabilities of staff to develop these skills in their young people. As well as creating professional learning resources, Education Scotland hosts National Literacy Network conferences twice a year to bring local authority literacy representatives and others together to share good practice from across the country. Education Scotland's recent evaluation of learning, teaching and achievement in literacy, 3-18 Literacy and English Review,4 noted that opportunities for learners to develop and apply their literacy skills in relevant contexts across curricular areas have increased since the implementation of Curriculum for Excellence. It reports that the majority of secondary schools are encouraging consistency in developing the literacy skills of young people through the use of a shared language and common approaches and resources. In the best practice, staff plan to develop literacy in discrete subject areas, highlighting literacy in their learning intentions and discussing success criteria to ensure pupils transfer skills from other areas of their learning. This is also supporting them to make connections across subject areas. The following case study (Case Study 2) from Education Scotland's 3-18 Literacy and English Review, illustrates the practical ways schools are providing professional learning for staff to enable them to develop literacy across learning.

The experiences and outcomes are organised into the eight curriculum areas: expressive arts, health and wellbeing, languages, mathematics, religious and moral education, sciences, social studies, technologies.

⁴ Evidence that informed this report came from a series of focused inspection and review visits to a number of early learning and childcare settings, primary, secondary and special schools during the period February 2014 to May 2014. There was also analysis of relevant evidence from general inspections and other professional engagement visits carried out by Education Scotland over the past three years.

Case Study 2: Hazlehead Academy, Aberdeen

Building the capacity of staff to develop literacy across learning

Hazlehead Academy in Aberdeen City has introduced literacy lunches to build on initial professional learning at whole staff meetings and ensure that all staff are supported in their responsibility for literacy across learning. The lunches are scheduled in the whole-school calendar and are hosted by the faculty head of English and literacy. Staff can opt in to all or some of the lunches, time and workloads permitting. The meetings, held during the lunch break on a normal school day, explore strategies to enhance practice and address the professional learning needs of staff in order to support the development of literacy skills in their curricular area. From this, shared priorities have been identified and staff have worked together to develop consistent approaches.

In the first year, reading was identified as a priority. A variety of activities to improve reading for understanding and note-making skills were shared with staff. Members of the group trialled strategies in their classes and shared evaluations at the lunches. The group then selected the most effective strategies which were rolled out to the whole school in the form of a Reading Toolkit. The consistent approach has enabled pupils to transfer their literacy skills across learning. This year the focus has been on writing strategies, with listening and talking planned for next year's development. The literacy lunches have been highly successful in providing support for staff and a forum for professional enquiry leading to improved practice. Literacy coordinators and head teachers from other local schools also attend the literacy lunches to promote partnership working and shared development work.

Staff are very positive about the impact of this work. For example, in social studies, reading techniques are supporting young people to assimilate information more easily from a range of sources and write clear, concise answers. In art and design studies, pupils can select key information when completing research tasks and use their own words more readily. Evaluative writing in health and food technology has greatly improved through reading and writing strategies developed at the literacy lunches. Teachers' own confidence has also improved. The faculty head for social subjects commented: "I feel more confident when approaching challenging texts myself thanks to the Reading Toolkit. I have noticed a difference in pupils' ability to access my subject's core texts and their understanding has improved."

Professional dialogue has been key to the success of Hazlehead Academy's literacy lunches. Opportunities for staff to share experiences and evaluate practice has revealed that some strategies work better in some curriculum areas than others. This is supporting them to adapt generic approaches to the demands of discrete subject areas.

Staff are developing their understanding of not only how they should be extending young people's literacy skills, but also how literacy will deepen learning in their particular subject. For example, in some secondary schools, young people are being provided with opportunities for extended writing that are effectively developing their skills in structuring a coherent argument, expressing informed views and drawing conclusions. These opportunities are also supporting young people to develop important subject-specific skills and developing

their higher-order thinking. As illustrated below in Case Study 3, where these skills are being developed progressively through the broad general education, young people in the senior phase are more able to apply them to the demands of the courses leading to National Qualifications. This includes critically engaging with texts to access knowledge and elicit understanding, deepening their thinking and demonstrating their learning through debate, discussion, presentations and extended written responses.

Case Study 3: Lochaber High School, Fort William

Deepening learning through literacy and higher-order thinking

The science department at Lochaber High School has focused on improving literacy skills to support young people to attain more highly in National Qualifications. This learning begins in the broad general education and aims to develop skills progressively.

Analysis of pupil attainment revealed that young people achieved less well in assessment activities that required them to explain their learning. A focus on higher-order thinking skills enabled staff to plan more learning activities that encouraged young people to explain their thinking, describe processes and apply learning to solve problems; activities that involved listening and talking, both in groups and individually, and extended writing. Assessments now include more open-ended questions and teachers work together to moderate young people's responses and identify where further support is required. Staff scaffold tasks to enable pupils to develop their literacy skills progressively. For example, models of good practice, writing frames, prompt questions and sentence starters have enabled pupils to understand what a quality explanation looks like. This has led to improvement in written responses. The Physics department has also incorporated discursive and persuasive writing into their courses to improve the quality of young people's writing. This is supporting pupils to extend their writing and develop their thinking further. Listening and talking activities in the upper school are also encouraging young people to explain and deepen their thinking.

Education Scotland continues to support this work by highlighting innovative practice during inspection and review activities and sharing resources and exemplars of good practice on its website.

Literacy in the upper secondary curriculum

The senior phase covers the later years in secondary education from around ages 15 to 18. It extends learning from the broad general education and maintains a continued focus on skills for learning, life and work. The curriculum framework and the qualifications system provide a range of opportunities to meet the needs of all learners in the senior phase while allowing schools and local authorities autonomy to design the senior phase curriculum in a way that suits young people and their local contexts. This is resulting in pathways which ensure young people gain the qualifications they need, and improve their achievement of a wide range of important skills including literacy.

"Whilst the opportunity to study for qualifications will be a central feature of the senior phase, there will be other planned opportunities for developing the four capacities.⁵ These will include an on-going entitlement to learning and experiences which continue to develop a young person's literacy and numeracy skills, skills for life and skills for work." (Scottish Government, 2008, p. 39)

Curriculum for Excellence represents a different approach to learning intended to help young people develop skills, knowledge and understanding in more depth. Many of these approaches require active and collaborative learning which involve thinking and talking together to discuss ideas and solve problems. Young people are more active participants in their own learning as a result of Curriculum for Excellence. Activities such as independent learning, research and enquiry, sharing learning with peers through presentations and debates, and written reports are now more prevalent in the upper secondary. These activities require the development and application of literacy skills and are raising standards and expectations.

New qualifications also complement the *Curriculum for Excellence*'s fresh approach to the way young people learn. *Building the Curriculum 5: A framework for assessment states:*

"The next generation of National Qualifications will be designed to reflect the values, purposes and principles of *Curriculum for Excellence* and to develop skills for learning, life and work. The qualifications will offer increased flexibility, provide more time for learning, more focus on skills and applying learning, and greater scope for personalisation." (Scottish Government, 2011, p. 32)

The Scottish Qualifications Authority (SQA), Scotland's national awarding and accreditation body, has embedded this principle within their qualification framework to ensure key skills for learning, life and work are developed through subject qualifications. Their framework of broad, generic skills (literacy; numeracy; health and wellbeing; employability, enterprise and citizenship; and thinking skills) is derived from *Building the Curriculum 4: Skills for learning, skills for life and skills for work.* These skills sit alongside knowledge, understanding and subject-based skills.

In particular, the new National Qualifications support the development of literacy skills across the curriculum and provide valuable formal recognition. Specific qualifications in literacy complement National Qualifications in English and aim to drive up standards in literacy while providing a more flexible approach.

"All new National Qualifications will support the development of literacy skills across the curriculum and help raise overall standards. In addition, new units in literacy at SCQF levels 3, 4 and 5 will be developed to provide formal recognition of the skills developed through *Curriculum for Excellence*. These units will also be available to adult learners." (Scottish Government, 2010, p. 10)

⁵ The purpose of *Curriculum for Excellence* is to support children and young people to be successful learners, confident individuals, responsible citizens and effective contributors. These are known as the four capacities.

Figure 1 explains where the new qualifications sit in relation to previous qualifications within Scotland's national qualifications framework, the Scottish Credit and Qualifications Framework (SCQF).⁶

Figure 1. The Scottish Credit and Qualifications Framework (SCQF) – showing levels correspondence to the European Qualifications Framework (EQF)

SCQF Level	National SQA Qualifications	Equivalent EQF Level
7	Advanced Higher/ Scottish Baccalaureate	5
6	Higher	4
5	National 5 (previously: Standard Grade Credit)	3
4	National 4 (previously: Standard Grade General)	2
3	National 3 (previously: Standard Grade Foundation)	1
2	National 2	
1	National 1	

Source: European Commission, Eurydice, 2015

The Scottish Government, Education Scotland and its partners have developed a new online benchmarking tool to support local authorities, secondary schools and teachers to analyse and compare data relating to performance in the senior phase. Introduced in September 2014, 'Insight' is designed to help bring about improvements by identifying areas of success and where improvements can be made. The tool focuses on the national measures of improving positive destinations, increasing levels of literacy and numeracy, improving outcomes for all pupils and tackling disadvantage. This underlines the commitment in Scottish education to ensuring all young people leave school with the highest possible levels of literacy.

Developing literacy skills beyond the classroom

National curriculum guidance encourages schools to plan flexible pathways for young people in the senior phase to ensure they leave school with an appropriate portfolio of qualifications, awards and skills. Where young people are following a vocational pathway, these flexible routes ensure they continue to develop their literacy skills in relevant contexts with a focus on the practical application of literacy skills. For example, learning for literacy qualifications can be evidenced through the practical application of reading, writing, talking

⁶ The Scottish Credit and Qualifications Framework (SCQF) is Scotland's national qualifications framework. It brings together all mainstream Scottish Qualifications. The SCQF is the responsibility of a partnership involving the Scottish Government, the Scottish Qualifications Authority (SQA), the Quality Assurance Agency for Higher Education (QAA) (Scotland), College Development Network, and Universities Scotland. Each qualification is allocated a level according to how demanding the qualification is.

and listening skills in work experience placements or skills for work courses. Education Scotland has provided examples of learner pathways on its website to support schools to develop their senior phase. Case Study 4 illustrates how one school is raising the attainment and aspirations of its young people through personalised pathways that take account of the local context and develop literacy skills both in and beyond the classroom.

Case Study 4: Craigroyston Community High School, Edinburgh

Raising attainment through literacy across learning

Craigroyston Community High School is a comprehensive school in Edinburgh with approximately 430 pupils. Almost all the school population are living in areas of high deprivation. The school has worked hard to provide personalised pathways that are supporting young people to achieve more highly and enter positive destinations beyond school. A key part of this strategy is developing employability skills including literacy and communication.

The English department has had a key role in driving up standards of attainment in literacy and English. When the present curriculum leader took up her position, no pupils achieved an award in Higher English (SCQF level 6) and only 2 pupils achieved a Credit pass at Standard Grade (SCQF level 5). In 2014, 42 pupils achieved an award in the new National 5 qualification (SCQF level 5), 15 achieved a Higher pass in English and 3 pupils achieved an Advanced Higher award (SCQF level 7). The department has achieved this success by focusing on essential literacy skills and ensuring young people have opportunities across all learning to develop these skills. Staff across the school were trained in approaches to developing reading and writing skills, which have been put into practice across the curriculum. Not only has the English department seen attainment rise, but also the art and design and the drama departments. They put this down to the work which has been done on writing skills across learning. The common language used across the curriculum has helped pupils become more confident and secure in their learning. There is also a strong focus across the school on reading. All pupils are encouraged to read for enjoyment. This is incentivised by a Reading Adventure programme in partnership with the school library. Pupils enjoy having their achievements in reading celebrated through this scheme.

In addition, staff work hard to meet individual pupil needs. A significant number of young people in first year have reading ages of 5-6 when they come to secondary. These young people receive extra support to develop their basic literacy skills. Young people learning English as an additional language make up 11% of the learners at the school and they have been encouraged to excel in their own language as well as English. They can also gain qualifications in English for Speakers of Other Languages (ESOL).

Increasing employability is a core priority for the school and there is a strong focus on skills for work at all stages. This includes through meaningful and wide ranging partnerships which provide work experience placements and skills for work courses such as boat building and childcare. Within these contexts, young people are encouraged to develop and apply their literacy skills in real and relevant contexts.

Nills for Work courses enable young people to develop practical skills and to improve their employment prospects by developing a range of employability skills. The courses are mainly taken in further education colleges, which work in partnership with the school. Employers and training providers may also be involved.

Most secondary schools offer a wide range of opportunities for personal achievement, service to others and practical experience of the world of work as central to young people's senior phase experience. Schools plan to develop literacy skills across all these contexts and often in partnership with community learning and development services in the local area. Many senior pupils in secondary schools are developing their literacy and communication skills through enterprise activities, charity work, work placements, community involvement and volunteering. They also support younger pupils in developing their literacy skills, for example through paired reading, lunchtime support clubs and by acting as peer tutors in class. Where young people are encouraged to reflect on the skills they are developing through these activities and are given feedback on how to improve, they are more aware of their abilities and are making better progress. As illustrated below in Case Study 5, secondary schools are increasingly using these opportunities for senior pupils to accredit personal achievement through awards such as leadership or volunteering awards. This supports young people to recognise how these skills can be transferred across different contexts.

Case Study 5: Braes High School, Falkirk

Senior pupils acting as literacy ambassadors

Senior pupils at Braes High School in Falkirk can achieve a Literacy Leader Award by acting as literacy ambassadors. This involves supporting younger pupils to develop their literacy skills through planned activities. The literacy ambassadors have planned and delivered an event for younger pupils aimed at developing reading, writing, listening and talking skills in a range of cross curricular activities. They created a character called 'Malefisentence', the enemy of literacy. Younger pupils had to tackle and defeat the villain. This involved reading for information about the character to establish her weaknesses and devising a plan of action which they presented to their peers. Younger learners have responded very positively to having older peers as literacy role models. They have found the activities led by the senior pupils highly engaging and productive. In addition, senior pupils have had the opportunity to progress their own literacy skills within a relevant and rewarding context.

Impact on young people's learning and achievements

Quantitative data and qualitative evidence reveal that this focus on literacy across learning has had a positive impact on outcomes for young people.

The Programme for International Student Assessment (PISA) survey conducted in 2012 shows that Scottish pupils aged 15 continue to perform above the OECD average in reading. Scotland's performance has remained steady since 2006 (see Figure 2).

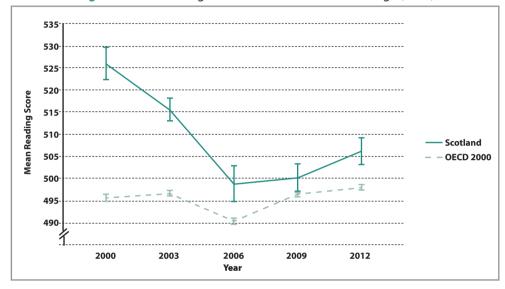


Figure 2. PISA Reading Trend Scotland and OECD average (2000)

Source: www.oecd.org/pisa/keyfindings http://pisa2000.acer.edu.au/index.php

In 2012, there was a reduction in the performance gap between disadvantaged and less disadvantaged pupils compared with 2009. Scotland was the only UK country to see a significant reduction in the gap. The performance of lower-achieving pupils (below level 2⁸) is the area in which Scotland is performing most strongly in relation to other countries, and in which it has shown most improvement (see Figure 3).

The PISA achievement levels in literacy are divided into proficiency levels ranging from level 1b to level 6. Low achievers are defined as performing below level 2, and top performers as performing at level 5 or 6.

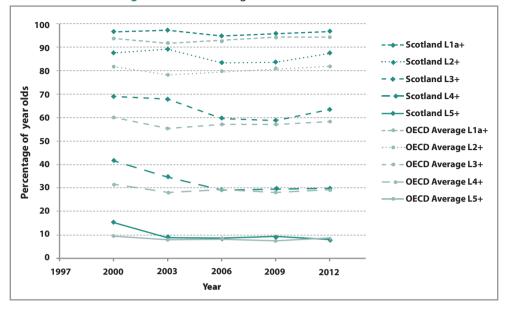


Figure 3. PISA Reading Performance Distribution

Source: www.oecd.org/pisa/keyfindings http://pisa2000.acer.edu.au/index.php

Data from National Qualifications⁹ suggests attainment in literacy is improving. New National 4 (SCQF level 4) and National 5 (SCQF level 5) qualifications were taken for the first time in 2014. Pass rates in new National 4 English (95.7%) and National 5 English (87.3%) qualifications were above the all-subject pass rates at these levels (93.9% and 81.3% respectively). 30,525 learners attained new literacy qualifications across SCQF Levels 3 to 5 in the first year of these new qualifications. The Higher English (SCQF level 6) pass rates have risen year-on-year since 2006 and in 2014, 75.9% achieved a pass. The number of young people leaving school with no qualifications at SCQF level 3 or above is an improving picture. In 2013 the figure was 1.5% compared to 1.7% in 2012 and 2.2% in 2011.

School leavers data¹⁰ also suggests the new curriculum in the upper secondary is meeting the needs of young people better, encouraging them to stay on at school and achieve more highly. Since 2009/10 the staying on rate has been increasing, reaching 62% in 2014/15. Almost two thirds of 2013/14 leavers left at the end of sixth year. Around 97% of leavers attained literacy at SCQF level 3 or above. 91.7% of 2013/14 leavers were in sustained positive destinations in March 2015, again showing an increase from previous years (90.4% for 2012/13).

Evidence from inspection and review activities suggest that the majority of children and young people are making good progress in their learning in literacy and English. They

⁹ Source: SQA 2014 (http://www.sqa.org.uk/sqa/64717.4239.html).

Nource: Scottish Government, Attainment and Leaver Destinations Supplementary Data, 2015b(http://www.gov.scot/Topics/Statistics/Browse/SchoolEducation/leavedestla/follleavedestat/attainmentandleavers1314)

are enjoying their learning as a result of a range of relevant and stimulating contexts and they are engaging well with a wider range of texts. Across subjects and in learning beyond the classroom, young people are applying their literacy skills well. Staff are also reporting increased confidence in delivering literacy across learning. Teacher questionnaire responses from the Scottish Survey for Literacy and Numeracy 2014 (Literacy) found that secondary non-English teachers from all curriculum areas regularly found opportunities to reinforce pupils' literacy skills. Over three-quarters of teachers in each curriculum area reported that they did this most lessons or most weeks.

Literacy in Youth Work and community settings

In addition to the emphasis on literacy in secondary schools, literacy continues to be a focus in youth work. Youth work is an educational practice which takes place outside school, in community settings. It contributes to young people's learning and development and recognises the young person and the youth worker as partners in a learning process. The young person takes part voluntarily and chooses to be involved. The purpose of youth work was well defined in *Step it Up*¹¹ following extensive discussion and consultation with the youth work sector. It is defined as: building self-esteem and self-confidence; developing the ability to manage personal and social relationships; creating learning and developing new skills; encouraging positive group atmospheres; building the capacity of young people to consider risk, make reasoned decisions and take control; and developing a 'world view' which widens horizons and invites social commitment.

There is a crossover age group between youth work and adult literacies with adult literacies generally regarded as working with a 16-plus age group. Young people can choose where they want to engage for support. Youth work and adult literacies practice share some common principles: effective work with young people starts from the interests, hopes and aspirations of young people and this is a principle shared by adult literacies work.

Skills and expertise undertaken by youth work is vital in taking forward current priorities of the Scottish Government. Meaningful partnerships with the youth work sector and wider Community Learning and Development partners are essential to ensure that all young people have the skills and experience required by employers. There remains the potential to establish innovative and creative partnerships to assist young people to embrace life and to support them through key life stages. Working collaboratively on youth literacies through youth work enables partner organisations to meet individual and national outcomes.

Nource: Step it Up-Charting Young People's Progress http://www.youthlinkscotland.org/webs/245/documents/StepItUpReport.pdf

Conclusion

Despite positive progress being made through these strategies, the Scottish Government is not complacent. The recent Scottish Survey of Literacy and Numeracy 2014 (Literacy)¹² shows a slight decrease in overall reading and writing performance in 2014 compared with 2012 in a few indicators. It also reveals that there is still much work to be done to close the attainment gap between the least and most deprived children and young people in Scotland. The gap in attainment has remained the same in all but two measures for reading and writing.

Scotland continues to seek ways to improve the life chances of children and young people from disadvantaged backgrounds. Education Scotland is currently working closely with the Scottish Government to take forward important initiatives to address these aims. Literacy is a key theme in the Scottish Government's Raising Attainment for All Programme.¹³ In addition, the Scottish Government has recently launched the Scottish Attainment Challenge, a programme funded by £100 million over four years, aimed at tackling educational inequality by closing the gap in attainment between the most and least advantaged learners in primary schools. It will target improvements in literacy, numeracy and health and wellbeing, building on, and complementing, existing activity by local authorities and the Scottish Government to address the gap in attainment between our most and least advantaged communities. In addition, the appointment of Attainment Advisors for each local authority will support local improvement activity by creating local and national networks.

Education Scotland will continue to support practitioners to develop their practice using research-based evidence and by disseminating good practice nationally. It will continue to use its inspection activities to support schools to raise attainment in literacy and close the attainment gap.

Since its implementation in 2010, *Curriculum for Excellence* has increased the priority given to literacy in the senior phase. Learning and teaching approaches are actively engaging young people in their learning, encouraging them to apply their learning and think more for themselves. It has also ensured young people's experiences in the upper secondary combine opportunities to achieve a range of awards and qualifications with the development of relevant skills they can apply across a variety of contexts in their lives and work. Literacy remains a national priority in Scotland. We will continue to improve young people's confidence, skills and abilities in literacy to raise attainment, reduce inequity and improve the life chances and employment prospects of Scotland's young people.

¹² The Scottish Survey for Literacy and Numeracy was introduced in 2011 and monitors national performance in literacy and numeracy in alternate years. The survey assesses pupils at Primary 4 (age 8-9), Primary 7 (age 11-12) and Secondary 2 (age 13-14).

¹³ The Scottish Government's Raising Attainment for All Programme was launched in June 2014, to support improvement in attainment and achievement through collaborative working across the country.

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Arts and Literacy: the Specific Contribution of Art to the Development of Multiliteracy

ABSTRACT

Deducing the forms of a work, situating it within its history, putting into words an aesthetic experience, proposing and confronting interpretations, even conceiving, producing and assessing a work of art within a creative process, comparing the artistic productions of one art to those of another, all mobilise the capabilities of reading, oral expression and writing, while also calling upon a demanding practice of both verbal language and other languages – graphical, sensitive, bodily – in complex activities of semiotic transposition. Thus, literacy (understood as the broad competence for thinking, learning and self-construction in the elaborate uses of every system of signs) is at the heart of the practices of art present not only in the specialised subject areas but also in the subject areas of language and the human sciences. Learners have to learn to talk and write about art in stimulating situations which are likely to offer students an original yet demanding way of developing their competences. This paper argues for the development of art related literacy practices at the end of compulsory education and analyses the French school system from this point of view.

Keywords: art and literacy, writing and talking on art and literacy, art education, multiliteracy

AUTHOR



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art education out of its usually peripheral status in ordinary classrooms in order to reconsider their specific contributions to learning and socialisation.



This article takes a cross-curricular approach to literacy. It is inscribed within an enlarged definition of multiliteracy (New London Group, 1996; Kalantzis, Cope, & Cloonan, 2010) so as to emphasise its multiple and integrating aspect vis-à-vis the definition of a core literacy, which CIDREE defines as follows: "Literacy includes the capacity to read, understand and critically appreciate various forms of communication". The assumption I shall defend here is that literacy practices integrated within arts practices are specifically a part of this multiliteracy and that they provide a unique contribution to "21st century literacy skills". The first section of this contribution will survey the complexity of current definitions of (multi)literacy. However, it also emphasises that the heart of this multiliteracy is constituted by literacy-in-the-restricted-sense, a core literacy, based upon natural language as a fundamental tool, giving access to the "social brain" (Mercer, 2013). In the following section, I will show how multiliteracy and literacy-in-the-restricted-sense are called upon by the practice of arts, which, in turn, specifically enrich them. I intend to show that, when the practices of arts are deployed in all their potentialities without being ejected to the periphery of the school universe, they demandingly bring into play the fundamental competences in all the dimensions of literacies. Finally, I will refer to French upper secondary curricula to assess whether these potentialities are exploited and what perspectives might be opened that could concern other educational systems in Europe.

Paradoxically, although the integration of arts and cultural education into curricula has become an evidence, in France, from the pre-elementary level (ISCED 0) to the mid-secondary level (the French "collège", ISCED 3), it seems that on entering upper secondary education, artistic subjects disappear from the majority of curricula (except to some specialised ones) and thus the specific literacy practices associated with them also disappear.

Definition of multiliteracy

The concept of literacy has been used in major studies of comparative efficiency (PISA, PIRLS; OECD, 2014). In France, however, the concept is not easily grasped since it has no equivalent and its successive definitions have never been unanimously accepted¹ (Hébert & Lépine, 2012; Jaffré, 2004; Bautier, Crinonet et al., 2006; Bautier & Rayou, 2009). The search for a French language equivalent to "literacy" occupying the same central position in political discourse and research is doomed to failure. The nearest concept in this role is perhaps "maîtrise de la langue" (mastery of language) which, in spite of the misunderstandings which it can create (Nonnon, 2008), seems to be functionally the closest (Eduscol, 2008). Here is the most recent formulation to be found in the core curriculum for compulsory schooling ("Socle commun de connaissances, de compétences et de culture", French National Core Curriculum, Knowledge, Competences and Culture Core Standards):

"The domain of languages for thinking and communicating covers four types of language, which are both objects of knowledge and tools: the French language; foreign or regional modern languages; scientific languages; and the languages of the arts and

¹ No more so than its spelling, which fluctuates between *literacy, littéracie* and *littératie*.

the body. This domain determines access to other knowledge and a balanced culture; it implies the mastery of codes, rules, systems of signs, and representations. It brings into play knowledge and competences which are called upon as tools of thought, communication, expression and work, and which are used in all areas of knowledge and in most activities. The acquisition and mastery of each of these languages cannot be compensated for by the acquisition and mastery of another." (CSP, 2015)

If we compare this with the definition of literacy of the NCTE and that of CIDREE, we can measure the extent to which the Anglo-Saxon definition has evolved towards an even greater extension in passing from the singular to the indefinite plural:

"Literacy has always been a collection of cultural and communicative practices shared among members of particular groups. As society and technology change, so does literacy. Because technology has increased the intensity and complexity of literate environments, the 21st century demands that a literate person possess a wide range of abilities and competences, many literacies. These literacies are multiple, dynamic, and malleable. As in the past, they are inextricably linked with particular histories, life possibilities, and social trajectories of individuals and groups. Active, successful participants in this 21st century global society must be able to:

- Develop proficiency and fluency with the tools of technology;
- Build intentional cross-cultural connections and relationships with others so as to pose and solve problems collaboratively and strengthen independent thought;
- Design and share information for global communities to meet a variety of purposes;
- Manage, analyse, and synthesise multiple streams of simultaneous information;
- Create, critique, analyse, and evaluate multimedia texts;
- Attend to the ethical responsibilities required by these complex environments." (NCTE, 2008)

In what follows, I will examine the elements of this definition in the light of the question: To what extent do the arts (as both practice and teaching) specifically contribute to the acquisition of literacy skills at the upper secondary level?

Literacy-in-the-restricted-sense

Historically, the first definition of literacy, what I call *verbal literacy*, or *literacy-in-the-restricted-sense*, designates elementary competences linked to the mother tongue: speaking, reading, and writing. This is the definition of the field of research devoted to mother tongues, in which "literacy" is practically always equivalent to "verbal/printed literacy" (IAIMTE, 2015).

This restricted definition remains fundamental to us. *Verbal literacy* still constitutes the very heart of the more extensive definitions which have succeeded it, as well as remaining fundamental whenever one looks into not only literacy as the result of acquisition process but also into its mere *process of transmission and acquisition*. The extension and complexification of the definition of literacy/literacies should not obliterate the crucial idea that any form of literacy necessarily integrates literacy-in-the-restricted-sense as a fundamental language competency (Grossman, 1999).

Socio-cognitive approaches to language activity

Human speech is indeed the tool which is most present in every learning process in both the school framework and in informal education (Bernié & Brossard, 2013; Daniels, 2001; Brossard & Fijalkow, 2008; Brossard, 2005; Bronckart, 1997; Clot, 1999). Even if learning mobilises other semiotic modalities (for example in areas such as *studio art* or physical education), natural language remains the mediator tool of learning (Mercer, 2013): "Knowing how to speak, read and write French conditions access to every area of knowledge and the acquisition of every competency" (Eduscol, 2015).

Not only is natural language the universal translator which at least enables knowledge, including non-verbal knowledge, to be put into words, but it is also indispensable for creating learning contexts, scaffolding (as defined by Bruner, Wood et al., 1976) learning activities, designing as well as conceiving, negotiating, regulating and assessing situations favourable to learning (Sensevy, 2011; Sensevy et al., 2005). "21st century skills" is generally used to refer to certain "core skills such as critical thinking and problem-solving, creativity and innovation, communication and collaboration, digital literacy" (CIDREE, 2015). All these *core* competences are themselves based upon a *root* competence: the ability to make diversified use of natural language for thinking, problem-solving, inventing, co-acting (collaborating and com-municating). All these literacy activities, to which I will return later, are carried out in a context which is fundamentally verbal. This explains the importance which NCTE grants to *extended* verbal literacy: "Communication in mother tongue (reading, writing, speaking, understanding, critical thinking)" (NCTE, 2008).

This is merely a reminder of the contributions of the *socio-cultural theory of education* and cognitive development, for which Mercer (2013), developing the work of Vygotsky [2012] coined the metaphor of the "social brain". The main thesis of this research field can be formulated as follows: language is not simply a medium through which thought is "expressed"; it is the very means of cognitive activity (Jones, 2008). We think because we produce signs which enable us to recover and re-launch our own thinking, in a continuous movement. This model articulates the social domain with cognitive constructivism insofar as it insists on the fact that, before being interiorised and individualised, thinking is shared in discursive dynamics (Wertsch, 1979). We think **together** and this is how we learn to think individually, through the permanent exchange of signs. See also the concept of "social semantics" as a constitutive concept in multiliteracy (Hodge & Kress, 1988).

These principles have a direct application if we take formal education into account. If indeed language is a tool for cognition, it is, of course, also the main instrument of the teacher: numerous studies analyse the work of the teacher as language action (Barnes, 2008). *Making pupils speak (or write) so that they learn* is a fundamental professional expertise.

Symmetrically and inseparably, however, the work of the teacher produces better learning effects if it does not limit itself to being projected towards the pupils as in frontal transmission teaching. Learning implies that pupils rework the teacher's language and the language of knowledge, that the *supplied* language is progressively replaced by *reworded* language (Rabatel, 2010). One does not learn because one listens and repeats, no more so than because one imitates model behaviours. One learns because one speaks and writes, and more broadly because one *produces signs in situated learning interaction*.

Verbal language and other languages in the ordinary practices of art

What links are there between the practices of art and literacy? To answer this question in a school context, I shall begin by leaving the school world so as to observe the place occupied by literacy (in both the restricted and broader senses) in the "reference social practices" (Martinand, 1981) which can be observed in the worlds of art (Danto, 1964; Becker, 1988). Let's ask a simple question: Who speaks or writes around works of art? Before this, however, let's clarify three possible misunderstandings. First restriction: here I will not deal with the language arts (literature, poetry, etc.) or the representation of the language arts in other arts. Second restriction: I will not reduce literacy to its sole verbal modalities: "research into literacy education has tended to stem from west-centric views where literacy is often defined as reading and writing traditional forms of text and often measured through standardised tests." (Barton, 2013, p. 2). Amongst the multiple literacies postulated by the most recent definitions, the arts occupy a separate place which specifically pertains to research into "art literacy" in the domain of the teaching of art as such (Albers & Sanders, 2010; Barton, 2013): "these literacy skills relate to other extraneous ways of knowing, unique to the particular subject areas under investigation that must also be learnt..." (Barton, 2013, p. 6) Third restriction: it is completely outside my intent to wish to instrumentalise art in schools, so that it might serve a single finality, that of developing only basic literacy skills (Barton, 2013). The authority of Dewey (1934) and Goodman (1984) should suffice to remind us that art does not have to justify itself in the global educational project of our modern societies, of which it constitutes an essential dimension (Kerlan, 2007, 2008). Here, I look into a simple idea: in practising arts for themselves we can develop transferable literacy skills. In other words, if the practices of art are to develop multiliteracy, this is precisely because they are not subjected to this sole objective.

Art in ordinary settings

If we examine from the ethnologist's perspective the social practices which the actors themselves call "artistic", we can observe multiple verbal exchanges or, more exactly, multimodal interactions (Duncum, 2004; Rabatel, 2010) which interweave enunciations in natural language and complex and mobile sets of other signs: para-verbal (exclamations, intonation, inflexions), non-verbal signs (mimics, gestures, postures, movements) (Kerbrat-Orechioni, 1990, 1992, 1993) as well as the use of various artefacts (notes, schemas, sketches: "instrumented cognition") (Rabardel, 1995; Vérillon & Rabardel, 1995). The complexity of these semiotic phenomena corresponds to the complex definition of "multiliteracy" (Kress, 2003; Jewitt & Kress, 2003; Kress & van Leuween, 2001).

Analysing the forms of an artwork, situating it within its history, putting into words one's aesthetic experience, proposing and confronting interpretations, even conceiving, producing and assessing a work of art within a creative process, comparing the artistic productions of one art to those of another – all these mobilise reading, oral and writing skills while also calling upon a demanding and intricate practice of both verbal language

and other languages – graphic, sensitive, bodily – through complex activities of semiotic transposition (Müller et al., 2013; Mondada, 2013):

- Around the material production of artworks (*poiesis*): discourse of the artist (Corbel, 2012; Dessons, 1994), preceding, accompanying or prolonging creation (Villagordo, 2012; Ernst, 1994; Stiles & Selz, 1996; Passeron, 1996)
- Around the interpretation of artworks: art historians (Baxandall, 1979; Zerner, 1997; Barolsky et al., 1996), iconologists, art philosophers, aestheticians;
 - Around mediation: museum guides, teachers (Leinhardt, Crowley, & Knutson, 2002);
- Around the aesthetic experience of artworks: discourse of the "art critic" (Brunot, 1930; Frangne & Poinsot, 2001; Carrier, 1987; Gaulmier, 1983; Schefer, 2007); discourse of "enlightened art-lovers" or "connoisseurs"; and "writings on art" in the literary tradition stemming from Diderot and Baudelaire (Vaugeois, 2005; Dethurens, 2009);
- Around artworks as material objects: art merchants, gallery owners, exhibition organisers (Docquiert, 2011), stage designers, museum curators, restorers, art experts, buyers and collectors (Graham, 2010).

Few of these practices are transposed into upper secondary education. In France, talking-about-art is exclusively practised in certain specialised options which concern a very limited number of pupils: Music, Dance, Art History and Visual Arts (MEN, 2001). The only forms practised by all pupils concern literature in the final examinations in French (Pratiques 68, 1990; Jey, 1998). In the final analysis, most practices of talking-about-art from outside the school universe are excluded from this universe, particularly those pertaining to the expression of a sensitive reception or a spontaneous appreciation, the voices of professional "spectators", critics, journalists and enlightened art-lovers.

Art outside the legitimised forms?

If we consider that talking-about-art does not only exist in expert and normed forms, we can go even further. The ethnologists and sociologists of art take seriously the words of the profane, such as museum visitors, pupils, the ordinary man in the street... and have identified multiple forms of talking and writing about art which could be called "informal" and/or "ordinary" (Le Quéau, 2007; Heinich, 2004).

Talking-about-art is thus not reserved for scholarly practices: it is also present in discussions between friends about the choice of a film, the comparison of the qualities of musicians or singers, the choice of clothing or accessories. The extension of the concept of aesthetic experience (Dickie, 1964; Beardlsey, 1988; Zangwill, 2011; Chateau, 2010), of aesthetic pleasure (Vouilloux, 2011), of aesthetic appreciation and of aesthetic judgement (Schaeffer, 1996, 2015) fuels contemporary debates about the re-readings of Kant (Genette, 1994, 1997) even about the return of a metaphysical ontology of the Beautiful (Zemach, 1997; Réhault, 2013). In profane guise, one can find the same fundamental questions of the theories and specialists of art: What is art? What is Beauty and what criteria to use to decide? What is its purpose? How much is it worth? Who decides if this is beautiful or ugly? (Morizot, 1998). These debates also concern school (Montandon & Perez-Roux, 2014).

The sociology of education and the sociology of learning (Bourdieu & Passeron, 1990; Bernstein, 1975; Lahire, 1995) denounce invisible phenomena of misunderstanding which

can explain school failure: the relationship to art is one such phenomenon just as much as the socially constructed "relationship to school" and "relationship to knowledge" ("rapport à l'école", "rapport au savoir", Bautier & Rochex, 1998).

Reference to the ordinary practices of art challenges the reductive prejudices concerning art

How does this detour via discourse on art, which is neither expert, nor formalised, nor given value, contribute to our reflection on teaching multiliteracy by means of the arts in upper secondary education?

First, secondary education privileges the "legitimised arts" while ignoring the forms of art and discourse which are those of the pupils. Nevertheless, in France, the official documents define what art is, using an inclusive definition even if this open definition has been challenged (for example: Fumaroli, 2007). In 2008, the French Ministry for Education introduced the teaching of history of arts (the plural is important: not "art history", but "history of arts") in compulsory education (that is, starting from early childhood education from age 3 to lower secondary education until age 16) (MEN, 2008; Baldner & Barbaza, 2013). The list of "arts" recognised goes far beyond the list of legitimised arts and includes forms of popular art: "visual arts" integrate not only the traditional plastic arts but also photography, illustration and cartoon; "arts of space" associate architecture with urbanism and the art of gardens and landscapes; "sonic arts" put on an equal footing on vocal and instrumental music, film music and "present day" popular music; the "performing arts" do the same for drama, dance, mime, circus arts, street arts, puppet theatre and even equestrian arts, fireworks and fountains (MEN, 2008).

This perspective, which upsets the implicit tenets of arts education in France in turn challenges the bashfulness of the upper secondary (the French "lycée") curriculum with its extremely cautious opening to this inclusive vision, a vision which has the advantage of creating a link between the practices that pupils from every milieu recognise as theirs and the practices recognised as legitimised. Yet it is precisely during upper secondary education that the arts (at least music and the visual arts) disappear from the list of subjects, except in arts specialised curricula concerning very few upper secondary students. The opportunity of linking informal, personal literacy practices and formal, school literacy practices disappears. Pupils are invited to adopt expert practices as receivers only; they are required to be historians of literature or semiologists (Todorov, 2007; Langlade, 2004; Breyer, 2004; Citton, 2010, 2007)

Motivating and demanding literacy practices

There is a whole body of research dealing with the positive effects of arts teaching on literacy-in-the-restricted-sense. Barton (2013) has surveyed this literature. The promoters of integrating arts teaching into curricula and practices stress this important dimension (Burnaford, Brown, Doherty, & McLaughlin, 2007). However, most of this literature is devoted to primary education in which the teacher is a multi-subject teacher.

Since this is true for primary and mid-secondary levels, should it not also be true for the upper secondary level? It is important to change the conceptions held by pupils, teachers and parents regarding artistic subjects, the usefulness of which concerning fundamental school learning is sometimes challenged (Deasy, 2002). Not only do artistic and cultural practices constitute an essential dimension of curricula given their specific contribution to art literacy, but they are also essential for the construction of multiliteracy, since they call upon skills at the intersection of experiences and languages (verbal, bodily, iconic, acoustic, graphic).

The close link between "artistic practices" and "literacy practices" should be analysed in detail. I use the term "practices" and not just "teaching", for these practices go far beyond the formal teaching which takes place in dedicated lessons (music, visual arts, dance, art history, lessons in aesthetics). In fact, pupils enter into contact with the arts in multiple but isolated worlds, and the task of education is to establish links between these experiences and to validate them as socially recognised knowledge. Pupils all have a personal practice of the arts, at least a reception practice of the popular art forms. They sometimes have a production practice (dance, music, writing) (Penloup, 1999). Usually, they work with works used as pedagogical material in their classes (mainly for the study of literature, philosophy and history).

Interpersonal experiential mediation

The most frequent literacy practices are what sociologists call *mediation process* (Heinich, 2009) which is none other than a joint activity in front of an artwork: co-perceiving, co-feeling, co-interpreting, co-analysing, and of course co-producing, co-creating. This is obviously central in dissymmetrical interactions such as the teacher-student relationship in a class, or the guide-visitor relationship at an exhibition. However, this *co-experience* of art (in the extended sense of Dewey, 1934 and 1938) is also constitutive of ordinary, informal practices amongst peers: two friends listening to the same piece of rap with shared earphones and talking about it are fully engaged in a co-experience of art which can easily be seen as co-talking-about-art (Rickenmann et al., 2009).

For my part, this is how I interpret the notions of "communication and collaboration" included in the definition of literacy of CIDREE, defining the *social and ethical dimension* of multiliteracy which could be called the *literacy of sociality* (learning to live together, and to begin to feel together, or even to care): "21st century skills" is generally used to refer to certain core competences such as critical thinking and problem-solving, creativity and innovation, *communication and collaboration* [emphasis added], digital literacy" (CIDREE, 2015). Notions which are also found in the NCTE definition: "Build intentional *cross-cultural connections and relationships with others* [emphasis added]" (NCTE, 2008).

Here, I must recall that, in this approach, language is not conceived as a technical medium but as the very material for effecting these "connections and relationships" or this "information sharing": this is not a mere exchange of content, but, strictly speaking, a *collaborative action* through which subjects mutually construct each other in exact proportion to their material and symbolic co-operation (Lave & Wenger, 1991).

The sensitive component

I shall pursue the deployment of the concept of multiliteracy by broaching one of the facets which its definitions do not sufficiently highlight. The cognitive psychology of perception (Arnheim, 2004) remind us that all the sensorial modalities of the various arts (sight, hearing, touch) do not pertain solely to low level neuronal treatment. A perception is an experience which is in equal measure both cognitive and bodily; it is a complex perceptive-affective-cognitive knot to which the definitions of *literacy* refer: "Manage, analyse, and synthesise *multiple streams of simultaneous information* [emphasis added]" (NCTE, 2008).

Indeed, these "multiple streams of simultaneous information" should not be reduced to "multimedia texts" and other messages. For the anthropological function of art is to apprehend, express, interpret and share the *striking experiences of our lives* which constitute *fundamental human problems* which must be "resolved" (Citton, 2010, 2012; Laplantine, 2005; Petit, 2002).

By means of this particular angle, we return to the CIDREE definition of literacy: literacy competences concerning "critical thinking and problem-solving" do not only concern operations of thought dealing with concepts or abstract and rational reasoning but also more global experiences which are *crucial moments of life for the individual*. Even in the most ordinary of lives, far-removed from the restricted practices of art in Bernstein's sense, these events are legion: a person may be moved by a song, a tragic news story, a final in his favourite sport, a landscape encountered on holiday, a reality TV or talent show (Holmes, 2010).

To put it briefly: multiliteracy as defined today must necessarily integrate a *sensitive dimension*. Amongst the multiple literacies we must also identify a sensitive literacy or *aesthetic literacy* after Dewey, a competency in signifying (making signs of) our sensitivity, our capacity for openness (Raney, 1999) to sensitive experiences. This goes far beyond a mere education in perceptual literacy (Cerkez, 2014), since this is a social reconstruction of perception, and appreciation which is undoubtedly the central contribution of education through art (Flood et al., 2007, 2008; Narey, 2008). "Literacy is not simply a separation of language systems that can be tested or skilled to death. It is not, nor can it be, enacted by simply adding on another communicative mode to traditional print literacy and calling it "multimodal." Literacy is entangled, unable and unwilling to be separated from the other modes, media, and language systems that constitute the very messages that are sent, read, and/or interpreted. (...) Multimodal literacies research considers the multifaceted ways in which languages (art, drama, music, movement, written/oral, math) can be studied in school contexts" (Albers & Sanders, 2010, p. 4).

Symmetrically, from the perspective of the socio-cultural theory of education (Mercer, 2013), when talking or writing about works of art (restricted or enlarged culture, Bernstein, 1975), one calls upon verbal literacies in a particularly demanding way: perceptual and experiential. Living, perceiving, feeling, sharing salient aesthetic experiences, even in ordinary and trivial settings *requires finding the words (or alternative signs) to say so.* This dimension is perfectly compatible with an education in well-equipped, active critical thinking: sensitive literacy is a sensitivity which is not only passive but also active ("manage, analyse and synthesise"), multidimensional ("simultaneous information") and "critical" ("analyse [...] and evaluate") in the sense that it is capable of closely examining the raw

data of aesthetic experience in order to distance them. Amongst 21st century skills critical thinking also has a dimension of critical perceiving and critical sensibility, which consists in having learnt how to undo the masks of emotion, how to foil the manipulations of the effects (for example, the manipulations of advertising discourse or religious or political propaganda).

Multiliteracy and art literacy in the French upper secondary curricula

Despite their educational importance, their multiform presence in informal practices, and the motivation they can produce in support of cultural, social and school learning, it must be admitted that the artistic dimensions of multiliteracy are marginalised in French upper secondary curricula.

So, the fundamental French official documents, the Socle Commun de Connaissances, de Compétences et de Culture (Core curriculum of knowledge, competencies and culture, MEN, 2006 and 2014) and the History of Arts curriculum (MEN, 2008) call for the finding of a balance between a sensitive approach and a technical approach. The National French Core Curriculum 2015 quotes: "The pupil will express in writing or orally what he feels before a literary or artistic work, he will support his judgement with it, formulate his hypotheses on its significations and propose an interpretation [of the work] based notably upon its formal and aesthetic aspects" (CSP, 2015, p. 15) History of Arts curriculum 2008 quotes : "The objectives of the teaching of history of arts are [...] to enable [pupils] to progressively access the level of "conoisseurship" relevantly employing an initial sensitive and technical vocabulary" (MEN, 2008, p. 3). And the most recent official Roadmap to Art Education cosigned by the French Ministry of Education and French Ministry of Culture quotes: "The teaching of the arts includes a cultural dimension which [...] is essentially based upon the approach to artworks and movements, as well as the writings of artists, theoretical texts and technical documents. As often as possible, it is lively: direct and sensitive in a first phase; then reflexive and 'scholarly" (MEN, 2015).

This undoubtedly requires an invitation to use *innovative literacy practices*, breaking with the habitual school forms, which may directly and massively call upon the autonomy and creativity of pupils while inviting them to *create the links* between their own personal culture and school culture by employing the multiple modalities which current digital instruments make available to all. The aim is to make room for *projects* adopting in collaborative forms pupils' experiences in the domain of the arts.

It should also be noted that these forms of work are of such a nature as to re-inject commitment into the common activities of pupils who are at unequal levels of competence; this pertains to another principle contained in the definitions of multiliteracy which I have developed from the outset: the principle of differentiation (CIDREE, 2015).

Multiple attempts have been made to introduce these forms of innovation pertaining to the principles of project-based instruction: we could mention, for example, the Pluri-disciplinary Professional Projects of French vocational high schools (Eduscol, 2000), the Supervised Personal Projects (acronym: TPE; Eduscol, 2005), the Discovery Itineraries in lower secondary education, or the ECJS subject (civic, social and judicial education) (Eduscol,

2014). The French Ministry for Education has very recently proposed the introduction into lower secondary education of Interdisciplinary Practical Teaching (acronym: EPI; Eduscol, 2015). All these measures are based on the same principles: a project chosen and borne by the pupils mobilising several subjects, which is given concrete form in a pluri-semiotic – generally digital – production and which constitutes a duly assessed pluri-disciplinary context for learning.

Essentially and quite simply, the aim is to *put the pupils to work* in a demanding literacy activity: pupils who produce are not only pupil expressing themselves and diffusing information: they are, first and foremost, *pupils who are talking-and-writing-to-learn*.

Conclusion

To conclude, we must resolutely keep in mind that the contribution of pedagogy of multiliteracy does not target the mastery of technical tools. Its main objective is to obtain *pupil investment in tasks*, the condition for success.

"Multimodal literacies instruction is pedagogy with *a fundamental philosophical orientation* that holds that children (and adults) learn best when *engaged* in complex, socially constructed, personally relevant, creative composition and interpretation of texts that incorporate a variety of meaningful communicative modes or symbol systems." (Albers & Sanders, 2010, p. 4)

One of the conditions of pupil engagement is also the taking into account of the distances and misunderstandings of socio-cultural origin which result in the fact that for certain pupils there is an irremediable distance between the school world and its knowledge and their own world, values, commitments and the social determinants of their dispositions and empowerment.

This is a major stake for upper secondary education. However, it should not be forgotten that the increase in the flow towards higher education also makes it a challenge for university pedagogy as it is also a major concern for all cultural institutions (art museums, science museums), which must adapt their provision to new audiences. For all these stakeholders, this is not a lowering of demands but a need to update mediation processes: not how to simplify and reduce content and instructional objectives, but how to give place for intermediation.

This challenge is for our societies in their entirety. This underlines the fact that the final contribution, perhaps the most central and most fundamental contribution of an education in multiliteracy, resides in its ethical foundations. The arts belong to the *transmission of the fundamentals of any society* in forms ever open to interpretation and democratic debate, in order to "attend to the *ethical responsibilities* required by [our] complex environments" (NCTE, 2008).

The essential aim targeted by an education in true multiliteracy is not only to master technical competencies, no matter how seductive and spectacular they may be, but also and above all to serve living-together and care and to build a society which is both peaceful and cohesive.

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Making Sense of Complexity of the World Today: why Finland is Introducing Multiliteracy in Teaching and Learning

ABSTRACT

The article focuses on the Finnish basic education curriculum reform between the years 2012 and 2016 and the role of multiliteracy in it. It helps readers understand the main reasons and aims of the reform as well as the collaborative working approach in the reform process. It describes the endeavour towards a holistic educational approach including an integration of school subjects which is more extensive than before. The aim is to promote pupils' ability to understand the relationships between various phenomena, to connect knowledge and skills gathered from different school subjects and to utilise them in exploring different phenomena and topics. The main tools in this approach are the seven cross-curricular, transversal competences described in the national core curriculum as well as the so-called multidisciplinary learning modules to be formed at the local and school level. The concept of transversal competence refers to an entity consisting of knowledge, skills, values, attitudes and will. Multiliteracy is one of the seven transversal competences. The article analyses the importance and objectives of multiliteracy in a world of change. The role of literacy has been changing rapidly, parallel to the development of other means of communication. More and more information is mediated in visual, numerical, audio, kinaesthetic and digital form, and through combinations of these. Multiliteracy is needed for interpreting, producing and assessing various kinds and forms of text. At school, multiliteracy is developed through studies in all school subjects and with the help of their specific language. The objectives of multiliteracy at different levels of pre-primary and basic education are examined and examples of multiliteracy in different school subjects are given in the article. The need for multiliteracy is connected to the paradigm shift concerning language teaching and learning as well as the role of languages and language awareness in learning, in school community an in a culturally diverse society.

Keywords: multiliteracy, phenomena-based learning, curriculum reform, transversal competences

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In December 2014, Finland completed the renewal of the national core curricula for preprimary education and basic (primary and lower secondary) education. Local education authorities are now busy working with the local curricula based on the national core curricula. Schools will start their work according to the new curricula in autumn 2016. The whole process is called Curriculum reform 2016. In order to meet the challenges of the future, there will be much focus on transversal (cross-curricular) competences and work across school subjects (Halinen, 2015).

One of the seven transversal competences described in the national core curricula is called multiliteracy. The focus of multiliteracy is in promoting students' capacity to read and interpret the multicultural and diverse world around them, and to influence it. (Finnish National Board of Education, 2014). It also aims to strengthen the basic literacy, in which Finnish students have gained high level of achievement, by connecting it to other forms of literacy, for instance visual and media literacy. Finnish teachers seem to have adopted the concept of multiliteracy in a positive way, and started to develop their pedagogy according to it.

Curriculum reform 2016

In the Finnish education system, the national core curricula are key steering instruments for pre-primary, basic and for upper secondary education. In this article we will focus on compulsory basic education. Children start basic education in Finland in the year in which they turn seven. Almost all of them will have participated in voluntary, one year long pre-primary education before this. From August 2015 onwards, the pre-primary education has been compulsory, too. Basic education usually lasts nine years. It is most often provided by the municipality. Municipal education authorities have to develop the local curriculum according to the national core curriculum. There are a few private schools, however they also create their own curriculum based on the same national core curriculum, as do the municipalities, too. So, the National Core Curriculum for Basic Education steers the provision of education for all children from 7 to 16 years.

In December 2014, the new national core curricula for pre-primary and basic education were passed by the Finnish National Board of Education (FNBE). The renewal of the core curricula was preceded by and based on a government decree concerning the general aims of education and the allocation of lesson hours. This decree was passed in the summer of 2012 and the new curricula must be in place in all basic education schools from the autumn of 2016. To support the local adaptations of the core curricula, a great number of in-service training courses is being organised and new learning materials published.

The FNBE has made a serious effort to organise the reform of the core curricula in the form of a process that as such reflects the qualities Finns value most in good education. This is why the core curricula were drafted in an open and comprehensive dialogue and collaboration with education providers, principals and teachers, researchers, and teacher educators. Civil society organisations played a most active part in the process and their voice was also well heard. In an article on the process of the curriculum reform, Heikkinen,

Huttunen and Kiilakoski (2014) concluded that the process observed to a high degree the principles of democratic will creation as proposed by Jürgen Habermas in his discourse theory (Jääskeläinen, 2015, 12).

The design process of the core curricula was based on a thorough study of both the newest research knowledge and results of various evaluations and development projects as well as every day experiences of municipalities and schools. The process was open and transparent. Municipalities and schools were asked to comment on the drafts of the core curricula, and take pupils' and their parents' opinions into account, too. The drafts were also available on the webpages of the FNBE several times during the process. Anyone interested could read and comment the drafts. The drafts were refined based on the feedback and then published again. During the finalizing period, the core curricula were sent to several key stakeholders for their opinions. As a result of this process, the reform itself and the core curricula have been met with a positive response throughout the field of education and from the Finnish society. The key is trust. Teachers trust that the FNBE really listens to their experiences, needs and ideas, and the FNBE trusts that local authorities and teachers do their best in drawing up the local curricula and working according to the common guidelines. As there is a lot of autonomy for local authorities in providing education, municipalities may develop their own approaches to implementing the curricula, differing from those of other municipalities (Halinen & Holappa, 2013, 39-40, 57-58; Halinen, 2015).

Key principles in the reform are inclusive education, multifaceted and deep learning, enhancement of and high level of transversal and subject competences, and promotion of sustainable ways of living. The Core Curriculum 2014 describes schools as learning communities in terms that echo the spirit and formulations of the chapters on value basis and concept of learning – bearing in mind that also these will be subjects to continuous reflection and dialogue in order to develop both. Important features to develop in school work are meaningfulness and authentic learning environments, joy of learning, participation, dialogue, interaction and trust. If pupils and teachers do not have a chance to participate in and influence the planning and crafting of their own work they would not be able and committed to teach and learn about these qualities. The messages of the processes in schools need to comply with the objectives pursued. Learning is seen as an inseparable dimension of an individual's growth as a human being as well as in the construction of the good life of a community. (FNBE, 2014; Halinen, 2015; Jääskeläinen, 2015, 13).

Transversal competences and multidisciplinary learning modules

The increased need for transversal competences arises from changes in the surrounding world. In order to meet the challenges of the future, there will be much focus on transversal (cross-curricular) competences and work across school subjects. As structures and challenges of doing, knowing and being are changing essentially in our society, it requires us to have comprehensive knowledge and ability. Competences open up a useful way to reflect the objectives of education. They describe what type of knowledge, skills, attitudes and values an individual needs in order to live a good and meaningful life and to be able to function and work as a constructive member of society. At the same time, descriptions of

competences include a vision of the desirable future and the development of both education and society. (Halinen, 2011, 76-79).

According to the National Core Curriculum for Basic Education, the concept of transversal competence refers to an entity consisting of knowledge, skills, values, attitudes and will. Competence also means an ability to apply knowledge and skills in a given situation (FNBE, 2014; OECD, 2015). The manner in which the pupils will use their knowledge and skills is influenced by the values and attitudes they have adopted and their willingness to take action.

The values, the concept of learning and the school culture as described in the Core Curriculum lay the foundation for the development of competence. School subjects still have an important role to play in teaching and learning but there will be less distinct borderlines and more collaboration in practice between them. The subjects common to all students in basic education have been stipulated in the Basic Education Act, and the allocation of lesson hours among school subjects has been prescribed in the Government Decree in 2012. Each subject builds the pupil's competence through the contents and methods typical of its field of knowledge and methods. Competence development is influenced not only by the contents on which the pupils work but also, and especially, by the manner in which they work and in which the interaction between the learner and the environment takes place. Feedback given to the pupils, as well as guidance and support for learning influence attitudes, motivation and willingness to act.

In the Core Curriculum 2014, the objectives for learning are described as seven areas of competence. These areas are

- Thinking skills and learning to learn
- Cultural competence, interaction and expression
- Managing daily life, taking care of oneself and others
- Multiliteracy
- ICT (IT)-competence
- Working life and entrepreneurial competence
- Participation, influence and building a sustainable future.

These areas are frequently interconnected. Their joint objective is, in line with the mission of basic education and taking the pupils' age into account, to support growth as a human being and to impart competences required for membership in a democratic society and for a sustainable way of living. It is particularly vital to encourage pupils to recognise their uniqueness, their personal strengths and development potential, and to appreciate themselves. Every competence area includes knowledge and skills, and ability to use them in various situations in the best possible way. Values and attitudes are also important elements of competences. They have a key role in the formation of motivation and ability to use knowledge and skills in constructive and respectful ways. In the Finnish curriculum process, we have added the fifth element to every transversal competence, and that is will – meaning both willingness and willpower to use knowledge and skills for promoting good. (FNBE, 2014; OECD, 2015; Engeström, 2008).

Local authorities and schools are encouraged to promote the development of these competences and to consider their own innovative ways in reaching these goals. In basic education, the subject syllabi have been described so that their objectives include the competence goals which are most important for the said objectives. The competences will

also be assessed as a part of the subject assessment. In this way, every school subject enhances the development of all seven competence areas. This is a new way of combining competence-based and subject-based teaching and learning.

In the reform, the emphasis set on collaborative classroom practices will also be brought about in multi-disciplinary learning modules where several teachers may work with pupils studying the same topic. According to the new Core Curriculum of 2014, all schools have to design and provide at least one such learning module per school year for all pupils, focused on studying phenomena or topics that are of special interest for pupils. The length of the module can be decided locally; the recommended minimum is the amount of lessons in one school week. Pupils are expected to participate in the planning process of these studies. School subjects will provide their specific viewpoints, concepts and methods for the planning and implementation of these modules. Every multidisciplinary learning module involves skills and knowledge related to many subjects, for instance history, arts, math, physics and Finnish language, but from the pupils' viewpoint the boundaries will vanish. Not all subjects can be incorporated meaningfully to every learning module. The lessons of other subjects are then organised normally. Topics, participating subjects and the operational details will be decided at local and school level. Municipalities are allowed to emphasize these multidisciplinary learning modules in the provision of education, and they are also allowed to decide that there will be more than one learning module per year in their schools.

Multidisciplinary learning modules are new and efficient tools in promoting the development of transversal competences. They aim at promoting pupils' ability to understand relationships and interconnectivity between various phenomena. They help pupils to connect knowledge and skills of different subjects, and to organise their knowledge into larger entities. They also guide pupils to apply their knowledge and skills in examining various phenomena and topics, and to produce experiences on how to build knowledge together. And finally, they support pupils to notice connections between issues they study at school and issues of their own life, of their community, and the whole society and humanity.

Reasons behind multiliteracy

Literacy is strongly connected to a person's self-development and involvement in society through the ability to understand, analyse and utilise texts. It is not merely the mechanistic recognition of words and phrases, but the combination of skills and social practices in order to understand the world and other people. Literacy is a basic skill needed throughout one's life. It is not learned only in childhood and especially not only in school. Literacy in today's world is more and more challenging because much information is mediated for instance in visual, numerical, audio and kinaesthetic form.

For long, Finns were considered to be good and eager readers, and reading has been valued in society. Now there are some trends showing that this situation is rapidly changing. Attitudes towards reading are already different among the young, and also older people's reading habits are shifting. We can observe a tendency of choosing shorter and digital texts and not being able to read longer ones (Herkman & Vainikka, 2011, 144). Negative attitudes are growing and the interest in reading is changing, too. Finnish ninth-graders are still among top readers in the world, but the level of literacy is decreasing. The main factors

contributing to a good literacy rate are: engagement in reading, understanding the value of reading skills, and motivation. It has been found out that as early as from the fourth grade, motivation of Finnish pupils to read is quite low, and it gets lower as the pupils get older (Kupari et al., 2012, 46-50). The PISA comparison of 2012 showed that the level of literacy is constantly dropping among ninth-graders in Finland. Although Finns were number one globally in the year 2000, our literacy points have gone down, so that in 2012, Finland was ranked sixth after five Asian countries and regions (Kupari et al., 2013, 22). Finland still is the best European country in reading, but the declining tendency is making teachers and educational authorities worried anyway.

PISA studies also reveal that the gender differences are increasing: girls are more engaged and better readers than boys, who have less interest in reading. In spite of many educational development projects in reading, the gender achievement gap in reading has increased in Finland. (Arffman & Nissinen, 2015, 31; Brozo et al., 2014, 588; Kupari et al., 2013, 38) Especially in the northern and eastern parts of the country, boys have lower results, whereas girls in northern Finland are the best readers in the whole country. Pupils with immigrant background also have lower results (Kupari et al., 2013, 40; Arffman & Nissinen, 2015, 32). According to the PIAAC literacy assessment, which shows literacy rate of adults (16–65 year old), two thirds (63%) of adult Finns are quite decent readers, who manage challenging problems of information processing and interpretation. However, 11% or 370,000 adults are poor readers, struggling when faced with large portions of information. (Malin et al., 2012, 22)

While the top readers are fewer nowadays, the differences between strong and weak readers are also increasing. Especially boys and pupils with immigrant background have difficulties in literacy which is a threat to their full inclusion and participation in studies and in society as a whole. Lower level of literacy may also cause difficulties in their daily life. For the sake of equality, it is important that the general level of literacy be as high as possible. So it is necessary to find new means to teach literacy and emphasise the importance of literacy in school.

What do we mean by multiliteracy?

In basic education, the subject of mother tongue and literature is the most relevant to literacy education. However, teaching literacy cannot and should not rely on mother tongue teachers only. Actually, every teacher is a literacy teacher in content area literacy (CAL) and in disciplinary literacy (DL). This idea has been introduced strongly in the Core Curricula for Pre-primary Education and for Basic Education 2014.

In the Core Curriculum for Basic Education, the concept of multiliteracy is introduced as a transversal, cross-curricular competence which combines all subjects. The role of literacy has been changing rapidly in the last years, parallel to other means of communication. Multiliteracy means interpreting, producing and evaluating various kinds and forms of text, which will help the pupils to understand diverse forms of cultural communication and to build their personal identity. Multiliteracy is based on a broad definition of text. In this context, texts can take various forms, and meanings are expressed with verbal, visual, audio, numeric and kinaesthetic means and their combinations. For example, texts may be interpreted and produced in written, spoken, printed, audio-visual or digital forms.

Pupils need multiliteracy to interpret the world around them and to perceive its cultural diversity. Multiliteracy practices include obtaining, combining, modifying, producing, presenting and evaluating information in different forms, in different environments and situations, and by using various tools. Multiliteracy supports the development of critical thinking and learning skills. While developing it, the pupils also examine and consider ethical and aesthetic questions. Multiliteracy practices are developed in all teaching and learning, and in all school subjects. The pupils must have opportunities to use their practices both in traditional and in digital learning environments that exploit media in various ways. According to the Core Curriculum for Basic Education, pupils' multiliteracy is developed in all school subjects, progressing from everyday language to mastering the language and ways of constructing knowledge in different disciplines. A precondition for this is a rich textual environment, pedagogy that draws upon it, and cooperation between teachers and other stakeholders. Teaching and learning offers opportunities for enjoying different types of text. In learning situations, the pupils use, interpret and produce different text genres both individually and together with others. Texts with diverse modes of expression are used as learning materials, and the pupils are supported in understanding their cultural contexts. The pupils examine authentic texts that are meaningful to them and interpretations of the world that arise from these texts. This allows the pupils to rely on their strengths and utilise contents that engage them in learning, and also draw on them for participation and involvement.

Multiliteracy in pre-primary education

According to the Core Curriculum for Pre-primary Education 2014, the task of developing the seven aforementioned competences is taken into account also in all aspects of pre-primary education: in the development of the working culture and learning environments as well as in daily activities with children. The implementation of the task requires systematic work, monitoring of results and cooperation between pre-primary and basic education. Multiliteracy is presented as a new concept. The aim is to inspire children to learn and to strengthen their identity as well as to form a strong basis for their later development.

The development of multiliteracy begins already in early childhood and continues throughout one's life. The task of pre-primary education is to support the development of children's multiliteracy in cooperation with their guardians. Children are encouraged to explore, use and produce different types and forms of texts. These can be used to learn expression and interaction, while also enabling children to learn to deal with the thoughts and emotions that these texts evoke.

The development of children's visual literacy, writing, reading and numeracy, and media literacy shall be supported. In order to develop their multiliteracy, children need an example provided by an adult and a rich textual environment, culture produced by children and cultural services appropriate for children, such as films, nursery rhymes and music. Children's participation is strengthened by the development of multiliteracy. At the same time, the children's world is opened up, becomes more structured and gains new meanings.

Multiliteracy in grades 1-2

In grades 1 and 2, according to the Core Curriculum for Basic Education 2014, the pupils are guided to develop further multiliteracy practices by giving them opportunities to interpret, produce and evaluate many types of age-appropriate texts. The development of multiliteracy is supported by a multi-sensory, holistic, and phenomenon-based approach in teaching and learning. The pupils are encouraged to use and produce different kinds of texts, to enjoy them and to express themselves through them. Their basic reading and writing skills develop and become more fluent. The pupils also improve their skills in processing everyday numeric information, including differences in quantities. They are guided to develop their visual literacy by using visual modes of expression and examining means of visual involvement in their close environment.

The pupils are supported in finding information from different sources and communicating it to others. They are also guided to consider the relationship between the imaginary and the real world and the fact that each text has its author and its purpose. Teaching and learning thus supports the development of critical thinking. In order to develop multiliteracy, the pupils need both a rich textual environment and protective support in media use. Texts suitable for the needs of the pupils' age are used in teaching and learning, including newspapers and magazines, books, games, films, and music, as well as contents produced and selected by the pupils. Pupils' observations of their diverse surroundings are also important. Text production skills are developed in parallel with interpretation and evaluation skills. The pupils are provided with plenty of opportunities to ask questions and to express wonder, tell stories, state their views and share their experiences using many types of tools and means of expression.

Multiliteracy in grades 3-6

In grades 3-6 of basic education, the pupils are guided to develop their multiliteracy competence by interpreting, producing, and evaluating an increasingly wide variety of texts in different contexts and environments. They are supported to make progress in their command of the relevant basic reading and writing skills and techniques. The pupils practice analysing fiction, non-fiction, and argumentation and recognising the difference between them. They are guided in observing and interpreting their textual environment and realising that texts have different purposes and audiences which influence the choice of expressions and other devices used in the texts. For example, texts may aim to inform, entertain or persuade the reader to make purchases.

Multiliteracy is advanced by analysing different texts from the perspectives of the author and the audience as well as by taking the context and situation into account. The pupils are encouraged to use various information sources, including oral, audiovisual, printed, and digital sources as well as search engines and library services. At the same time, the pupils are supported in comparing and evaluating the appropriateness of the information they find. The pupils are guided in working with various media which aims at making visible the meanings and realities conveyed by the media. Critical literacy is developed in cultural contexts that are meaningful for the pupils. Narration, description, comparison, and

commentary as well as various media presentations are modes of presenting information typical of this age. Active reading and producing different texts as part of school work and free time as well as enjoying texts – both in the role of an interpreter and the producer – promote the development of multiliteracy.

Multiliteracy in grades 7-9

According to the Core Curriculum 2014, in grades 7-9, the pupils are guided in deepening their multiliteracy by expanding the range of texts used in teaching and learning of all school subjects. The emphasis is on practising the pupils' analytical, critical, and cultural literacy. The pupils practise using all of their sensory faculties and utilising different ways of knowing diversely in their learning. Producing, interpreting, and communicating information are practised in ways characteristic of different school subjects and in cooperation between subjects. The pupils are also encouraged to use their multiliteracy when participating and being involved in their own surroundings, media and society. School work offers plenty of opportunities for practising these skills in a cooperative setting.

The emphasis in multiliteracy development increasingly shifts to context and situation-specific texts. Pupils' multiliteracy is advanced by introducing them to narrative, descriptive, instructive, argumentative and reflective text genres. Cultural, ethical and environmental literacy are supported in teaching and learning. Environmental literacy means knowledge and understanding of the environment as well as the conditions and circumstances affecting it. Texts related to working life are also analysed and interpreted. The pupils develop their consumer and personal finance skills by familiarising themselves with texts that treat these topics in a versatile manner and by learning about the contexts in which they are used. Numeracy is advanced for example when assessing the reliability of opinion poll results or the cost-effectiveness of a commercial offer. The pupils are guided in developing their visual literacy by using different modes of image interpretation and presentation. Media literacy is developed by being involved in and working with various media. The pupils are encouraged to express their views using different means of communication and involvement.

Multiliteracy in various subjects of basic education

Teaching and learning in every school subject is connected to the promotion of multiliteracy. Each subject has its specific viewpoints to the issue, and the objectives of teaching and learning will get more demanding from grade to grade. In the subject *mother tongue and literature*, most of the objectives have a connection to multiliteracy. Good examples of these goals at grade 9 are for instance:

- to guide and support the pupil to develop strategies and metacognitive practice needed in understanding, interpreting and analysing texts as well as the capacity to assess where he or she needs to develop
- to guide the pupil to advance his or her language awareness and become interested in language phenomena as well as to help the pupil to recognise linguistic structures,

different registers, nuances and stylistic characteristics, and to understand the significance and consequences of linguistic choices

Connections to multiliteracy are numerous in most of the subjects. The following are a few examples of the learning objectives in grade 9 that have a link to multiliteracy. It is worth noticing that the objectives may have connections to other competence areas, too.

History:

- to help the pupil to understand that historical information can be interpreted in different ways
- to support the development of the pupil's competence in using a variety of sources, comparing them, and forming his or her own justified opinion based on those sources

Social studies:

- to guide the pupil to practise ethical evaluation skills related to different human, societal and economic questions
- to encourage the pupil to examine societal activity as well as different communities and minority groups from a variety of viewpoints and with open mind

Geography:

- to support the development of the pupil's structured understanding of the world map
- to guide the pupil to develop his or her sense of space as well as to understand symbols, proportions, directions and distances
- to develop the pupil's skills in making observations on the environment and changes within it and to encourage the pupil to be active in following current events in the surroundings, in Finland and the world

Physics:

- to guide the pupil to use and evaluate different sources of information critically and to express and justify varying views in a manner characteristic of physics
- to guide the pupil to perceive the nature and development of scientific information and scientific approaches to producing information

Religion:

- to guide the pupil to identify and evaluate different methods of argumentation as well as differences between religious and scientific language
- to encourage and guide the pupil to gain awareness of the customs and symbols of different religions and worldviews and to recognise religious topics in the media, world politics, art, and popular music

Health education:

to guide and support the pupil to gain understanding of physical, mental and social health and the factors and mechanisms that support and pose a threat to them, as well as to support the pupil's ability to use the related concepts in an appropriate manner

Music:

- to encourage and guide the pupil to discuss music, and to use the concepts and terminology of music
- to guide the pupil to examine music as an art form and to understand how music is used for conveying messages and making an impact in different cultures

Visual arts:

- to encourage the pupil to perceive art, the environment and other forms of visual culture in a multi-sensory manner and to use approaches of visual production diversely
- to inspire the pupil to express his or her observations and thoughts in a visual manner and in different environments by using diverse tools and approaches in producing information
- to guide the pupil to make judgements on the values manifested in art, the environment and other visual culture

Foreign languages:

- English, so-called A or long syllabus:
 - ▶ to guide the pupil to observe the regularities in the English language, to consider how the same ideas are expressed in other languages, and to use linguistic concepts as a support for learning
- Foreign languages, B2 or short syllabus:
 - ▶ to help the pupil perceive the relationship between the new language he or she studies and the languages he or she has previously learned and familiarise himself and herself with some key features of the linguistic region of the language in question and its way of living as well as to support the linguistic reasoning, curiosity and plurilingualism of the pupil
- Second national language/Swedish, B1 or medium length syllabus:
 - to encourage the pupil to notice opportunities in his or her life for using the Swedish language and to guide the pupil to use Swedish confidently in different situations at school and outside it.

Languages in the Core Curriculum: A paradigm shift

The new Core Curriculum deals with languages in a variety of ways setting unforeseen emphasis on their role in not only teaching and learning, but also the ways in which the value basis of education is conceived and school culture construed and reinforced. Some aspects of what can be labelled a linguistic paradigm shift will be examined briefly in the next sections. This paradigm shift made also visible the importance of multiliteracy.

Languages as a cross-cutting element in the Core Curriculum

One of the expert groups set to draw up the Core Curriculum was assigned to define transversal literacy skills as well as linguistic and cultural awareness as cross-cutting elements in the curriculum. This was done in response to the changes in schools' operational environment: children and youngsters live in a world that is linguistically and culturally diverse and in constant change. Information and interaction take on new forms that need to be interpreted and generated in sustainable ways. Key insights from research, development schemes and practice were analysed and filtered into the Core Curriculum where language and cultural awareness can now be encountered as parts of the task of basic education, the value base, school culture, transversal competences and more. Together with cultural diversity, language awareness is seen to constitute one of the seven pillars or core aspects of school culture.

Teaching intercultural competence has long been seen as part of foreign language teaching. In the new Core Curriculum, schools are seen as integral parts of culturally evolving and transforming societies where the global and the local are constantly intertwining. This entails that all teachers are to instruct pupils to build on an identity that is dynamic as it draws strength from the diversity and plurilingualism of both individuals and communities. Pupils should also be encouraged to see things and situations through others' eyes.

In the new Core Curriculum, every school community and its members are assumed as plurilingual. Different languages are valued and used side by side as natural elements of school culture. The role of teachers is now stipulated as follows: Every adult in the linguistically conscious school is a linguistic model and the teacher of the language of his or her subject.

Teachers need to collaborate in order to help create an atmosphere where languages flourish. To achieve this, it is crucial to understand that the languages that pertain to academic discourse can be very different from the languages that students know well and are at ease with. Students, in order to succeed academically as well as to flourish as human beings, may need support in working with the academic language but they also need a sense of appreciation regarding their own language repertoires. Students who come from immigrant backgrounds or from disadvantaged socio-economic backgrounds or with learning disabilities may be particularly challenged, if the school is not a linguistically conscious one. Internationally, the issues of the languages of schooling have been strongly advocated by the Council of Europe through recommendations that emphasise the role of language awareness in the quality and equity of education (CoE, 2012 and 2014).

Some of the paradigmatic changes that have now been taken on board in the new Core Curriculum are highlighted in the chapter on Special Aspects of Language and Culture. If we compare this chapter with the previous core curriculum, we can see that the 2004 text opens with a subchapter on students with Sámi language background, followed by texts on Romani, signed language and immigrant background students. In the new curriculum this chapter comes with an introduction explaining what language awareness is, pointing out that the goal of basic education is to instruct students in valuing different languages and cultures, to promote bi- and plurilingualism and thus to reinforce students' linguistic awareness and metalinguistic skills. Further on, where the old text refers to immigrant students, the new

text addresses the needs of plurilingual students. What has been considered a marginal part of regular Finnish basic education has now been integrated into a whole-school approach to plurilingual and culturally diverse upbringing of the new generations.

Language subjects working together to reinforce language education

Based on what was established on the key role of languages in education by the teams drawing up the generic parts of the Core Curriculum, the mother tongues and foreign languages groups of subjects worked together in order to formulate a shared approach specifically targeted to language learning. A number of Finland's top language researchers, teacher trainers, administrators and practitioners worked together on defining the common element in all languages which already much earlier had been labelled as language education, but which was now deliberately written as the common introduction to all language syllabi as they are prescribed in the new Core Curriculum.

Hence, all language curricula now open with a text titled language education, stipulating that pupils are to receive support in appreciating their own plurilingualism and ability to exploit all the linguistic capacity they have, including the languages they use in their freetime. Even when pupils' linguistic skills are limited, they should be encouraged to use them – without fear of being deprecated. The significance of minority languages and vulnerable languages is to be brought up. The language curricula repeat what has been underlined already in the chapter on School Culture: in basic education, all teachers should be conscious about their language use and pay special attention to the academic language of the subject they teach. This means that the teacher becomes a mediator who is in continuous dialogue with the learners, listening carefully and always modifying his or her discourse depending on the situation.

The key aspects of language education are reiterated in all language syllabi. The 2004 language syllabi had brief mentions concerning intercultural competence and the idea of learning to learn (more) languages. The new syllabi describe language learning as having aims and contents that help students grow in intercultural understanding and competence, be curious and courageous users of their linguistic skills, be willing to increase their language repertoires and learn to use the languages they know to become active and participatory members of their communities and even citizens of the world.

The school must be instrumental in providing students opportunities to build networks and to communicate with real people for authentic communicative purposes, even internationally. For the first time, the Core Curriculum introduces schools' international activities in basic education as a natural resource for bringing up inter-culturally savvy global citizens. The linguistic and cultural diversity near and far should be made accessible for every student with the help of *internationalisation at home*. This means that for example ICT is used in a variety of ways networking, information sourcing and creation, and of course, interaction in connections that promote the learning of the languages (or any subject) in question.

Discussion

The key conditions for the development of multiliteracy and other transversal competences are:

Looking at literacy from new angles

Over the past few years, new meanings and new scope have been attributed to the concept of literacy. Traditional reading and writings skills are being superseded by new ones. Texts with new diverse forms should be interpreted not only by examining the words, but images and sound as well. Textual entities can be constructed in a vast number of new ways in different media. One should learn to decipher not only texts as such but, to a growing degree, the different texts genres. While doing so, it is crucial to understand how the traditional concepts of cultivation and being cultivated, well read, are emphasised when focus is set on critical cultural literacy. As an extension of what has been before, one has to be informed of the significance of literary culture and tradition with the new reading and writing skills. New ways of delivering information and texts have changed reading and writing into something much more interactive than what we have been used to. Reading can give rise to a discourse on the texts both orally and in writing. The new reading skills – reading on the net, writing on the net – must be studied as a conscious effort as they cannot be learnt inadvertently.

With the amount of information which is growing exponentially, the new literacies should be taught with a focus on the selection of knowledge and information as well as on finding proper references. How to distinguish relevant information from what is irrelevant is an increasingly important objective in teaching and learning literacies. This is also a way to learn about the languages, texts and discourses that are typical of different fields of knowledge and disciplines. In teaching and learning, multiliteracy comes with an emphasis on the role and significance of the specific languages of different subjects.

Connections between transversal competences and school subjects

Competence-based approach is popular in several countries. Competences have been defined in many different ways, for example as C21st skills or as key competences. The challenge seems to be how teaching and learning of both wider competences and subject knowledge is possible simultaneously. Teachers seem to think that if they focus on the wider competences they have to neglect the subjects, or if they focus on subject studies there will be no time for the enhancement of competences.

The way the transversal competences have been described in the new Finnish Core Curriculum is not unlike what can be found in the curricula of several other countries. In practice, it has been difficult to decide how to combine subject teaching and the development of transversal competences and how to find the necessary teaching time. In Finland, the solution is fairly simple: the objectives of each subject include, not only elements necessary in the promotion of the competence in the discipline of the school subject, but also elements needed in the development of transversal competences such as multiliteracy. This solution ensures that the transversal competences are also being taught, studied and assessed. Multiliteracy is present in the teaching and learning of all subjects as an element of their key

objectives, not only as a curricular ornament. This way, it has been possible also to draw up a detailed description of what multiliteracy means in the Finnish basic education. It is not possible to study multiliteracy without the contents that the different subjects provide. To give a simple example, it is not possible to learn writing and word processing unless one has something to write about.

Importance of language awareness

Multiliteracy can best develop in a school whose working culture is permeated by linguistic awareness. A school with linguistic awareness sets emphasis on the multiple roles of language(s) in studies and sees linguistic diversity as a richness that can promote pupils' learning and versatile development as persons and as members of society. It guides the pupils to pay attention to the diversity of the surrounding world and to realise that all subjects have languages of their own. Pupils are instructed to develop their understanding and usage of, not only the overall language of schooling, but the languages of different disciplines.

Importance of the learning concept and the emphasis of pupil participation

The National Core Curriculum is based on a concept of learning that sees the pupils as active agents. This learning concept forms also a solid basis for the development of both subject and transversal competences. According to the Curriculum, the pupils learn to set goals and to solve problems both independently and in collaboration. While acquiring new knowledge and skills, the pupils learn to reflect on their learning, experiences and emotions. Positive emotional experiences, the joy of learning and creative activities promote learning and inspire the pupils to develop their competences.

Learning takes place in interaction with other pupils, the teachers and other adults, and various communities and learning environments. Learning in collaboration promotes the pupils' skills in creative and critical thinking and problem-solving and their ability to understand different viewpoints. It also supports the pupils in expanding their objects of interests. Learning is diverse and connected to the content to be learnt, time and place. Developing the learning-to-learn skills lays the foundation for goal-oriented and lifelong learning. The pupils are thus guided in becoming aware of their personal ways of learning and using this knowledge to promote and regulate their own learning. In order for them to learn new concepts and to deepen their understanding of the topics to be learnt, the pupils are guided in connecting the learning topics and new concepts with what they have learnt before. Learning knowledge and skills is cumulative and often requires long-term and persistent practice.

Need for supporting teacher in their language awareness and importance of in-service education of teachers

In their very demanding work, teachers need to be supported. They are expected to develop their own language-awareness and understanding of the importance and nature of multiliteracy. Much in-service education is needed in order to encourage teachers to familiarize themselves with the importance of language, texts and different genres in

various subjects. These viewpoints should be included already in teachers' initial education, and then confirmed by in-service training and supporting material.

In Finland we are at the beginning of this road, but we already know which way to go. The drawing-up process of the national core curricula has provided us with a shared understanding of the needs of both learners and the society as well as of the future direction of education.

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Building Content Area Literacy-Expertise among European Teachers of Secondary Schools

A Report about two European Comenius Projects

ABSTRACT

In 2011/2012 a European "Basic Curriculum for Teachers' In-Service Training in Content Area Literacy in Secondary Schools" (BaCuLit) has been developed in the course of a Comenius Multilateral Project which involved seven European countries representing the geographic, economic and socio-cultural diversity of Europe. The BaCuLit curriculum aims at providing secondary teachers of all school subjects ("content areas") with the necessary knowledge and skills to support their students in reading and writing to learn from disciplinary academic texts across the curriculum. The course consists of 6 modules comprising about 40 hours of in-service teacher training. It is available in English and 6 European languages and can be disseminated in other countries as well. In the subsequent Comenius Accompanying Measures Project ISIT ("Implementation Strategies for Innovations in Teachers' Professional Development", 2013-2015) the implementation opportunities of regular BaCuLit courses in teacher training institutions in three core-partner countries (Germany, Hungary, Romania) and five associated countries have been explored and analysed. More than 30 teacher trainers have been trained and certified as BaCuLit trainers by means of a Blended Learning Course and an International Summer School. These teacher trainers explored the opportunities of regular sustainable implementation of Content Area Literacy courses in their training institutions and documented the steps taken in an implementation logbook. Those logbooks were analysed by the trainers, the national ISIT staff(s) and the international partners in order to identify general opportunities and obstacles in implementing innovation (like the BaCuLit course) into teachers' professional development.

Keywords: ELINET, ISIT, BaCuLit, content area literacy, teachers' professional development, blended learning

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of Teachers in Content Area Literacy (BaCuLit, ISIT) and for building up a European Literacy Policy Network (ELINET, see www.eli-net.eu).

Introduction and Background

"One in five 15-year-old Europeans, as well as nearly 75 million adults, lack basic reading and writing skills. Not only does this make it hard for them to find a job, but it also increases their risk of poverty and social exclusion, by limiting their opportunities for cultural participation, lifelong learning and personal growth. Literacy is fundamental to human development, as it enables people to live full and meaningful lives and contribute towards the enrichment of their communities." (ELINET Country Reports, Frame of Reference, May 2015, p. 5) This description of the literacy challenge which contemporary Europe faces is the starting point of research and policy activities of the *European Literacy Policy Network (ELINET)*, which started its work in February 2014.

This literacy challenge became more and more obvious in the new millennium, when the international literacy assessments (PISA, PIRLS and PIAAC) made the broader public aware of this problem. People disposing of reading skills which would have been sufficient in the 1950s are considered nowadays at risk not to meet the contemporary demands of the global post-industrial knowledge societies of the 21st century. These demands matter not only for academic careers but for all modern working environments in the digital world. American research on "workplace literacy" already found out in the 1980s that 70% of the texts which have to be dealt with at normal workplaces show a degree of difficulty which corresponds to that of the upper classes in high school (cf. Mikulecky & Drew, 1991). Therefore, it is required that all adolescents dispose of a high-quality basic standard of literacy skills at the end of compulsory schooling, in order to make a successful start into their training or job. The PISA Studies define this minimal standard as competence level 2 (out of originally 5 levels): Adolescents scoring on competence level 1 or below are consequently regarded as "low achievers", "poor" or "struggling" readers or "students at risk". In the EU, the number of these low achievers among the 15-year-olds tested by PISA has not considerably decreased since the first PISA study in 2000, where the average rate of low achievers for the participating EU countries was 21.3%. For this reason, the improvement of reading literacy of adolescents has been a major issue on the European educational agenda since the Education Benchmarks for Europe defined by the European Commission in 2004 (cf. Sulkunen, 2013).

In 2006, the European Commission launched a call within the Socrates Programme aiming at: "Better understanding of the phenomenon of poor reading and poor readers in order to better combat the problem." The ADORE project ("Teaching Adolescent Struggling Readers. A Comparative Study of Good Practices in European Countries") was funded by this programme and carried out from 2007 to 2009. Coordinated by Karl Holle, Swantje Weinhold and Christine Garbe at the University of Lueneburg, this project gathered 12 research and practice partner institutions of 11 European countries investigating good practice in reading instruction in all participating countries (by collecting data through on-site visits). During the 2-year investigation period, we have written down 30 case studies of schools with promising programmes and practices and finally identified 13 "key elements" of good practice on classroom, school, community and national levels concerning the improvement of reading instruction for adolescent struggling readers (see: Garbe et al., 2010a and the Executive Summary of the ADORE project on the website: www.adore-project.eu, to be found under "Downloads").

One of the main findings of our investigations was that the expertise of teachers to integrate literacy instruction continually in all their subject lessons is one of the most important key elements of good practice to help struggling readers. However, mathematics, history or science teachers in secondary schools are usually not prepared to teach literacy skills in their classrooms. Those subject teachers consider only the mother tongue teachers to be responsible for the reading and writing skills of their students – but we know from extensive research during the last decades, that this is a wrong concept.1 The idea that reading and writing skills have to be taught "across the curriculum", which means in all school subjects, is called "content area literacy" (CAL) in international research and education practice. In the United States, for example, research and development around content (area) literacy has a history of more than 100 years. Brozo (2014) refers to E.B. Huey (The Psychology and Pedagogy of Reading, 1908) as the first publication about content literacy; since the late 1960s (H.L. Herber, Teaching Reading in Content Areas, 1970) up to today there has been published extensive research and study books around CAL as well as nearly 20 national reports and position statements on adolescent literacy in the U.S. (see overview in W.G. Brozo, 2014).

The reading difficulties of adolescents in many European countries (and beyond) may to a considerable extent be caused by the lack of a systematic reading (and writing) instruction in secondary schools in all academic subjects. Researchers and reading educators recommend that understanding content area texts (or disciplinary texts) should be taught in all subjects and all class levels systematically. But in European countries, content area teachers are not trained to fulfil this task.

The BaCuLit Project

This was exactly the starting point of the BaCuLit project, funded by the Comenius Programme (Multilateral Projects) from January 2011 to December 2012 and has developed, implemented and evaluated a "Basic Curriculum for Teachers' In-service Training in Content Area Literacy in Secondary Schools". For this purpose, 10 partners from universities and inservice teacher training institutions from 7 European countries cooperated in this project. The BaCuLit project has been coordinated by a German team: Christine Garbe, Martin Gross (Albertus Magnus University of Cologne), Karl Holle, Stephanie Schmill (Leuphana University), partner countries included Germany, Hungary, the Netherlands, Norway, Portugal, Romania and Sweden, who were supported and consulted by two American experts, William G. Brozo (George Mason University) and Carol M. Santa (Montana Academy).

The BaCuLit project focused on "reading skills": it wanted to extend secondary school teachers' expertise to improve their students' reading habits and comprehension strategies for diverse texts in all school subjects and to help them build a stable self-concept as

¹ The ADORE-findings were later on supported by the Final Report of the European High Level Group of Experts on Literacy, published in 2012 and containing, among others, age-specific recommendations for children, adolescents and adults. For adolescents, this report put on top of the agenda of its action plan the claim: "Make every teacher a teacher of literacy!" (HLG Final Report, 2012, p. 92)

readers and learners. The basic curriculum intends to define the minimal knowledge every secondary content area teacher in the EU should have about teaching literacy skills in all school subjects.

The BaCuLit project addressed decision makers in educational policy and in schools who were responsible for the training of secondary school teachers. Those teachers were considered to be the main target group who shall participate in the BaCuLit courses in order to improve their own instruction (as teachers will learn how to support their students by providing guided text comprehension) or to become future BaCuLit trainers themselves (multiplier approach). The ultimate target group, however, were the secondary students – struggling adolescent readers and writers – who will benefit from the increased expertise of their teachers. Furthermore, the project offers teacher training institutions and decision makers in educational policy a scientifically based and practically tested core curriculum for the education and training of teachers which will enable them to effectively support struggling students to improve in reading, writing and learning.

Project Design and Objectives

The BaCuLit project followed an ambitious work plan (consisting of three phases) during the 24 months of the funding period:

During the **Development Phase** (January to September 2011) the concept of the basic curriculum was decided (during the 1st Workshop in Nijmegen, Netherlands, in February 2011) and the work of developing all materials for the 6 modules was distributed. This phase ended with the 2nd Workshop in Braga, Portugal, in September 2011: here the pilot versions of the modules and the training concept were discussed and agreed upon. Results of the development phase were: structure and concept of the basic curriculum with 6 modules, including detailed work plans and corresponding materials (presentations, worksheets, background texts); a drafted teacher's workbook; a training concept ("guidelines for professional development of teachers") and the structure of the communication platform (Moodle).

During the Implementation Phase (October 2011 to July 2012) the pilot course was implemented in 7 teacher training institutions in 6 EU-countries: Germany, Hungary, Netherlands, Portugal, Romania (twice), and Sweden; Norway did not implement, as it disposed of a similar national programme already. The total scope of the pilot teaching was 36 hours (12 units of 3 hours or 6 units of 6 hours). Depending on national or local conditions, the units were taught flexibly. The content of this phase was the translation of the modules and the teachers' handbook into six national languages; the teaching of the pilot courses and their formative evaluation; the organisation of supporting visits during which tandem partners visited each other for one pilot module. Furthermore, the evaluation of the pilot courses involved not only trainers and participating teachers on a regular basis, but also external educational experts. Results of the implementation phase were six implemented

and evaluated modules, about 20 supported BaCuLit trainers and about 140 trained BaCuLit teachers in six countries.

During the **Dissemination Phase** (August to December 2012) the evaluation results of the implementation phase were analysed in the 3rd Workshop which took place in Cologne, Germany, in August 2012. On this basis further improvements of the curriculum and a modification of the basic model were discussed and agreed; the publication of BaCuLit results in English and in six national languages was prepared and a dissemination concept, standards for the qualification of BaCuLit-trainers and a sustainability concept were developed. During this workshop, the BaCuLit consortium founded an International BaCuLit Association which is now in charge of further developing the BaCuLit curriculum and defining quality standards of BaCuLit teachers and BaCuLit trainers by means of certification.

The general **project objective** – to develop, implement and evaluate a coherent, practicable and sustainable Basic Curriculum for Content Area Literacy, based on the current state of content area literacy research – was differentiated into four fields of work with specific objectives:

- **concept, methods and materials:** At the end of the project, six modules with PPT presentations and worksheets, integrated in a Teachers' Workbook, as well as all guiding materials for the teacher trainers have been produced: work plans for all course units, annotated PPT presentations, research background and scientific references integrated in the Trainers' Handbook. The latter is available only in English whereas all materials for the teachers are available in the English master version *and* in the national languages of the implementing partner countries (i.e. Dutch, German, Hungarian, Portuguese, Romanian and Swedish). The English master version is determined for being translated into further languages of European countries.
- Development of a sustainable concept for teacher training which closely links the new input to the daily classroom practice of the trained teachers: In most cases, teacher training is conducted as so called "one shot activity", which results in teachers having no support in implementing new methods or contents into their own classroom. In contrast, the BaCuLit project developed a concept, which focuses on changing the classroom practice of teachers as well as their self-concept as teachers not only of content but of content-related literacy skills. The main tools for this sustainable teacher training approach are a long-term input with at least 6 units of continuous professional development (PD), a Teachers' Workbook with assignments and materials to be used in teachers' daily practice and the use of a BaCuLit learning and communication platform (Moodle) that allows for the coaching of teachers by the national teacher trainers in the interim phases between the course units.
- Development of a Trainers' Handbook and a concept for training of the trainers:

 Regarding the originally planned multiplier concept, we made changes due to experiences with the pilot courses. It was planned that the most qualified teachers of the first trained cohort in all partner countries should become BaCuLit trainers in order to realise a

multiplier effect. This has proven not to be practicable in this direct way; instead experience has shown that the conditions for teachers' PD between the participating countries, partly even between the different federal states (e.g. in Germany), differ much more than we expected. Therefore we created the Trainers' Handbook (in English) that can be used to provide a compact PD training for teacher trainers in different countries, according to the conditions of the respective countries.

Sustainability: Building an organisational structure for a long-term implementation of BaCuLit within teachers' pre-service and in-service training: Accounting for the heterogeneous conditions of teachers' PD in Europe it is necessary to continuously update the BaCuLit curriculum and to flexibly adapt it to the national educational systems. During the last stage of the project an international BaCuLit Association has been founded, which, as a legal entity, takes over the intellectual property of BaCuLit and which is responsible for the further development and for national implementation strategies. The BaCuLit Association also defines quality standards and ensures them by awarding certificates for teachers and trainers (more information about the association can be found on the BaCuLit website: www.baculit.eu).

The Basic Curriculum and its Principles

The curriculum builds upon two interrelated results of international research in the field of content area teaching and learning:

- In the content areas, the students' appropriate dealing with subject specific texts is directly linked to successful content learning.
- Responsive teaching and metacognitive literacy discourses are directly linked to successful content instruction.

During the 3rd BaCuLit Workshop in Cologne the partners analysed the implementation and evaluation results of the pilot teaching of BaCuLit in 6 European countries (from November 2011 to June 2012). As a consequence the BaCuLit consortium agreed upon some modifications in the concept (framework) and the curriculum. This revision has been carried out in the final project phase (September – December 2012): The 6 modules were slightly modified in their content and structure and their timing became more flexible. Not every module is set to 6 hours, but some modules may be taught in 3 hours, while others rather require 8 or 9 hours. In addition, there are some optional contents that can be added or omitted depending on national circumstances. By this, the developing teams aimed at considering the fact that the implementation conditions in the participating (and in future participating) European countries vary widely, but can also vary within a country or even from school to school.

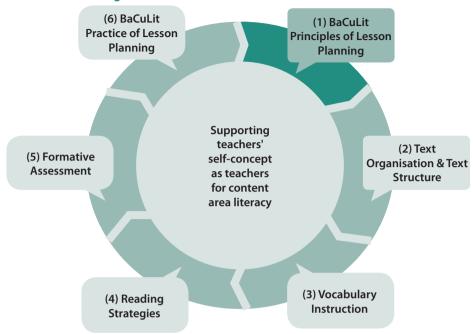


Figure 1. The structure of the BaCuLit curriculum

Figure 1 gives an overview of the BaCuLit curriculum as a whole with the main goal in the inner circle and the six modules located around it. The structure of the BaCuLit curriculum has been modelled in the form of a cycle – a reference to the ADORE-project and its main idea of the "ADORE reading instruction cycle". This cyclical teaching structure is used instead of the traditional sequentially organised lessons for theoretical reasons (cf. Garbe et al. 2010a, chapter 6.2). In the centre of the cycle the main goal of the curriculum is stated, which is to support teachers' self-concept as teachers not only of content learning, but also of literacy instruction within their content areas.

Modules 1 and 6 deal with lesson planning which is at the centre of the BaCuLit concept for putting instructional ideas into practice. Therefore the curriculum cycle starts and ends with this topic. In module 6, all participants are requested to present their own BaCuLit lesson plan (in their specific subject) which incorporates all the aspects they have learned during the course. Modules 2 to 4 deal with central aspects of literacy-related instruction in all school subjects: knowledge about the structure and diversity of texts, about the teaching of academic vocabulary and the teaching of reading strategies. Module 5 delivers knowledge about and tools for diagnostic / formative assessment, which should be applied at the beginning of every instruction unit, but may best be taught after the modules 1 to 4.

In detail:

Module 1: Lesson Planning I; General Principles. This module focuses on the basic ideas behind the BaCuLit curriculum. Central questions are: (1) Introduction: Why reading

matters in all school subjects? (2) What will participants learn during the BaCuLit-course? (Content and structure of the BaCuLit curriculum, underlying principles of professional development); (3) How are participants required to work during the BaCuLit-course? (Teacher's workbook, final assignment, requirements for BaCuLit teacher certificate; *optional*: Moodle platform); (4) BaCuLit framework for lesson planning: Why are the following cross-curricular concepts central for lesson-planning in the BaCuLit framework: (a) Metacognition & Literacy for Learning, (b) Interaction & Classroom Discourse, (c) Engagement & Empowerment? (5) What are the main questions when you plan a content lesson or unit?

Module 2: Text Diversity and Text Organisation. This module focuses on the diversity of content area texts and their role in fostering students' reading engagement. Main questions are: (1) Why and how to connect students' text worlds to the diversity of texts? (2) What are the advantages and disadvantages of using authentic texts in the classroom? (3) How and why to use content area structure and organisation for meaning making? (4) How are texts crafted to help students learn new content knowledge? (5) How can teachers own text materials guide their students' learning?

Module 3: Teaching Academic Vocabulary. This module focuses on how to identify and teach the essential content-specific vocabulary in order to facilitate students' content learning. Main questions are: (1) Why is vocabulary development crucial for content area literacy? (2) How can principles from vocabulary research guide classroom practice? (3) What are some guidelines for selecting words in the content areas that are worthy of rich instruction? (4) How can students develop their own student friendly definitions? (5) How can teachers help students expand their understanding of essential word meanings?

Module 4: Metacognition and Reading Strategies. This module focuses on teaching cognitive and metacognitive reading comprehension strategies students can use for reading content area texts. Main questions are: (1) What are reading strategies and how should they be taught? (2) How can teachers become aware of their own strategy use and gain an insight into their students' strategies? (3) How does a cognitive apprenticeship approach bring about a shift of responsibility for strategy use from teacher to student? (4) What is reciprocal teaching and how does it work in teacher training and in the classroom?

Module 5: Formative Assessments. In contrast to common assessment procedures ('assessment of learning', summative assessments), this module focuses on 'assessments for learning' (formative assessments). The function of these assessment procedures is helping teachers in supporting their students' learning. Main questions are: (1) Why is formative assessment an assessment for instruction? (2) What should be formatively assessed in the content area classroom? (3) How can vocabulary self-assessment be used by teachers in order to inform instruction? (4) What is the Content Area Reading Inventory (CARI) and how can it be designed by teachers to give clear instructional directions?

Module 6: Lesson Planning II – Creating Actual Lesson Plans. This module focuses on two topics: (a) Reflection and evaluation of lesson planning examples teachers have developed during the former modules. (b) Planning and reflecting the conditions for successful

implementation of the BaCuLit program in the teachers' own schools. Main questions are: (1) How did I embed the BaCuLit cross-curricular concepts and the framework for lesson planning in my own lesson planning? How did it work out for my students? (2) How can I embed concepts and elements of the BaCuLit course in my own personal action plan to sustain BaCuLit concepts in my future teaching? (3) What did I like about the whole course? Which improvements would I suggest?

The following outcomes have been produced within the BaCuLit project: PPT-presentations for all modules which also contain annotations for the trainers; a teacher workbook with all worksheets, materials and assignments for the participants, a handbook for the BaCuLit trainers, guidelines for professional development of teachers which explain our didactical approach, and a communication platform for teachers and trainers. We also created a BaCuLit website where you can find more information about the project, including PPTs, posters and flyers with basic information and module No. 1 with all materials in different languages (www.baculit.eu).

The BaCuLit Lesson Planning Framework

During the first project phase the BaCuLit consortium developed a complex model of content area literacy instruction, the so-called COME-model. The acronym C-O-M-E represented the main teaching activities 'Connecting students with content and text' – 'Organising, modelling, and controlling text comprehension' – 'Meaning negotiation and metacognitive reflection' and 'Expanding knowledge'. During the pilot teaching however, it turned out that this model was too complex and therefore caused more confusion than orientation among the course participants. At the Cologne Workshop the BaCuLit partners worked on a revision and – above all – simplification of the COME-model. We decided to entirely focus on the teacher's activities and to omit the students' perspective in this model; therefore it is now called the BaCuLit "Lesson Planning Framework".

² The main author of this model was our highly appreciated colleague and co-coordinator Karl Holle, who sadly passed away in 2013.

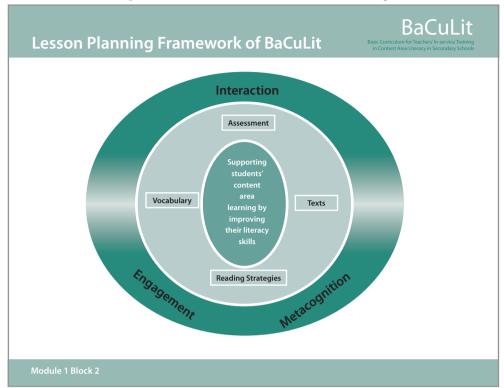


Figure 2. BaCuLit Framework for Lesson Planning

The **BaCuLit Lesson Planning Framework** is based on the ADORE Reading Instruction Cycle. The main goal of all lessons designed according to the BaCuLit framework is to support students' content area learning by improving their literacy skills, as is indicated in the ellipse in the middle. Although the focus of the model is on the teacher's perspective, the students' perspective is included in this inner circle as the BaCuLit goal. The second circle shows the core concepts, which are dealt with in separate modules in the BaCuLit curriculum: texts (module 2: Text organisation and text diversity), reading strategies (module 4: Teaching cognitive and metacognitive reading strategies), vocabulary (module 3: Teaching academic vocabulary) and assessment (module 5: Formative assessment for content literacy and learning). The outer circle includes the cross-curricular concepts which should be part of every module (and every BaCuLit lesson). These three concepts - metacognition, interaction and engagement - are therefore introduced in the basic module No. 1 (in block 2). Also in module 1 the participants get to know the "Guiding Questions for Lesson Planning" which refer to the Lesson Planning Framework. They contain 3 to 5 questions in each of the following paragraphs which are worked through in all 6 modules, thus enabling teachers to internalize these principles and apply them in their daily classroom practice:

BaCuLit Guiding Questions for Lesson Planning:

SUPERIOR TOPICS and LEARNING GOALS of my LESSON / UNIT

What are my goals for this lesson with respect to content and literacy learning?

What content is central to this unit? What do I expect students to know and do as a result of this unit?

What instructional materials will I select to meet these learning expectations? If a fixed unit is used: how does text play a role in this unit?

ENGAGEMENT

How can I find out what students want to know about the topic in order to engage them in learning?

How can I have them participate in choosing learning materials for this unit and setting up learning goals for their individual learning?

How can I actively involve every student in the learning process?

INTERACTION

How much modelling from my part will be necessary for students to use the strategies I want to include in this lesson?

Which kind of support and scaffolding activities do I have to provide for students' learning of this content?

How can I arrange a maximum of participation and interaction among students?

METACOGNITION

How can I help students understand the importance of activating their own background knowledge?

How can I help them focus on the learning tasks and setting their own learning goals? How can I help students continually monitoring their own comprehension?

What opportunities will students have to fix up areas of misunderstanding in order to perform well on the tasks and the final assessment?

How will I provide students with opportunities to evaluate and reflect about their learning?

TEXTS

What are the characteristics of the specific text (I chose / we chose) and of this text genre in general?

Which challenges (in structure, content and vocabulary) does this text contain for my students and how can I make it accessible to them? Is this text in their "zone of proximal development"?

What are the big ideas in this text? How are they conceptually related? How are they related to the content of previous lessons?

VOCABULARY

How do I build understanding of essential vocabulary?

How do I select words that are essential for students to learn in my content area?

What strategies will I use to create students' ownership of important vocabulary?

READING STRATEGIES

How can I model and scaffold the use of strategies *before – during – after reading* in order to better understand this particular text?

What tools shall students use for structuring the content of this text during and after reading (e.g., selective underlining, summarising, concept maps, Venn diagrams, tables, time relations, two column notes...)?

What strategies will I offer my students to become actively persistent while reading?

ASSESSMENT

How can I assess my students' literacy abilities and strategies with my content texts? How can I assess my students' knowledge of key concepts and vocabulary from my content texts?

How can I use these assessments to provide responsive content literacy instruction? How can I help my students monitor their progress as readers and thinkers of my content texts?

Which assessment information will I provide to students so they know what is expected of them?

In the "Conceptual Foundations" for Module 1 in the Trainers' Handbook background information can be found about the research basis of our framework; we refer to John Hattie's study "Visible Learning" from 2009 which is considered as a milestone in international empirical education research, to international research about teachers' PD (e.g. Timperley, 2008) and to several excellent PD-programs in the United States, above all "Reading Apprenticeship" (Schoenbach et al., 2012) and "Project CRISS" (Santa et al., 2014).

BaCuLit Principles for Professional Development and Working Methods

Teachers' PD treats teachers as learners. The ultimate goal underlying teachers' PD is improved student learning. Research shows that teachers feel motivated to learn only if their learning makes a difference to their students' learning. The question directing professional learning is "What works best and why?" (cf. Hattie, 2009; Timperley, 2008).

BaCuLit aims at enhancing teachers' expertise in content area literacy. As international research has shown, so-called "one-shot training activities" are not enough to actually change classroom practice but instead may lead to a "knowledge-action-gap" (see, for example, Anderson, 1992; Garbe, 2014; Philipp & Scherf, 2012; Scherf, 2013). BaCuLit therefore offers a flexible curriculum (tailored programmes) that can be used on a long term basis for inservice training. Instead of relying on a concept of PD that only presents information, the BaCuLit project relies on principles of teaching and learning that have a positive influence on teachers' self-concept as competent and reflective practitioners. Teaching students how to learn content by reading and writing, talking and listening must go hand in hand with content instruction, so that students gain the tools for life-long learning. Content teachers should not only be content specialists but learning specialists. When students know how

they can use reading and writing for learning content they become more successful learners which leads to feelings of success for both teachers and students.

Following this understanding of effective PD for in-service teachers of all content areas in order to change classroom practice, we designed the BaCuLit workshops according to the following principles:

- We give teachers the opportunity to interact with each other to exchange and reflect on their own classroom experiences in their disciplinary subjects and their teaching beliefs.
- We allow teachers to practice new literacy related teaching and learning strategies within the courses because research has shown that teachers only apply in their classrooms what they have experienced themselves.
- We offer teachers guided support and feedback in adapting literacy practices to their own content area classrooms.

These principles of PD guide the following learning activities that are used in the workshops:

- having pair and group discussions during the workshops
- providing peer and trainer support and individual feedback during the workshops and via communication platform (building "learning communities")
- introducing relevant knowledge as well as models of good practice and offering opportunities to link this knowledge and these models to the teachers' own classroom practice
- introducing literacy related tools and teaching strategies
- offering demonstrations of specific teaching strategies
- offering exercises, practical experiences, and possibilities for inquiry into teachers' own classroom practice.

In order to incorporate these principles for PD in the BaCuLit course we designed the *Teachers' Workbook* as an important tool. This workbook offers materials and methods which are designed to support teachers' efforts to change their classroom practice. It contains background information, assignments for homework, tools for applying inquiry methods to the classroom, assessment tools and evaluation sheets. The Teacher Workbook also functions as a portfolio where course participants document their active participation and work with the course materials; completing the assignments is a prerequisite for getting the BaCuLit certificate at the end of the course.

Figure 3 shows the principles according to which every module has been developed. The main idea is to strongly reflect on the teachers' own classroom experiences and teaching beliefs in every module and to give them the opportunity to get a clear idea of the principles their own teaching is based on. The relevant literacy knowledge is related to outcomes of literacy and instructional research, but these outcomes are transformed into models of good practice and practical approaches of literacy related teaching and learning strategies. The goal is that at the end of each module teachers are aware of routines and teaching strategies they can use and try out in their daily instruction.

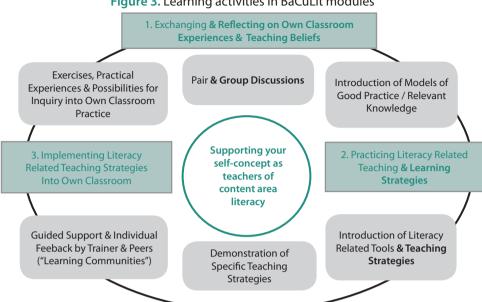


Figure 3. Learning activities in BaCuLit modules

Evaluation Tools for evaluating the Pilot Courses during the Implementation Phase of the BaCuLit curriculum

In the implementation phase of the BaCuLit course in all participating countries the drafted modules were translated into the national languages and taught to a pilot teachers' cohort of 10 to 20 teachers in each of the 7 teacher training institutions. During this implementation phase the developing and implementing BaCuLit teams evaluated the practicability of the BaCuLit course in the diverse European countries which were part of the project. This evaluation was designed according to the evaluation concept agreed upon by the partners on the 2nd BaCuLit workshop in September 2011 in Braga.

The following tools and methods for evaluating the implementation of the BaCuLit concept and curriculum were worked out for this evaluation:

- (1) Evaluation Tools for the Implementation of the Modules (teachers & teacher trainers)
 - **Evaluation sheets**, which were filled in by every teacher after the completion of each of the six modules
 - ► Teacher workbooks and entries on the online communication platform ("Moodle"), which were analysed by the national teams to evaluate the implementation phase. To ensure some kind of comparison, guidelines were provided by the Coordinating Team on how to evaluate these materials.
 - Documentation of and reflection on the teaching of the modules by the teacher trainers, which was realised by a semi-structured Trainers' Questionnaire Form (to be filled in every time after teaching one module).

(2) Evaluation Tools for the Tandem Visits

These tools were used by different persons involved in the tandem visits during the implementation phase: External experts, national developers and teacher trainers from other countries.

- ▶ *Observation sheets*, which were filled in by the external experts and national developers during the observation of the module teaching
- ► *Guidelines for interviewing trainers and teachers*, which was done by the national developers (due to language restrictions)
- ► Short guidelines for group discussions with course participants, which were conducted by the external experts or the national developers.
- Report Forms for the reports of external advisors from national education policy
- ► **Report Forms for the reports of the national developers**, which consist of a summary of their observations, interviews and the group discussion.

All evaluation tools for the implementation of the modules and the tandem visits of external experts, national developers and teacher trainers from different countries have been developed and were used during the implementation phase. These tools have been published on the project website and are thus available for similar projects and initiatives.

The ISIT Project

The ISIT project ("Implementation Strategies for Innovations in Teachers' Professional Development") was funded within the COMENIUS Accompanying Measures programme and run for 15 months (12/2013 – 02/2015). The project built upon the results of the BaCuLit project and comprised BaCuLit partners from Germany, Hungary, Portugal and Romania and new partners from Belgium, Cyprus, Finland, and Russia (the latter on a self-paying basis). During the last phase of the BaCuLit project the implementation opportunities for the BaCuLit curriculum in the 7 participating countries were analysed in so called mainstreaming reports (carried out by national experts). Germany, Hungary and Romania revealed the most promising opportunities to implement the BaCuLit curriculum within a narrow time-frame. Besides this, the 3 countries represented different approaches to CPD and diverse structures (central, federal, regional), so that a comparative analysis of implementation strategies promised to deliver rich insights.

In addition to the 6 core partners from these three countries the coordinator decided to involve further "associated partners". Even though ISIT was implemented only in the above mentioned 3 countries, some previous partners from the ADORE project (Belgium, Finland) and some new partners (Cyprus, Russia) were interested in learning about the BaCuLit curriculum and participating in the research about implementing innovative concepts into national CPD systems. They all are leading pedagogical institutions in their countries, and are highly involved in research and transfer of innovative concepts into teachers' CPD.

We chose those institutions to become partners during the implementation phase of ISIT in order to reach a better geographical coverage across Europe: involving additional partners from the Northern (Finland), Western (Belgium), Eastern (Russia) and Southern parts of Europe (Portugal, Cyprus) and to involve a multitude of heterogeneous countries,

some of them facing heavy economic crises (like Portugal, Cyprus and Greece), others representing the wealthier parts of Europe (like Germany, Belgium and Finland); some of them representing the new member states (Hungary, Romania).

Project Design and Objectives

The ISIT project addressed two problems defined by the EU Education and Training Benchmarks for 2020 and by the Final Report of the High Level Group of Experts on Literacy (2012): (1) the problem of low literacy skills of students in many European countries which became obvious with the PISA studies and (2) the unsatisfying status of teachers' continuous professional development (CPD) in the EU.

In order to address the problem of low literacy skills of European adolescents the previous BaCuLit project developed a comprehensive curriculum in content area literacy (CAL) for continuous professional development of secondary teachers. In ISIT, we considered this curriculum to be a model of an *innovative training programme* for teachers which allows for flexible adoption to specific national or local requirements, programmes and time frames.

Several European reports revealed unsatisfying conditions of teachers' in-service training in European countries on a general level, but they do not provide advice for the central question of this project: Which strategies for the *implementation of innovations* are suitable for the different educational systems in European countries? As to this question ISIT intended to gain more specific qualitative data in a process that closely links research to practice, similar to the principles of action research: *not* to separate research from action (change, innovation) and likewise *not* to separate researchers from actors.

Building upon the results of the *innovative CPD programme of BaCuLit*, the ISIT project thus pursued two goals: (1) training at least 30 teacher educators from 3 European countries in content area literacy (specific goal) and (2) identifying the most successful methods of how to implement innovations into different national structures of CPD (general, comparative goal).

The project addressed 3 target groups: by training teacher educators working in teachers' in-service training institutions (narrow target group) it reaches out to secondary school teachers (second target group) which will have a positive impact on the long-term target group of secondary students with low literacy skills (broadest target group).

In fact, ISIT trained a total of 34 teacher educators from 28 different training institutions of Germany, Hungary and Romania to become CAL-trainers by means of an e-learning course (on the platform ITSLearning, www.itslearning.com) and a one-week International Summer School in August 2014. After being trained and certified as BaCuLit trainers the teacher educators explored the opportunities of regular sustainable implementation of CAL courses in their training institutions and documented the steps taken in an implementation logbook. In national workshops the trained teacher educators analysed together with national ISIT staff members the steps and obstacles in implementing CAL courses in their institutions. Thus, ISIT explored the general opportunities and obstacles in implementing innovation into teachers' CPD in the three countries. The ISIT design is based on the

assumption that experiences with implementing CAL are valid and helpful also for other kinds of innovation. Thus they can be used by all actors who want to implement new methods, materials or subject-related topics into CPD.

A further objective was the dissemination of BaCuLit (or adapted CAL courses) in five additional European countries. Although the project focused on three countries, partners from 5 other countries participated in the Summer School and in the final project workshop in order to gain new and comparative insights and to give input and advice from the perspective of their countries.

Implementation Strategies for Innovations in Teachers' Professional Development – Findings from the ISIT Project

In three national workshops in the implementing countries and one international workshop with all partners the implementation logbooks of 30 trainers have been analysed in order to identify successful implementation strategies for innovative CAL-courses in the participating teacher training institutions.³ The ISIT-consortium could identify some common (transnational) and/or specific (national) *obstacles* as well as *opportunities* for implementing CAL-courses in the participating countries and developed some general and specific *recommendations* addressing teacher trainers, training institutions and policy makers. We will report here only the common obstacles which were identified in all three implementing countries.

Obstacles for implementing CAL-courses in teachers' CPD

Lack of time
In all implementing countries the lack of time for participating in PD turned out to be a major obstacle. The full BaCuLit course comprises 6 modules of minimum 6 hours each and consequently requires a long-term commitment of teachers (and principals) to attend those courses for a period of ideally 6 or more months. As schools have to invest into substitution of teachers during their absence due to training programmes, principals show reluctance to allow teachers such long-term participation in PD during school hours. Possible solutions proposed by the ISIT trainers are for example an 'appetizer strategy' which offers a small unit of the BaCuLit course, e.g. a "one afternoon demo version" in order to get teachers interested for learning more. Other possibilities would be a blended version of weekdays and Saturdays or weekdays and summer schools or a blended learning course combining faceto-face with e-learning units. On the political level the conditions for teachers' CPD have to

The results of the national workshops and the analysis of the national implementation logbooks have been summarised in the national ISIT Reports about Germany (author: Dorothee Gaile), Hungary (author: Ildikó Szabó) and Romania (author: Ariana-Stanca Vacaretu) which can be downloaded from the ISIT website.

be improved: teachers should be given the opportunity to regularly participate in in-service training and they should be held accountable for doing so.

- Geographical conditions

 In some implementing countries the size of regions to be covered by PD offers is an additional challenge. Teachers who have to travel 200 km to the training institution will not commit themselves to attend a course for 6 or 12 units. Two solutions have been taken into account: the teacher trainers have to travel to the schools (in case of whole-staff-training) or the course has to be offered as a blended-learning course.
- Reluctance of teachers and/or principals
 In all participating countries teachers or principals showed some reluctance to "innovative" offers in CPD. Too often they have been disappointed by CPD courses with attractive titles but no interesting content for their daily practice; or they were obliged by top-down-decisions to attend courses which did not meet their needs. Possible solutions: to take care of high quality offers and continuous quality monitoring; to build teachers' confidence into the quality of the BaCuLit offers on a long-term basis and to strive for scientific evaluations which prove the positive effects of the programme.
- Literacy not being prioritised on the educational agenda/rapid institutional changes In all participating countries there is a lack of awareness for the importance of content area literacy and the required qualifications for teachers of all subjects. The educational agendas and topics as well as the involved teacher training programmes and institutions change in accordance with political changes (e.g. due to elections) and often do not allow for the necessary continuity of educational reforms. Possible solutions have to build on continuous awareness raising measures about the importance of literacy issues like those being initiated by the Literacy Report of the European High Level Expert Group (2012) or the European Network of Literacy Organisations (www.eli-net.eu) being established in 2014.

Successful Implementation Strategies for CAL courses

The newly certified BaCuLit trainers in Germany, Hungary and Romania developed different strategies for implementing CAL-elements into their regular PD-practice. Without any exception the qualified trainers who filled in the logbooks displayed a high degree of engagement looking for solutions and paths towards the implementation of the programme. The measures initiated by them were carefully adapted to the conditions of the respective country or region and they witnessed a high amount of creativity. On a general level, the following key success strategies could be identified:

Implementing the programme in several phases of teacher education
In one German federal state the BaCuLit course was developed as a certified additional qualification for teacher trainees. At the same time BaCuLit modules are offered in inservice training and opportunities are currently being explored to offer content area literacy seminars in initial teacher education at the University as well. In Hungary, several modules

of the BaCuLit curriculum have been implemented in the study programme of initial teacher education in one Teacher Training College.

- 2. Implementing the programme step-by-step
 In several institutions a systematic step-by-step planning of implementation on different levels within relevant institutions was performed. Careful information of decision-makers at teacher training institutions turned out to be a key success factor for sustainable implementation of the programme. "As communication had always accompanied the process, there were no barriers to the implementation of BaCuLit", one trainer wrote.
- Integrating BaCuLit into existing literacy programmes
 In all countries attempts have been made to integrate BaCuLit elements into existing programmes or initiatives. In Hungary the national initiative to develop a new generation of textbooks for all school subjects has been used to integrate content area literacy elements and assignments into those textbooks; in Germany national or federal literacy programmes and the respective structures (ProLesen, BISS: Bildung in Sprache und Schrift, "Lesen macht stark") have been addressed; in Romania curriculum reforms and national assessments are taken into account for implementing CAL elements.
- Self-qualification of new trainers

 Several trainers asked themselves how they can gain the necessary expertise as

 BaCuLit facilitators. They decided to first put parts of the programme to the test in their
 own teaching practice (in the schools or teacher seminars where they work) and thus
 gained experience and self-confidence in their role as a BaCuLit trainer. They kind of 'selfscaffolded' their own learning process by asking themselves questions that can be followed
 in their logbooks. Only in a subsequent phase did they implement their BaCuLit elements in
 their role as teacher trainers.
- Applying an 'Appetizer' Strategy

 Several trainers discovered the opportunity of offering "mini-training sessions" with characteristic BaCuLit elements to colleagues and clients in order to create an 'appetite for more'. For example, they offered a two- or three-hours unit on "Modelling and Thinking Aloud" or on "Teaching Academic Vocabulary". Those mini lessons turned out to be highly effective.
- Tailoring the programme to existing demands
 Innovative PD programmes have to be designed in a way which allows for flexible adaptation to different needs, e.g. according to the needs of teachers of different levels (primary/secondary schools) or different types of schools, e.g. high schools or vocational schools. For example, a CAL-course "light" for in-service vocational teacher training and for CPD on natural sciences was found to be the most suitable format in one federal state of Germany.

- Networking

 An essential element for successfully implementing innovations into teachers' PD is building cooperations and networks between different institutions or organisations. In Romania, several Teacher Training Houses developed a cooperation in order to get the BaCuLit course accredited; Filocalia Foundation Iasi and RWCT Cluj came together to exchange their concepts and expertise. In Hungary, a national BaCuLit Association has been built up as part of the Hungarian Reading Association. In Germany, several trainers from different federal states decided to cooperate in order to develop additional modules for the BaCuLit course, e.g. an additional module on "BaCuLit for students with migration background/with German as a second language" and to produce synergies between fields.
- Accreditation
 Depending on national conditions the accreditation of BaCuLit courses turned out to be essential (like in Hungary and Romania). In those cases teacher training institutions started to cooperate in order to share resources and responsibilities for such accreditation.
- Whole staff approach and mentoring programmes
 Several trainers recommended the training of the whole staff of a school as an optimal way to put the BaCuLit programme into practice. However, this could be realised only in the case of one Romanian partner (from Iasi) who developed this concept for 30 schools of 6 counties in the frame of a national programme ("Reading to Learn"). Within this programme, the BaCuLit trainers also offer continuous mentoring for the teachers who are trained in the participating schools. This is felt to be the most effective way to implement CAL into the daily classroom practice of teachers, but it needs according personal and financial resources in order to be put into practice.
- Combining top-down and bottom-up approaches
 Ideally, innovations in teachers' PD need a combination of top-down and bottomup approaches on school, local or national levels. Policy makers, curriculum designers or
 school principals have to provide the necessary legal and financial resources which enable
 teachers to participate in innovative courses. Those courses will on the other hand only
 create change in school and classroom practice if the teachers themselves are motivated and
 engaged in putting educational school programmes into practice.

Outlook and Future Perspectives

The ISIT project has just been finished and its results have to be disseminated now. The BaCuLit Association has more than 50 members in the meanwhile, most of them being certified BaCuLit trainers, and held its 3rd Annual Membership Meeting during the 19th European Conference on Literacy in Klagenfurt in July 2015. The coordinator of BaCuLit and ISIT (University of Cologne) has applied for a new project within the Erasmus+ programme (Key action 2: Cooperation for innovation and the exchange of good practices) which has just recently been approved: The "BleTeach" project (Blended Learning in Teachers' Professional Development) intends to develop a blended learning course in content area literacy for secondary teachers building on a careful investigation of international best practice in this field. The BleTeach consortium consists of 8 partner institutions working in six different countries (Belgium, Germany, Hungary, Portugal, Romania and Russia) and will continue the important work which has begun with the ADORE project.

Further information on BaCuLit is available on the project's website: http://www.baculit.eu

Further information on ISIT is available on the project's website: http://www.isit-project.eu

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'Reading the World' – Freire, Lyotard and A Critique of Literacy Education under the Postmodern Condition

ABSTRACT

This essay explores some of the underlying (and often unacknowledged) theoretical and political tensions and ambiguities in recent literacy education policy in Ireland. Employing the strong critical pedagogical frameworks present in two seminal philosophers in education, Paulo Freire and Jean-François Lyotard, I focus on the simultaneous progressive and anti-progressive aspects of dominant literacy education proposals for schools. These tensions stem not simply from the models of literacy themselves (although they are present there). Rather, they also relate to structural or systemic questions, what might be called the 'politics of education', or here 'the politics of literacy education'. Lyotard's work especially casts light on the complexity of the 'postmodern' situation of education, where increasing recourse to rhetorics of 'emancipation' and 'empowerment' can often mask a more overarching managerialism, which is highly conservative. Freire's work on literacy education, while accused of utopianism, focuses on a more micro- and generative level of educational and student change, which eschews more macro- and top-down models of education and literacy.

Keywords: existential-political literacy, becoming-literate, pseudo-emancipation, generative themes, conscientisation, radical democracy

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Introduction

This paper will seek to explore some of the insights which Paulo Freire's seminal work on literacy, begun in the late 1950s in Brazil (Freire, 1992 and 2005; Freire & Torres, 1994; Brown, 1975), can bring to the context of understanding contemporary notions of literacy education. There has been a renewed focus in recent years from governments and ministries of education on the topic of literacy (Department of Education and Skills, 2010; National Council for Curriculum and Assessment, 2011; NCCA, 2012a), but such an emphasis also brings with it tensions and ideological disagreements. One of the main dangers of such approaches is the tendency to isolate literacy education as some kind of specific technical expertise, which can be divorced from other aspects of teaching and being in the classroom. This kind of specialised technical knowledge then becomes the most important index of what progressive or successfully accomplished teaching must aim at, and is accompanied by back-up test scores and measured performance results from both teachers and students, allowing schools to be placed hierarchically in competitive school league tables. This is both intra-national and international (DES, 2010).

In the latter instance, for example, if we go back to the first cycle of PISA, completed in 2000, the major domain of assessment was reading literacy. Ireland achieved the fifth highest mean score among 27 OECD countries on the combined reading literacy scale (NCCA, 2002). This latter result is described as a 'world-class performance by Irish 15-year-olds... a highly significant achievement for the students, their teachers and their schools' (NCCA, 2002). While there may well be some merit in such a view of Ireland's OECD comparative 'result', we might also express some genuinely pedagogical and philosophical reservations about such assumptions. This currently dominant model of educational ideology, variously referred to as 'technicism' (Irwin, 2010b), the 'rubricist' paradigm (Long, 2008), 'managerialism' (Blake et al., 2003; Carr, 2005) or 'neoliberalism in education', runs the risk of entrenching a fundamental kind of educational illiteracy just as it supposedly seeks to defend the very opposite values in schools. For example, it is noted that 'an over-emphasis on basic skills is identified as being particularly problematic if it occurs in the absence of meaning-oriented instruction' (Knapp, 1995; NCCA, 2012a, p. 18). This hegemony of a certain kind of instrumentalism in education is also traceable, in broader socio-political contours, from a kind of New Right technocratic thinking, as in Daniel Bell's The Coming of the Post-Industrial Society (Bell, 1973). It can also be seen as contextualised by a supposed 'postmodern turn' in education and politics, from the late 1970s onwards most especially, as seminally described in Jean-Francois Lyotard's The Postmodern Condition: A Report on Knowledge (1986), although Lyotard sets his own work in opposition to such technicism and instrumentalism per se in education (Irwin, 2010b). For Lyotard, the principle which he describes as ruling such a society is one where 'the aim of all activity is to reach optimal equilibrium between cost and benefit' (1993, p. 38). The 'human sciences', that is the application of a scientistic paradigm to the humanities and specifically to education and schooling, merely brings 'new refinement' to the application of this rule, which Lyotard refers to as a system of 'unculture' or 'anti-culture' (1993, p. 38).

In Irish education, perhaps unsurprisingly, we see apparently contradictory developments in the educational sphere. On the one side, there are movements which are clearly designed to counter such pedagogical 'technicism'. If we take the Junior Cycle Framework proposals for

example, intended for second level students (12-18 years) (NCCA, 2012b), there is a critique of exams oriented teaching and learning, and a strong emphasis on formative assessments, as well as school based and locally developed (and assessed) learning. For instance, here the emergent emphasis on 'short courses' to be created by specific schools themselves is a good example (NCCA, 2012b). This brings us away from standardisation in education. This seemingly more progressive pedagogical approach is, however, paradoxically also readable in the very opposite direction (Darling & Nordenbo 2003; Irwin 2010a). The Department of Education proposals, while offering somewhat broader definitions of literacy than traditional pedagogies, nonetheless also manifest aspects which are more identifiable with narrower, more reactive educational ideologies (DES 2010, NCCA 2012a).

With regard to broader conceptions of literacy, for example, it is noted in the Better Literacy and Numeracy for Children and Young People NCCA Submission (NCCA, 2011), that the National Draft Plan for Literacy (DES, 2010) 'offers definitions of literacy and numeracy in terms beyond what might have been traditionally understood. Literacy conventionally refers to reading, writing, speaking, viewing, and listening effectively in a range of contexts. In the 21st century, the definition of literacy has expanded to refer to a flexible, sustainable mastery of a set of capabilities in the use and production of traditional texts and new communications technologies using spoken language, print and multimedia' (NCCA, 2011).

With regard to narrower, more reductionistic ideologies, it is also asserted that the National Draft Plan in needing to establish sound foundations for literacy and numeracy, seeks 'to place a relentless focus on the progress of every child in these domains' (DES 2010; 13), foregrounding what it refers to (in literacy test OECD scores) as 'low attainments'. Here, we see an ideological tension between, on the one side, more nuanced and subtle understandings of literacy education and, on the other, a clear drive to instrumental 'performance' and test scores. In this Irish context, for example, we can see these issues highlighted in the differing perspectives of the original Department of Education and Skills documents on literacy education (DES, 2010) and some of the observations on the terms of reference of these plans in succeeding policy documents on literacy from the National Council for Curriculum and Assessment (NCCA, 2011; NCCA, 2012a).

But the tension is not simply between theory and practice. It can also be seen in terms of the hermeneutic which is employed to interpret early year's development in children. For example, reference is made to three significant paradigms of 'theoretical perspectives on young children's early literacy development – from behaviourist to cognitive to socio-cultural perspectives', adding that such views can be seen as developing progressively one into another, in terms of cumulative insight (NCCA, 2012a). However, this model of interpretation significantly neglects the very real (and contemporary) conflicts and irreconcilable differences between such philosophies of early year's development. When it comes to the impact of such specific (and conflicting) philosophies on our understanding of the possibilities of literacy education, these tensions are more clearly apparent. For Freire, no pedagogy is ever innocent (1968) but seeks to apply its own politics of education to the given context, and with literacy education, this ideological tension is especially acute. With a particular reference to the recent Irish context of literacy education, this paper will seek to explore some of the strengths and weaknesses, from a Freirean perspective, of contemporary notions of literacy education. However, Freire's philosophy of education has its own specific

commitments and biases, and exploring these tensions from a Freirean perspective is, of course, also open to counter-argument and contestation (Irwin, 2012; NCCA, 2012a).

Freire's own philosophy of education is itself marked by different phases of work, and although the notion of literacy is paradigmatic for Freire throughout his *oeuvre*, there are distinct emphases to be noted across the different periods of his work and life. In the next section, I will delineate some of the different aspects of this developmental Freirean conception of literacy education, while holding out for an overall unity (a unity amidst difference) in his vision of such pedagogy (Blake & Masschelein, 2003).

Literacy – A Total Change in Society

Instead of being a 'method', we might describe Freire's approach to literacy education as being rooted in an attempt to construct a new epistemology or theory of knowledge (Gadotti, 1994, p. 16; Elias, 1994, p. 2). Or, as Linda Bimbi notes, the Freirean approach to literacy is linked to a 'total change in society' (quoted by Gadotti, 1994, p. 17). Gadotti draws out the story of how this evolution of Freire's method began to engender political conflict in Brazil - this was 'the method which took Paulo Freire into exile' (1994, p. 15). The emergence of this literacy method in Northeastern Brazil is not coincidental - in 1960 this area had an illiteracy rate of 75% and a life expectancy of twenty eight years for men and thirty two for women; in 1956, half of the land was owned by three percent of the population; the income per capita was only 40% of the national average (Elias, 1994). While the first experiments began in 1962 with three hundred rural farm workers who were taught to read and write in forty five days (Gadotti, 1994), the following year Freire had been invited by the President of Brazil to rethink the literacy schemes for adults on a national basis. By 1964, twenty thousand cultural circles were set up for two million illiterate people (Gadotti, 1994). But, as Gadotti notes, 'the military coup, however, interrupted the work right at the beginning and cancelled all the work that had already been done' (1994, p. 16). The military coup thus attacks the literacy and political programme at its very roots. So much for the historical contextualisation of Freire's approach to literacy. But what can this radical perspective to pedagogy tell us today, in relation to contemporary approaches to literacy education?

Here, we can take a two-pronged approach to this question. On the one hand, we can look to an intra-Freirean analysis, pointing to the different phases of his thinking on literacy and how each different emphasis brings new (and not always mutually compatible) insights. Second, we can explore how these distinct strands of Freire's conception of literacy might be applied to contemporary understandings, with particular reference to the Irish context of literacy education. Here, we will see that empirically speaking (in terms of a systems analysis), we should not isolate literacy education but rather see it as part of an interconnected system of educational change and ideology. There are conflicting aspects to this process of educational (and political) change which we can broadly construe under the conception of the 'postmodern condition' (Lyotard, 1986; Irwin, 2010b). The latter is, of course, a conception which originates with the French philosopher Jean-François Lyotard's work, and we will return to a comparison between Freire and Lyotard on education in conclusion, focusing especially on the relevance of this comparison for literacy education.

An Intra-Freirean Analysis of Literacy

Fundamental to Freire's analysis of literacy education are his conception of the ideological distinction between 'sectarianism and radicalisation' and his paradigm of conscientização (conscientization) (Freire, 1996; Fanon, 1986; Irwin, 2012). These concepts develop from an eclectic series of influences, but Freire operationalises them in his own specifically powerful way. Moreover, these are concepts and themes which recur throughout Freire's work often with slightly different inflections and 'modulations', depending on the context of the work, but always in some way returning to the original discussion in *Pedagogy of the Oppressed* (1996). The importance of these concepts develops from Freire's seminal approach to literacy education in the text he wrote prior to Pedagogy of the Oppressed, Education as the Practice of Freedom (in Education for Critical Consciousness, 2005). For Freire, there is an affirmation of 'radicalisation' but never 'sectarianism': 'Pedagogy of the Oppressed, the introductory outlines of which are presented in the following pages, is a task for radicals; it cannot be carried out by sectarians (1996, p. 19). The work of educational and political change which Freire is advocating in these early texts requires a disposition of openness which is sometimes lost in an ideological dogmatism and closedness (however well-meaning this may be). It is this latter dogmatism which Freire labels 'sectarian' and which he seeks to critique. 'Radicalisation', in contrast, which is also strongly committed to change must eschew easy generalised solutions to educational and political problems (Irwin, 2012; Freire, 1996).

We can see how the concept of 'radicalisation' in Freire (explicitly outlined in *Pedagogy of the Oppressed*) emerges from his original work in literacy education in Northeastern Brazil, which he outlines in *Education as the Practice of Freedom* (Freire, 2005). *Education as the Practice of Freedom* grows out of Paulo Freire's creative efforts in adult literacy throughout Brazil prior to the military coup of April 1, 1964, which eventually resulted in his exile (Goulet, 2005, p. vii). As Goulet observes, 'American readers of *Pedagogy of the Oppressed* will find in *Education as The Practice of Freedom* the basic components of Freire's literacy method' (2005, p. viii). However, we must immediately make some qualifications. There is no Freirean method as such (in terms of a literacy method or any other method), as Freire tells us again and again. We might say that Freire's method is to disavow any kind of formulaic methodology.

We will see this expressed in a most extraordinary way (exactly faithful to Freire's consistent philosophy) in his practical work at the Education Secretariat in Brazil in the 1990s (O'Cadiz, Wong & Torres, 1998). Thus, when we look at his approach to literacy education, we are immediately struck by the multi-layered and explicitly inter-disciplinary approach which he takes to literacy education. Another key component is Freire's stress on the need for what he terms 'generative themes', and indeed a generative methodology, which continuously must be reinterrogated as we develop our understanding (and which constitutes a kind of anti-methodology). By anti-methodology here, I mean that the 'generative themes' idea must always take its cue from the specific context of the work and the views of the protagonists, which can be facilitated by the teacher but which must not be directed or which shouldn't adhere to any preformed understanding. This becomes especially important in literacy education where often many so-called emancipatory or progressive approaches start with a predetermined content, without any reference to the socio-cultural world or situation of the students (Freire, 2005).

Additionally, key to his approach is a co-operative relation between teacher and student, where certainly there is a distinction between these roles, but here the teacher's role is more to problematise than to in any way provide an answer. It is arguable that, in such a practicaleducational context, we can see the very same structure which Freire will later theorise more systematically in Pedagogy of the Oppressed and in his powerful critique of what he terms 'banking education' and the impasse of the 'teacher-student contradiction' (Freire, 1996; Irwin, 2012). Freire offers critique on two fronts here. First, he offers a critique of the hegemony of illiteracy based on fundamental social and political-economic inequalities in Brazil of this time. Freire's critique of illiteracy is thus grounded in a whole social-political and economic critique of power in his Brazilian context, linked to but not simply dependent upon the Portuguese colonisation (Freire, 2005; Goulet, 2005). In effect, there is a direct analogy to be drawn between the anti-colonial liberation movements and the dominant approaches to literacy education. This is the second prong of Freire's critique of the banking system, often neglected. That is, Freire also wishes to direct his ire at a certain 'pseudoliberationism' in supposedly emancipatory education and politics, where the latter simply reinforces or inverts the previous power hierarchy. Literacy education runs this risk of being pseudo-liberatory, of being a banking system of education in disguise (Freire, 1996; Illich, 1971; Hooks, 1994).

Freire's final chapter in *Education as a Practice of Freedom*, 'Education and Conscientização' (2005) is preoccupied with the specific aspects of the Brazilian context in the 1960s which his work emerged from: 'My concern for the democratisation of culture within the context of fundamental democratisation required special attention to the quantitative and qualitative deficits in our education. In 1964, approximately four million school age children lacked schools; there were sixteen million illiterates of fourteen years and older. These truly alarming deficits constituted obstacles to the development of the country and to the creation of a democratic mentality' (2005, p. 37). These are indeed 'alarming deficits' in anyone's language and they also demonstrate how a raising of the theme of literacy could not but also connect with the wider socio-political reasons why so many people were illiterate. Thus, there was then real need for what Freire calls 'conscientization' or 'conscientização', an authentic 'critical consciousness'.

Freire includes a significant appendix in *Education as The Practice of Freedom* (2005). In this Appendix, he includes the drawings that he used in the original 'culture circles' in Brazil. In the first case, it is interesting that the original drawings were done by Francisco Brenand but were taken from Freire, during the military coup. The ones included in the newer edition were drawn by another Brazilian artist, Vicente de Abreu, who is himself described as being now in exile. This tells us something important about the Brazilian context from which Freire's work derives. The final picture in the series is meant to exemplify the culture circle itself, where the participants come to recognise themselves, at least if the process has been properly successful (Irwin, 2012). This is the tenth and final picture in the process: 'a culture circle in action' (Freire, 2005, p. 75). Freire describes the discussion around this picture vividly. The discussion pictured involves a 'synthesis of the previous discussions on seeing this situation, the culture circle participants easily identify themselves' (Freire, 2005, p. 75). This self-recognition is important as previously the discussants felt themselves alienated from such a dialectic or philosophical discussion. Also, we see here the sense of the concept of 'culture' itself which plays such an important part in Freire's analysis. Here, we see a

developing and deepening literacy embedded in a radical democratisation of culture and education. In this tenth picture of the culture circle, Freire notes that: 'they discuss culture as a systematic acquisition of knowledge and also the democratisation of culture within the general context of fundamental democratisation. The democratisation of culture has to start from what we are and what we do as people, not from what some people think and want for us' (2005, p. 75). Thus the concepts of militant democracy, of the people and of culture, as constitutive of an authentic literacy, a process of becoming-literate, 'reading the world and reading the word', become indissociable.

What this also allows for is a much more organic and involved definition of *literacy*, as constituted by politicisation and a deepening of existential perspective, thus moving beyond the narrow technicism of much literacy and emancipatory education; 'literacy only makes sense in these terms, as the consequence of human being's beginning to reflect on their own capacity for reflection' (Freire, 2005, p. 76). This also connects Education as The Practice of Freedom (2005) directly to Freire's later text, Extension or Communication (both in Education for Critical Consciousness, 2005), the latter being more focused on a vehement critique of development education. This latter text is again much concerned with the issue of pedagogy and democracy and the way in which supposedly emancipatory pedagogy is often delivered in an approach which favours transmission or 'extension'. In Extension or Communication, Freire makes an especial connection between this approach and development education in the Third World, here agrarian reform in Chile. There is thus a powerful critique of developmental politics in Freire's work, as for example Paul Taylor points out clearly (1994). But what is crucial to note here is that Freire is not critiquing the possibility of literacy education or development pedagogy, but rather pointing to a residual traditionalism (in effect, a 'banking' mindset [Freire, 1996] which exists in much of what passes itself off as liberatory forms of literacy or development thinking (Freire, 2005).

We will see how this Freirean critique might still be applied to contemporary educational contexts below.

Applying Freire and Lyotard to Contemporary Literacy Education – A Postmodern Condition

We began the essay with a contextualisation of some of the recent international and national reemphasis on literacy education, pointing to certain tensions within this emphasis. We have seen that movements endorsing formative assessment and local learning and opposing pedagogical 'technicism' (NCCA, 2012b), (that is, teaching to the exam) do exist, however, the renewed emphasis on literacy appears to create tensions with such a more progressivist approach to pedagogy and assessment (Darling & Nordenbo, 2003; Irwin, 2010a). With regard to broader conceptions of literacy, for example, it is noted in the Better Literacy and Numeracy for Children and Young People NCCA Submission (NCCA, 2011), that the National Draft Plan for Literacy (DES, 2010) 'offers definitions of literacy and numeracy in terms beyond what might have been traditionally understood. While the definitions of literacy outlined in the Department of Education proposals for literacy education seem more broadly defined than traditional approaches to becoming literate, it is also possible to identify more narrow ideologies of education being present' (DES 2010, NCCA 2012a). This tension

is not simply between theory and practice but can also be seen in terms of the hermeneutic which is employed to interpret early year's development in children, for example, a model of interpretation which significantly neglects the very real (and contemporary) conflicts and irreconcilable differences between such philosophies of early year's development, as they relate to our understanding of the possibilities of literacy education (DES, 2010; NCCA, 2012a).

But what can the earlier intra-Freirean analysis of a more radical conception of literacy education (Freire, 1996, 2005), grounded initially in his Brazilian experience but coming to have wider provenance, tell us with regard to such a contemporary educational predicament? Here, I want to contextualise Freire's approaches in relation to Lyotard's diagnosis of a 'postmodern condition' (Lyotard, 1986) in education and politics, whilst also employing some of Lyotard's pedagogical insights, both in affinity and disaffinity to those of Freire (Lyotard, 1993; Dhillon & Standish, 2000). Lyotard's conception of the postmodern moment in education and politics should not be construed as unequivocally negative. Certainly, the postmodern condition can be associated with (and is effectively engendered by) a 'crisis of legitimation'. It is precisely this 'crisis of legitimation' which enables Lyotard to speak of a 'postmodern' epoch (Lyotard, 1986; Irwin, 2010b). If the meta-narratives of legitimation were intrinsically modernist, then the succeeding process of 'de-legitimation' is, by definition, post-modernist (Lyotard, 1986). 'In contemporary society and culture - postindustrial society, postmodern culture - the question of the legitimation of knowledge is formulated in different terms. The grand narrative has lost its credibility, regardless of what mode of unification it uses, regardless of whether it is a speculative narrative or a narrative of emancipation' (Lyotard, 1986, p. 37).

Against the characterisation of postmodernism as a hegemony of instrumentalism, or of a new kind of 'knowledge-economy', Lyotard is claiming that, if anything, this new phase of development represents a move in favour of emancipation (Lyotard, 1986, p. 37). Here, he identifies strongly with his own political and educational work in and around May 1968 in Paris with the Movement of March 22, where Lyotard was a provocative philosophy lecturer and political activist at the infamous University of Nanterre (Lyotard,1993). The Movement of March 22 referred to a specific radical leftist group, of which Lyotard was a part, which had been a key instigator of the May '68 events in Paris. On March 22, 1968, 150 students at the University of Paris at Nanterre, protesting against the arrest of members of an Anti-Vietnam movement, occupied the university's administration offices. In response, the French government closed courses at the university and this action in turn sparked further protests on the part of students, which then inflamed the whole of France. By mid-May 1968, ten million workers were on strike and France was at a standstill. Lyotard refers to this movement as 'having got him out of the impasse between militant delirium and scepticism' (1993, p. 55). As with Lyotard's other texts, 'March 23' seeks to simultaneously critique 'alienated life as a whole', while also looking to a viable alternative: 'what is this other of capitalist bureaucratic reality?' (1993, p. 55).

This is where we can connect Lyotard's analysis to that of Freire. Freire's text *Pedagogy* of the Oppressed was originally published in 1968, and explicitly references the May 1968 students and movement in a footnote on its first page (Irwin, 2012). The crisis of legitimation which Lyotard describes is also a crisis of legitimation for the previously dominant forms of education and politics, which Freire associates especially with a banking mentality and

a First World political regime, as against what he refers to as an emergent 'Thirdworldism' (using this term in an affirmative political sense). The status of literacy education in such a context is complicated and fundamentally ambiguous. On the one hand, on the surface level, it is identified with forces of progression and change, with the emancipation of the illiterate from their plight. On the other hand, on a deeper level, Freire accuses such approaches of often acting as a palliative for the maintenance of the overall (political and educational) status quo. In Education as The Practice of Freedom (Freire, 2005), Freire identifies this residual banking mindset in First world literacy programmes as applied to postcolonial developing societies such as Brazil. At the same time, in terms of his own emergent model of a more radically democratic literacy pedagogy, founded on existential and political consciousness, Freire also points the way to an exit from such a zero sum game. We described this process of the democratisation of culture above, in relation to some of Freire's work on the culture circle (Freire, 2005, p. 75). But clearly there is a positive alternative for literacy education and it is also a strong connector between Freire's analysis (both positive and negative) of literacy education and Lyotard's involvement in the March 22 movement, and his explorations of a way out of the impasse of the postmodern educational and political condition.

Analogously, in his reading of agricultural development schemes in *Extension or Communication* (Freire, 2005), Freire cautions against the residual banking mindset of existing approaches to transformation in rural communities, whilst simultaneously building an authentic model of transformation based on what he terms 'generative themes'. Such a (political-existential) literacy process ['literacy only makes sense in these terms, as the consequence of human being's beginning to reflect on their own capacity for reflection' (Freire, 2005, p. 76)], also provides the pathway to 'conscientization' or 'conscientização', an authentic 'critical consciousness' (Freire 1996).

It is this more radical and problematizing (in Freire's terms, 'problem-posing') literacy education which we should look to in the present educational and political context, as a refreshing voice that has perhaps been lost in the urgent necessity for the state, of producing responses to OECD placings and apparently 'low attainment' of literacy targets. In an Irish context, we can see this critique already getting voice in some of the disagreements and reinterpretations between the original national Draft Plan (DES, 2010) and the succeeding policy and programme evolution (NCCA, 2011 and 2012a). Such a more challenging existential-pedagogical and political paradigm of literacy serves as an iconoclastic counterpoint to a tendency in contemporary education towards more reductionistic programmes (often under the guise of so-called 'emancipatory' or progressive education). Here, rather lurks the Janus face of the currently dominant model of educational ideology, variously referred to as 'technicism' (Irwin, 2010b), the 'rubricist' paradigm (Long, 2008), 'managerialism' (Blake et al., 2003) or 'neoliberalism in education'. Both of these types of literacy education, whether neoliberal or pseudo-emancipatory, run the risk of entrenching a fundamental kind of educational (and existential) illiteracy just as they supposedly seek to defend the very opposite values in schools.

Whither literacy education now, then? Given the pointed critiques from both Freire and Lyotard, it is clear that we need to be more mindful of blindspots in current approaches to education and schooling. Freire and Lyotard's respective ideology-critiques point to the complexification and contradictoriness of the educational and political context, and it is arguable that such complexity is even more pronounced in recent times. Nonetheless, what

this finally demonstrates is that a literacy education which authentically 'reads the word *and* reads the world' is all the more urgently required in schools and wider society today.

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