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Dear IEJEE Readers,

It's a great pleasure for us, as IEJEE family, to present the latest issue of International Electronic Journal of Elementary Education. This excitement started 6 years ago in 2008. From that year on, we've published 17 issues with our precious editor Kamil Özerk and editorial team. These publications were generally on elementary art, language development, maths, science, social studies, computer, social development and educational psychology. In this period four special issues, each of which made an overwhelming impression, were published.

When the issues are examined, it'll be seen that IEJEE has made a great contribution to knowledge and literature in this six-year-period. Thousands of journals have published issues on politics, medicine, sociology, philosophy, economics, engineering, space technology, etc. In this case, it's expected to have a difference between information six years ago and now and contributed to knowledge and literature. With the experimental studies and inventions, the developments in information technologies have been affecting human life fabulously. Information is not any more on the second shelf at the latest end of the library, it's now on the keys of our mobile phones.
We are ready to contribute with the new issue. In the first article, Müürsepp and Kıkkull examine the significance of craft skills for the pupils in age nine and twelve years. The next article "The Impact of Notebooking on Teacher Candidates' Construction of Knowledge" investigates the structures and thinking processes that teacher candidates utilize when writing in notebooks. In the third article, Weigh offers a qualitative analysis of student-described engagement with selfselected text in a classroom where a core reading program comprised the majority of their literacy instruction. In the fourth article, Kılınç investigates pre-service social studies teachers' understandings about the nature of the social studies. The next article "Predictors of Quality Verbal Engagement in Third-Grade Literature Discussions" examines how reading ability and personality traits predict the quality of verbal discussions in peer-led literature circles. Özerk and Kerchner explores the impact of demographic changes on political agendas, legal frames, educational approaches, research findings and student achievement in the field of education of linguistic minorities in Oslo, Norway and Los Angeles, USA. The last article in this issue is entitled "Using the Branching Story Approach to Motivate Students' Interest in Reading" written by Jane Liu and Hanan Aldurayb.

I'd like to thank to the editors, advisory board and to the authors of the current issue. The forthcoming special issue of International Electronic Journal of Elementary Education is about **Reading Fluency**. The special issue editor is internationally wellknown reading fluency scholar **Dr. Timothy Rasinski**, professor of literacy education at Kent State University, USA.

Dr. Turan Temur
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Cooking and Hammering: Primary School Pupils' Concepts of their Craft Skills

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Abstract

The aim of the study is to clear the significance of craft skills for the pupils in age nine and twelve years. More than 200 pupils were asked to define, what are the most important skills for the pupils of their age. The results bring out that category of the skills related to craft subject is of the most presented categories in pupils' self description. Thus the primary school pupils essentially defined themselves by the activities they could do practically (building, cooking, repairing of things). The most undefined relation to craft activities is reflected in the answer of smaller boys in our study. A suspicion arisen from the analysis of pupils' sayings, that the craft lessons in the 1st school stage tend to be organized kind of poorly was asserted by the teachers who pointed out the need for special rooms and materials to implement different techniques.

Keywords: Craft Skills, Curriculum Development, Ideal Standard, Primary Education, Self-Concept.

Introduction

The title is inspired by an interview in a scientific journal, where the editor asked a famous physician a question about conditions supporting his pursuits in science. The physician reminded an episode when he was three years old hammering a nail, and also later in his childhood when he was often given different materials and tools to knock up technical widgets (Akadeemik 2008). He pointed out the significance of craft activities as a tool of scientific thinking.

This paper focuses on problems of technology teaching in primary school. The empirical study covered the abilities that pupils themselves elicit as necessary, in other words, their ideal self-concept on the level of their skills. Skills related to craft subject have gained an important place in pupils' answers. Questions evolved from that: what kind of skills is

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important for different age and gender groups? What kind of information might be gathered from pupils to improve technology teaching?

The study about valuing craft skills by pupils is placed in the theoretical frame of curriculum development and technology teaching (Alamäki 1999; Illum 2005; Lind 2009, 2010; Lindfors 2007; Lindström 2011; Kikkull 2012). Nordic craft syllabuses prioritize pupils' self-confidence and coping with everyday life. Consequently it should be significant for curriculum development what the pupils themselves think about the subject of craft in the context of their activities and needs. Estonian National Curriculum experiences a paradigmatic shift along the lines of Nordic curricula, to support the forming of pupils' general competences in craft lessons (Lind 2009; Kikkull 2012). At the same time the problem of overemphasizing the so-called academic (core) subjects at expense of creative and practical subjects is real in our country as well as in the world at large (Adams 2011; Alexander 2009; Erwin, Fedewa & Ahn 2012; Russell-Bowie 2009). The article is written with certitude that skills acquired and trained in craft are important for pupils' general development and coping with everyday life.

Theoretical argumentation

Craft skills: interpretation of the notion in the context of general development. There is a subject called 'craft' in the curriculum of some countries, but the topic would also be included in the subjects 'technology', 'arts and design' and 'technology' in other countries (Alamäki 1999; Lindström 2011; Lind 2009; Sløjd 2004; Kikkull 2012). Implementation of the notion of 'craft skills' depends on the field of research and on cultural context. The notion of 'craft' is defined by skills in planning, making or executing, or activity that involves making something in a skilful way by using your hands (Free Merriam Webster Dictionary), 'craft' as a number of separate skills (Cambridge Dictionaries Online); 'craft' as a skill, trade or occupation, especially requiring use of hands, an activity involving skills in making things by hand (Oxford Dictionaries). Skill is an ability to use one's knowledge effectively and readily in execution or performance (Free Merriam Webster Dictionary).

Analysing pupils' ideas about their craft skills, the article concentrates on skills related to different areas of craft; these are the skills acquired and trained in craft subject.

There is a certain agreement between the notions 'craft skills' and 'manual skills', although craft work demands both mental and manual input: as expressed in Latin, things are done "mente et manu" - with mind and hand... Manual skills will be defined as the ability to use one's hands efficiently in performing a specific task or operation. The notion of motor skills is also important in the context of craft skills. The child will develop fine and gross motor skills through directed activities and periods of free and independent play. In primary school age children's gross motor skills will develop more rapidly than their fine motor skills which require more concentration. There are a number of manual and physical abilities based on fine motor skills like managing tools for craft (pencil, scissors, brush, needle, awl, fork and knife), carrying different things, and coordinating movements, which are considered necessary in kindergarten programme as indicators of school readiness (Alushariduse 2006). The physical and motor dimension is related to functional performance of personal skills; however, there is data from all over the world that the amount of children's everyday physical activity has decreased during recent decades (Hakala 2009). Researchers dealing with parents' attitudes towards preschoolers' physical and personal competences confirm that parents overestimate children's intellectual abilities and underestimate physical development as a part of school readiness (Hakala 2009; Palm 2009).

Although instructions on assessing school readiness usually point out certain motor skills which have to be acquired before school, each child is different and many children need

special attention at school because they have poor development in fine motor skills. Poor motor competence may interfere with daily life activities, resulting in a less active lifestyle in primary school aged children (Juul-Kristensen 2009). There are activities and materials allowing active movement of entire body that is necessary in primary school – like building from big details (blocks, constructors, stones, snow...) or composing collective works like oversized paintings (Põhikooli 2010).

Statements have been made that because of the influence of globalisation and scientific development, manual work skills would lose their significance in the context of education, while the labour market needs not so much craft skills any more but knowledge and skills of information technology instead (Waks 2003). As a counterpoint to such pragmatic logic, craft skills would be treated as a personal treasure for pupils and a factor of general personal development. Conscious work on development of craft skills related to fine and gross motor movements is as important in preschool age as later, also in adolescence. For a long time the dominant belief in education was that the brain develops only until end of childhood. Only in the last decade neuroscientists have pointed out new knowledge about adolescent brain development. There are areas of brain functioning that depend on activity of fine and gross motor movements. Speaking about the adolescent brain, the skills of impulse control, appreciation of cause and effect, and planning and decision making are mentioned as important skills that rely on numerous interconnecting cognitive components that emerge as the brain develops during adolescence (Weinberger, Elvevåg & Giedd 2005; The Secrets 2011).

The list of general competences of National Curriculum for the first stage includes abilities related to craft skills (to some extent), such as 'uses tools for measuring', 'uses technical equipment at home and in school', 'enjoys moving and creative self-expression', 'keeps order and cleanliness'. The list of later general competences includes abilities like 'expressing oneself through art', 'having a general understanding about the world of work' (Põhikooli 2010).

Competences and qualities of a pupil may be expressed diversely, but they always reflect the concept of a child as harboured by the curriculum's compilers. Thus, the compilers of the National Curriculum for Basic School see a child at age nine/ten years using technical equipment, enjoying moving, keeping order and cleanliness, and a pupil at age 12/13 years having a general understanding about the world of work (Põhikooli... 2010).

Certainly, craft skills are included not only in the general part of the curriculum. There is an area called 'Technology' which includes subjects like 'manual training', 'handicraft/domestic science' and 'technology'. For a long time the subject of 'craft' has been interpreted on the level of polytechnical instruction in our syllabus; teaching specific technologies of treating different materials has been its most important goal. Today's demand for teamwork skills, innovative thinking and creativity has influenced certain changes in the craft syllabus (Alamäki 1999; Illum 2005; Kikkull 2012).

When comparing the goals of craft teaching in neighbouring countries, the differences are remarkable (Kikkull 2012). The most important aim of craft teaching in the Nordic syllabi is pupils' all-round development (Crafts 2000; National 2004; Slojd 2004; Education 2007). Craft is treated as a combination of manual and mental work, improving creativity, curiosity, responsibility, independence and problem solving skills (Crafts 2000, Kikkull 2012). Purposeful work with different materials empowers pupils' self-confidence and faith in their skills, and these are the conditions necessary to solve problems anywhere.

Self-concept: explanations, measurement and relation to skills. Treatment of different interpretations of the notion 'self-concept' in the article here is based on implementation of a research method related to assessment of self-concept. Self-concept, broadly defined, is a person's perception of him or herself (Shavelson and Bolus 1982). Theorists emphasise the multiplicity and multidimensionality of self-concept phenomena (Shavelson and Bolus 1982; Gage and Berliner 1998; Lee 2005; Marsh 1989; Sailkind 2008; Wentzel and Wigfield 2009).

Results of studies show that specific components of self-concept may be different depending on age and gender, for example boys may have higher physical self-concept than girls, but lower self-concept in e.g. sociability. Marsh (1989) has warned against simplification of gender differences in treatment of self-concept, as these might be influenced by traditional gender stereotypes.

Reflecting on research of younger children, Marsh pointed out a problem that younger children may have difficulties responding to psychometric measurement on a five-point response scale; they also tend to be egocentric and have consistently high, less differentiated self-concepts in all areas. As children become older, their self-perceptions become more correlated with performance, performance feedback and other external criteria (ibid). Younger children's self-perception is more concrete, meaning they define themselves in terms of their physical characteristics, but later their self-concept becomes more abstract as a result of better understanding of their abilities (Schunk, cited by Lee 2005).

In the context of the current study it is important to discuss the social essence of self-concept. Relationship with adults and peers within school setting is a factor that affects pupils' self-concept (Gilman, Scott Huebner & Furlong 2008; Lee 2005; Wentzel & Wigfield 2009).

Whereas the current research aims to explain the significance of craft skills for pupils in primary school, relevant sub-categories of self-concept have to be included in the discussion as well. In research, the notion of academic self-concept by Shavelson and followers (1982) has been tied with “more academic” subjects like math, science and language, as if it was not possible to include that ability in the craft subject. There is obviously an attitude of general undervaluing of art and craft education in academic research. Craft skills may be treated only conditionally, in the framework of physical abilities (like fine motor skills) and problem-solving ability (Marsh 1989). Therefore, the idea of hybrid self-concept (Gilman et al, 2008) seems to be fruitful in research of abilities like craft skills, integrating mental, manual, creative and aesthetical aspects of person's abilities.

According to Gilman et al (2008), information about sub-domains of self-concept will be evaluated by four evaluation standards – 'absolute', 'comparative', 'ipsative' and 'ideal'. The category of 'ideal standard' will be employed in empirical research below, according to the definition by theorists that an ideal level of accomplishment would be used as a standard of comparison by a student or by others.

The competences in National Curriculum are verbalized from pupils' point of view, like 'a pupil values..., uses..., is able to...' (Põhikooli 2002; Põhikooli 2010). There is reason to compare an adult's understanding with responses of pupils concerning their abilities.

Why speak about pupils' participation in development of curriculum?. Contemporary primary education research is supported by childhood studies where a child is seen as a reflective, independent and active participant in his or her life course (Hill 2006; Alexander 2009; Karlsson 2009; Lindström 2011). However, the present National Curriculum reflects certain stagnation. During the last 20 years the idea of child-centeredness has been accentuated as a

leading principle of Estonian school reforms (Veenpere 1999; Kreitzberg 2000); however, the primary stage would be interpreted dominantly as a preparation for next school stages and not as a specific developmental stage in itself (Põhikooli 2002; Arenev 2006; Põhikooli 2010). Critics of National Curriculum point out a disagreement between the general part and the subject syllabi: ideas expressed in the general part are not reflected in subject teaching (Läänemets 2010). While constructivist ideas of learning raised already by John Dewey (orig 1916, newly edited 2011) are followed on the general level, subject areas need to develop specific strategies to include pupils' opinion and their reflection of their life experience. The idea of pupils' activity in curriculum development is included in the National Curriculum's text. Therefore the study here proves a practical opportunity to involve pupils in discussion about educational ideals.

On the one hand, primary school is a very traditional phenomenon, and on the other hand it is a meeting place for a new generation of children coming from the rapidly changing childhood of today, which means also a conflict between traditions and change in many aspects of teaching. Children's experience is an important source to get the ideas for school improvement (Baytak, Tarman & Ayas 2011; Boylan 2008). The problems of our curriculum development are not exceptional, as discussions concerning curriculum-related topics are in focus in many countries, especially in light of international comparison (Alexander 2009; Rose 2009; Läänemets 2010; Richards 2010).

Method

Participants

We gathered two sets of drawings and accompanying written descriptions which respectively focused on prospective teachers' past mathematics learning experiences as students and their future plans as teachers. These samples were taken from 100 prospective teachers who enrolled in one of five sections of an elementary mathematics methods course over two semesters. This elementary mathematics methods course is a 4-credit, required course for all elementary education majors at a Midwestern United States university and is typically taken prior to student teaching. All of the prospective teachers had successfully completed their mathematics content courses prior to this methods course. Participants consisted of 84 female and 16 male teacher candidates.

Throughout the semester, participants engaged in various modes of instruction, including lectures, large and small group discussions on theories and educational trends or issues, and hands-on activities that involved technology tools and manipulatives. In addition, participants were asked to complete several course assignments in their field setting while they interacted with actual students. Those assignments included developing and implementing a mathematics lesson and assessment for their field students.

Data source

Prospective teachers' reflections upon their past mathematics experiences and plans for future teaching were identified through the drawings and corresponding descriptions that they completed on two separate occasions during the semester. The first set of drawings and descriptions (Set 1) was collected at the second class meeting. Participants were asked to draw a picture that portrayed their past math teachers or other memorable mathematics learning experiences on a standard sheet of paper. Participants were also asked to include a written paragraph that described their picture and clarified the meaning embedded in their drawing, as suggested in other similar studies using drawings as research methods (Mitchell et al., 2011). These were shared in a small group discussion and a few volunteers even presented their drawings to the class. The second set of drawings and descriptions (Set 2)

was collected on the last day class. This time, participants were asked to draw a picture that portrayed their own elementary mathematics classes in five years. Participants' drawings were presented in various formats including hand-drawings, computer clip arts, and collages. Some drawings contained realistic descriptions of classroom settings or people while others used metaphorical objects or words. In order to encourage participants to respond honestly, it was promised that the quality of their artwork and writing would not be assessed and students would earn full credits by simply completing their work. These two sets of drawings were worth approximately 5 percent of the total course assignment points.

Data analysis

Participants' drawings and written descriptions were examined based on aspects of open-ended coding and a double-coding procedure (Miles & Huberman, 1994; Strauss & Corbin, 1998). This study was not intended to utilize the pre/post design that asks the same question to compare changes. Instead, the sets of drawings and written descriptions were analyzed separately highlighting participants' views on teaching and learning mathematics when they positioned themselves in different roles (i.e., as a student or as a teacher).

We created a text translation of the drawings by listing specific items or settings depicted in each (e.g., "a crying face in the middle surrounded by numbers and signs of operations"). We then noted specific words and phrases in the corresponding written descriptions. The text translations and notes made from the written descriptions were used together as data and categorized into several themes. Initially, we reviewed the data independently to identify recurring themes and intentions. We then revised and refined the identified themes together through comparison and discussion and then coded our findings. Doing this together allowed us to resolve coding discrepancies immediately. After the completion of coding, frequencies of coded themes were identified. In the results section, selected excerpts and examples of drawings were used to illustrate the common themes identified.

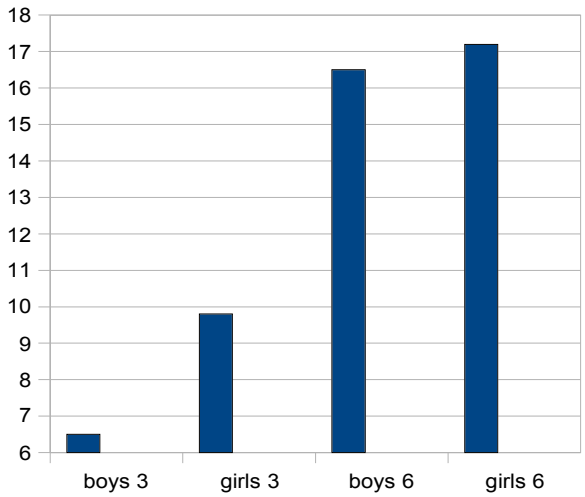

Figure 1. *Proportion of mentioning craft skills in the answers of each group (the number indicates the percentage; grade 3 - 9 years old pupils, grade 6 - 12 years old pupils)*

Gender differences in defining necessary competences

Each respondent could attribute a specific skill either to a boy, a girl or both. The biggest number of common outcomes independent of gender was in the category of moral values. For the most part, respondents shared the opinion that both boys and girls have to respect old people, peers, home, family, parents, people in general, but also animals, nature, homeland.

The gender-independent component was also considerable in case of social skills: all children must know how to behave; they have to be friendly and helpful.

Regarding the hypothetical 'fine boy' and 'fine girl', the biggest differences in any respondent groups were in the category of craft skills. Figure 2 shows the number of answers which attribute a specific skill only to girls and only to boys. In all respondent groups, the number of craft skills attributed to girls is nearly twice as big as that of boys. In other words, both boys and girls thought that girls have to be able to do more different works than boys.

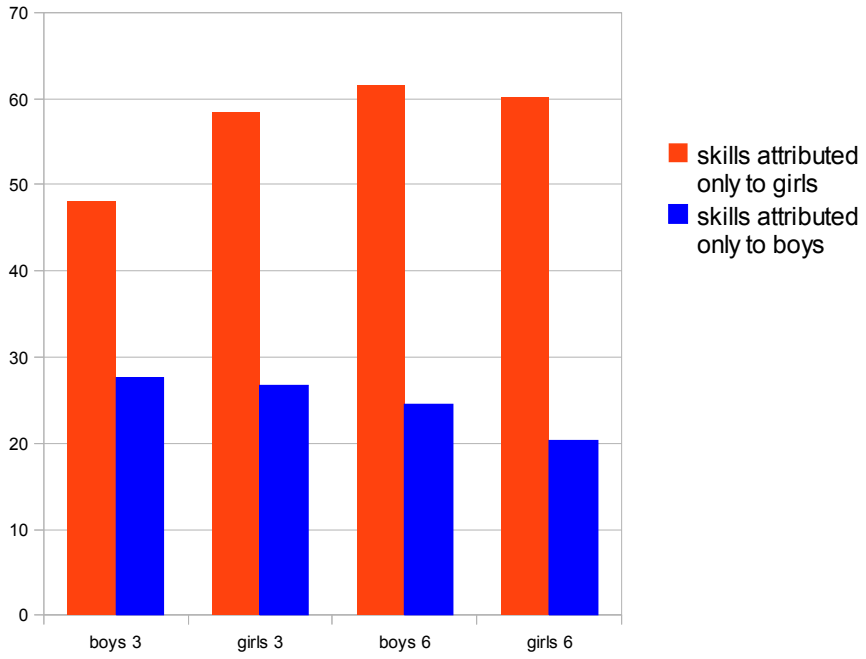

Figure 2. Proportion of sayings about skills attributed to girls and boys in answers of each group (the number indicates the percentage of answers)

While boys and girls are rather equivalent in naming craft skills (Fig 1), a considerable difference can be seen in comparison of skills attributed to boys and girls. Gender stereotypes are especially noticeable in assessments provided by younger boys. Grade 3 boys believe that a boy of their age should be able to build, construct, fix things, and girls of their age should know how to cook, do the washing up and sew, knit, and crochet. They attribute drawing skills also primarily to girls. Grade 3 girls believe that independently of gender, children of their age should know how to cook and tidy up. Grade 6 pupils consider cooking, baking, and tidying up as skills necessary for both genders; gender stereotypes are apparent in case of other skills – men build things, 'do things that require strength', use heavy and sharp tools, whereas women knit, crochet, and take care of their clothing in other ways.

Expressions with more generality, regarding more complex coping qualities that might contain a craft skill, are 'knows what to do when in trouble/in a difficult situation/can cope in different situations', 'knows things that are necessary for life', 'can cope independently', 'is able to look after himself/herself', 'knows how to do something useful', 'is able to help others', 'is able to use acquired skills in everyday life', 'knows how to cope in the nature', 'is able to solve problems independently', 'is able to do things within his/her powers'. More

complex coping qualities are usually gender-neutral – these are important both for boys and girls. Similarly to the need to 'know everything/a lot/about everything', pupils expect their ideal to be able to cope universally in case of practical skills, which in turn should mean mastering various skills. In pupils' opinion, craft skills are also related to interest in technical problems and research in the field: in grade 6, pupils have mentioned that a boy 'is able to construct complex inventions to perform simple tasks', 'knows how mechanisms function, e.g. a carburettor'.

Discussion

Three questions are discussed here: What kind of knowledge would be obtained from the study introduced in previous parts of the article? How to interpret the sayings gathered from grade 3 and grade 6 pupils? How could the results and conclusions be used in curriculum development and technology teaching? The study's results will be analyzed in the context of general competences of the National Curriculum and in the light of comments of the expert group.

According to the results, the skills of cooking, doing textile works and building are comparable in their significance for pupils to the so called 'core' abilities which are measured by national and international tests (mathematics, language). As theorists of curriculum propose that technology should be taught for pupils' everyday needs, the pupils' answers – especially in grade 6 – confirm that pupils need and respect the skills trained in craft lessons. Skills related to craft are significant in pupils' description of their ideal self.

Although the general part of the curriculum mentions the ability to use technical equipment as necessary for pupils of age 9-10 years, none of the pupils – not in that age nor older – wrote about this kind of skills. Different explanations may be given to the absence of the idea of technical equipment use in pupils' answers. Of course, special research of tools and equipment use by pupils in everyday school activities and at home might be a part of both technology teaching and academic research work. Maybe pupils who are using different tools like mobile telephones, iPads, washing machines and other devices do not see any special skill in switching these on and off. Rather, piling of logs and tying a tie are mentioned as complicated activities. Children do not see a problem in using things by which they are surrounded. Oppositely, there are projects relevant in education where children teach computer use to elderly people (Tambaum 2009). Presumably, attention of teachers should be directed to not only the use of equipment but also to integration of pupils' experience in information technology with different themes of handicraft and homework and design.

When presenting the results to a wider audience of educators, specific features of children's language development should be remembered. As generally known in primary education, speech of younger pupils is very concrete, influenced by their most recent experiences. Younger pupils' ability to generalize is relatively weak and for that reason their sayings should be analyzed in the context of specific situation. Words and sentences about the 'ideal self' in the study here are the results of only a certain sample, although from different schools. These convey the manner of pupils' thinking and may inspire to compile worksheets, copybooks or other materials to support technology teaching and to study specific pupils in specific schools in order to improve teaching in those schools.

The study was introduced to a group of primary school teachers participating in a summer school. They appreciated highly the pupils' sayings about skills and abilities and found those to be a true reflection of conditions where primary teachers work. According to teachers' opinion, craft skills are significant for pupils due to the fact that children use practical performance to assess that they are able to do something. They see the result of

their plans and working processes. With more intellectual and abstract school tasks, they are not very capable of assessing their performance and the assessment is generally done by a teacher.

The ability to cook was mentioned by pupils the most among all practical activities, when comparing to other skills and abilities concerned with craft (handicraft or rather homemaking). The new version of the National Curriculum is up-to-date in the aspect of homemaking in primary school: while earlier the outcome for pupils of grade 3 was only to do dishes and tidy up, the new syllabus includes the ability to cook simple food (Põhikooli 2010). At the same time a big mistake has happened in technology syllabus. As an innovation, there are chapters of learning environment in the syllabus, specifying the conditions which have to be provided by school owners (mostly local governments). The environment for craft in the first school stage is described only as tools and materials for individual work. However, some works demand special rooms and equipment – like cooking for example. Unfortunately, the requirement for special rooms and equipment is noted in the syllabus only beginning from the second stage (age 10-12 years), not for the younger age.

A distressing result in the study is that younger boys – pupils of grade 3 – have answered only very modestly in reference to craft skills. A typical description is that a boy in grade 3 has to run or realize another physical task and a girl has to perform handicraft. How to join boys' attachment to gross motor movement with subjects of craft and art? The answers given by boys in the first stage of study barely reflect the content intended for the first stage of study by the National Curriculum. The notion of 'constructing, building' is mentioned only sometimes in the whole material collected from boys of the first stage. However, the syllabus itemises activities such as processing metal and wood, making objects using wire, constructing and building models, as being included in the first stage. This leads to the conclusion that in reality teachers prefer working with paper and cardboard and do the so-called traditional handicraft work which is mostly attributed to women (sewing, knitting, crocheting), because most probably such activities are easier in respect to getting the necessary materials, storing the finished objects, and probably agree more with the utility possibilities offered by classrooms. The fact that smaller boys identify themselves less through craft skills could be related to factors which are due to boys' poorer coping in many aspects (Pinker 2008).

In general, gender differences came out concerning pupils' attitude towards craft skills. As a comment it has to be said that there is a new version of the syllabus since 2010, intended tominimise gender segregation in the subject of technology. The traditional distribution – handicraft for girls and technology (manual training first of all) for boys – is replaced with the principle that pupils can choose different technology courses independent of their gender. In relation with this, gender differences should be studied a few years later, to see possible changes in pupils' views.

A self-critical remark has to be made with regard to research methodology in the current study. According to a warning by Marsh (1989), there is a possibility that gender stereotypes could be stressed by researchers themselves. When one asks about differences between boys and girls, the respondent seems to be programmed into an answer.

Nowadays, in the light of theories of multiple masculinity and femininity, research in education could well disengage from gender based thinking. (Müürsepp & Uusen 2012). Maybe the lifestyle and living conditions of pupils' families should be taken into account rather than gender issues, to clarify the skills necessary from pupils' viewpoint. The fact that younger children mention craft skills less frequently when compared to their older peers – and boys in particular – could also be associated with their speech development. Children

find it easier to name procedures and principles which have been phrased or verbalised more intensively for them. In respect to craft skills, one aspect of the problem may precisely be the fact that activities such as 'placing', 'cutting', 'gluing' and others are not clearly named in lessons. Teachers rather say: 'Today we are making a cat. What did we make today? We made a cat.' For the sake of children's language development as well as to give meaning to their work, it is important to use all verbs labelling the different activities in all stages of the work: planning, making, assessing the results, and discussions in a later stage.

The social essence of self-concept noted by many authors (Gilman 2008; Lee 2005; Wentzel & Wigfield 2009) has to be referenced here. Defining their ideal self, children would mention characteristics about which they have spoken with their fellows and teachers.

Conclusions

Summarizing the analysis and the discussion, the most significant conclusions seem to be the following: 1) pupils' attitudes towards the abilities and skills trained in craft are important to share, because these provide support to teachers in organizing work processes and environment; teachers appreciate pupils' thoughts; 2) the most undefined relation to craft activities is reflected in answers of smaller boys in our study, i.e. boys in grade 3; what to do in order to teach craft according to boys' necessities and potential is a question for further research; 3) the suspicion raised by analysis of pupils' sayings, i.e. that craft tends to be organized somewhat poorly in the first school stage, was confirmed by teachers who pointed out the need for special rooms and materials to implement different techniques.

To interpret pupils' attitudes in an international study and more deeply in a wider cultural and social context, the following questions have to be considered: What are education-related values in both schools and families? What are the functions of different institutions in education and how do they cooperate? Priorities mentioned by children in other countries are similar to our study: children expected school to prepare them for life, to develop relationship skills and life skills, etc. (Primary Review 2007).

According to the study's results, we can confirm that pupils in grade 3 and 6 see the abilities and skills trained in craft lessons as being part of their general ideal self. Primary grade teachers understand that pupils' craft skills are the basis of learning at school. Whilst the new craft syllabus has taken many steps towards contemporary craft teaching (Lind 2010), researchers and developers of the curriculum and leadership of schools have to understand that development of craft skills as a part of general development cannot be left in background and in fact merits a lot more attention.

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The Impact of Notebooking on Teacher Candidates' Construction of Knowledge

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Abstract

Teacher education preparation programs must adapt to changing science education reform movements that identify notebooking as an effective means to increase children's' science process skills and content knowledge. This study addresses the question, "What are the structures and thinking processes that teacher candidates utilize when writing in notebooks?" Specifically, how do they express their thoughts during an observational-based prompt writing experience in an undergraduate, integrated science and mathematics methods course? Sixteen teacher candidates at a Midwestern university in the United States completed an eight-week assignment during the spring 2012 semester using notebooks. Results indicate the participants could be placed into three distinct categories of processing and formatting the notebooks which are described in detail with supporting examples.

Keywords: Observation, Curriculum, Constructivist, Teacher Candidates

Introduction

The need for something better

Science education continues to be a vital subject for the United States and its citizens. Recent advances in technology mean that emerging careers are strongly linked to education, training, and knowledge in the science, technology, engineering, and mathematics (STEM)

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fields. In addition to career opportunities, science education is critical in helping citizens prepare for incorporating scientific advances into their personal lives. And, of course, the process skills and scientific attitudes developed through science are important to help young and old navigate (Achieve, Inc. 2013; National Research Council 1996; National Science Teachers Association, 2002). But, for many in the United States science education is not meeting the demand for educating students to live and work in a rapidly changing scientifically enhanced world. One of the nation's leading advocates for reform in science teaching or education, the National Science Resource Center (NSRC), expresses its mission as "…to improve the learning and teaching of science for all students in the United States and throughout the world." (NRSC, 2011). This reform is largely based on research that supports inquiry based coursework. Such coursework, and appropriately connected elementary teacher instruction, promotes problem solving and deeper understanding of science content. Such instruction often requires integrated learning connected to solving problems and investigating problems over time.

To help address the need for something better, the NRSC, and other leading reformers, call for a change in the way curricula is taught to elementary students. One such change is the incorporation of inquiry based kits. Inquiry based kits have existed and been used in elementary classrooms for about half a century and have seen an increased emphasis over the last decade. One reason for their use is that the kits often include assessment tools that help teachers monitor and determine students' abilities to master science process skills and the content knowledge upon which a kit is based. These assessment tools often require students to write out their answers as they learn. Researchers have long demonstrated, and still do, that students better learn the science when they write about it (Aschbacher & Alonzo, 2006; Endreny, 2010; Fulton & Campbell, 2004; Matsumura, et al., 2002; Rivard, 1994; Scardamalia & Bereiter, 1985). Rowell's (1997) metanalysis on writing in science implies that students can improve their conceptual understanding of science through notebooking. This is largely due to the cognitive disequilibrium they experience as they attempt to scaffold existing schemata into a new framework to integrate new information, terminology, and linkages. Therefore, notebooking and writing can be used as essential curricular strategies to enhance learning in the elementary classroom.

The role of science notebooks

While students have long used writing in school it has not always been done in a systematic way. Copying class notes from a board, completing worksheets, or writing one word answers to questions on laboratory sheets is not currently viewed as best practices in learning and assessment with inquiry-based methodology. To address this deficiency in elementary science, student notebooks are often incorporated as a pathway for students to better learn through an authentic, inquiry-based method. Science notebooks include the ways scientists (and students) systematically develop research questions, record observations and data, draw inferences and conclusions, and communicate findings as they go about their work. Notebooking and writing practices are critically important and directly called for in Practice 4 (Analyzing and Interpreting Data) and Practice 8 (Obtaining, Evaluating, and Communicating Information) of the Next Generation Science Standards (Achieve, 2013).

To effectively model the process by which adult scientists go about their work, elementary teachers are encouraged to utilize notebooks with their students. In the elementary school, notebooking may defined as "…tools for students to grapple with scientific concepts and make sense of their understandings using recording and organizing strategies that are personally meaningful" (Fulton & Campbell, 2004, p. 26). A key goal for notebooking then is to write for conceptual understanding (Tomkins & Tunnicliffe, 2001).

Variations about what should be included in science notebooks exist, but they all attempt to challenge students to record observations, analyze data/findings, summarize their learning, and ask new questions from the experience. They are then able to take ownership of the notebooks and review them as they integrate their developing knowledge with classroom work. In addition to writing for conceptual understanding students should include drawings and diagrams to help internalize the content being learned (Glynn & Muth, 2008). Shepardson and Britsch (2001) report that this is a bit more intuitive for primary students based on their imaginative play. Primary students contextualize their occurrences in relation to a) imagination, b) previous experiences, and c) the science activity/experiment itself. Intermediate students have become more normalized to the process of schooling and learning and expectations of the teacher.

This begs the question then of how elementary teacher candidates will structure and express their thinking while using notebooks to record observations in nature. Since observing lies at the heart of the basic scientific process skills, it is important that teacher candidates model, understand, and master the creation of exemplary observations when notebooking. Indeed, how they internalize the process as emerging teachers will relate to how they use and teach the process to future elementary students. As such, their notebook recordings will be used to discover how teacher candidates structure and express their thinking while making observations in a nature setting. Specifically, the research question we addressed was what are the structures and thinking processes that teacher candidates utilize when writing in notebooks how do teacher candidates physically structure their notebook observations when recording observations in a nature setting.

Method

To address the research question, researchers analyzed entries from 16 teacher candidate observation notebooks. Notebook entries were collected weekly over an 8-week period following the introduction of the assignment. Following best practices, intermediate notebook entries were not formally assessed and feedback was limited to helping candidates uncover their ideas, asking questions, and making general comments (Fulton & Campbell (2003).

Participants

Participants for this study came from teacher candidates enrolled in two sections of an undergraduate integrated science and mathematics university level course taught by the lead author. The course material covered content and strategies for teaching grades kindergarten through grade three and seeks to emphasize the use of inquiry-based practices with young children. Participants were recruited through an explanation of the project given by the professor (first author) who taught both sections. The final 16 participants represent those who consented.

The participants have been accepted into a Department of Teacher Education program located in a Midwestern United States 4-year public university that is accredited by the National Council for Accreditation of Teacher Education (NCATE). To be accepted into the program candidates must have passed, by meeting minimum state cutoff scores, the Praxis I, ACT, SAT, or GRE examinations; earned a 2.75 GPA; passed a criminal background check; and successfully completed all coursework that applies to the program course requirements with at least a C or better.

The professor desired that teacher candidates (participants of study) spend time outdoors as well as begin to practice recording observations, so she combined these into this assignment. As a classroom teacher, she had found that even young children do not always

observe carefully when in nature. Many of the children did not get up close to trees, leaves, logs, and bugs. They did not handle them or peer at them. This assignment was to provide teacher candidates an opportunity to be introduced to doing observations outside as well as a way to practice asking questions that would lead to data collection and problem solving. She was also interested in how they might connect this series of observations with their future teaching.

Procedures

After IRB approval, the research project was explained to all eligible participants in both sections of the course and informed consent documents were distributed in class during the first week. Those who were willing to participate signed the informed consent document and returned them to the professor. An explanation of the observation notebook assignment (see Figure 1) was provided in class to all participants.

Assignment: Observation Notebook

Goals for this assignment

- ✓ Consider why young children need to observe and spend time outdoors
- ✓ Use several senses
- ✓ Recognize possible use of photographs, drawings in conducting observations
- ✓ Relate observation to other content learning, and the development of children
- ✓ Growing ability to ask higher level questions
- ✓ Increased use of ideas of how to represent knowledge
- ✓ Consider how you might teach the ability to observe to young children

Week #1

**Choose a place outdoors to observe and focus. It needs to be a place you can continue to get to and be still for at least 15 minutes (no texting or talking). Immediately note your observations in the notebook. Make drawings, sketches, or take photographs of objects or areas connected to your observations. Ponder about the relationships between natural elements and/or manmade elements, and any changes that occur over time. Record questions that come to mind as you conduct your observation. These 'questions' may take the form of ponderings, but include at least 3 throughout your notes. These may prompt future observations as well as help you consider what you might help your students in the classroom.

**You are *required* to observe at least once a week for 8 weeks; however, you may go more often and stay for more than 15 minutes – this may lead to further knowledge and understanding!

**Submit on the due dates and it will be returned at the next class period.

Figure 1. *Assignment Guidelines*

All participants were given pseudonyms and the handwritten narratives were transcribed as line by line entries. Transcripts were coded individually by the researchers and then a common list of codes was compiled to utilize for further analysis. Codes that emerged initially included questions, professional connections, and observations. Researchers established a 93% inter-rater reliability of coding (Miles & Huberman, 1994) before continuing analysis of all transcriptions.

Analysis required the researchers to look at the entries not only line by line but also in chunks allowing them to see how individuals approached this assignment with respect to structure and thinking. As analysis continued, it became clear that students were using specific ways of documenting and recording in their notebooks. These findings are detailed in the following section.

Findings

The assignment was designed to be constructivist in nature in an attempt to allow creative freedom. Ultimately, this lead to participants creating their own unique system for organizing the information they were recording during the 15 minutes of observation. In an attempt to organize the content they observed, the participants tended to create a sort of template for each entry. This is exemplified by several of the participants following a self-developed, consistent order such as stating something they observed, asking a question about the observation, posing an explanation about the observation, concluding with an action to further explore an issue about the observation, or making connections to activities they could do in a future classroom.

The results indicated that as participants began to record observations in nature, they made choices about how to record, as well as, what to record. Even though each participant created his/her own format, there were some commonalities within the 16 notebooks. This ultimately led to the identification of three distinct categories (Reflectors, Wonderers, and Planners) of processing and formatting the notebooks. Each is described in the following paragraphs with supporting excerpts from notebook entries.

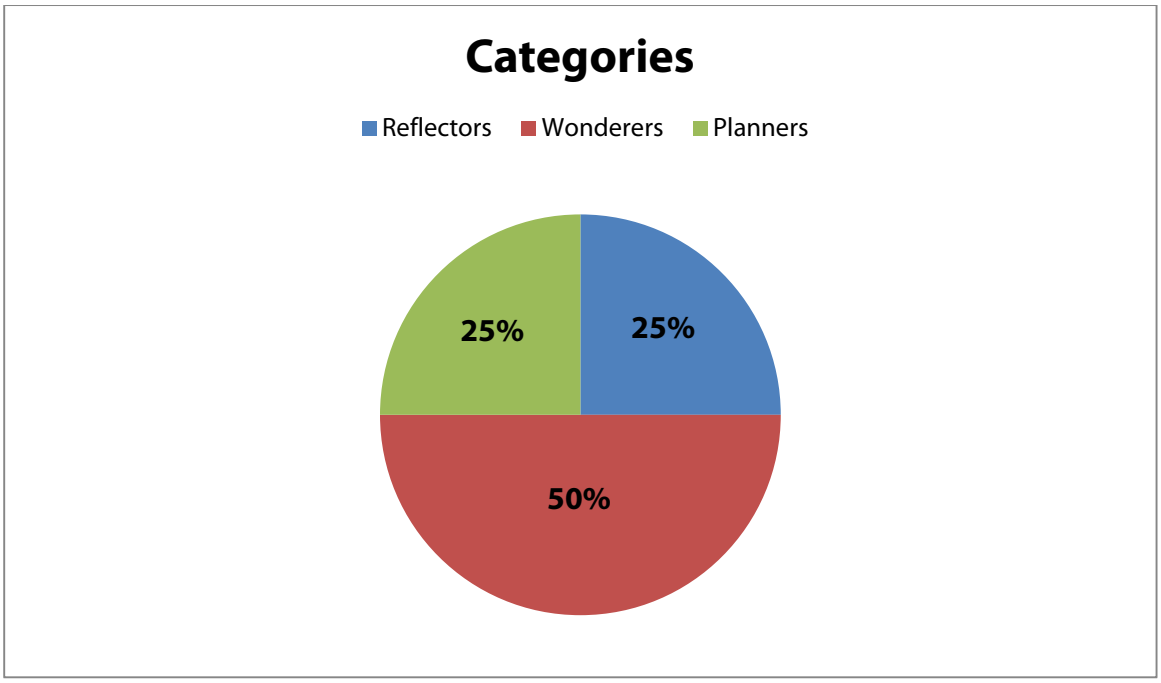


Figure 2. Pie Chart of Categories

Reflectors. "Reflectors" were represented in 25% of the notebooks. These were teacher candidates who observed something in nature and recalled similar or related prior experiences. It was as if memories were engaged allowing the teacher candidate to make sense of what they were currently encountering in nature. For example, *Chelsea* wrote,

> "The children just run past the lake again. One little girl is scared to get close to the water, but follows in the older kids footsteps anyways. Maybe to prove a point? She's courageous. Being out here and seeing these kids, makes me think of when I was little. My siblings and I would always play outside with the neighborhood kids. To prove myself to my older brother and the boys I would do stuff that I was secretly afraid of. It's funny how being out here would make me think of all this. It's not like déjà vu, we never had a lake near, but the smell of grass, the sound of the fountain (like a sprinkler). The neighborhood kids out playing, I swear I can just close my eyes and be instantly transported back to the late 1990s."

Liz wrote,

> "The water in the river is not very clear or clean. I describe it as a dark greenish brown color. Why are some rivers cleaner and clearer than others? As I continue to study the color of the water, I recall trips to the mountains where those rivers were beautiful. I am sure there are many causes to this. Could it be that those rivers in the mountains have rock on the bottoms versus ours that consist of a muddy, clay, and sandy type of bottom? As I continued to observe the environment around me, I noticed that the current of the water (which is moving pretty slow) is running from what looks like South to North. I couldn't help to think this was strange. I recall my dad discussing this topic with me in the past. Learning that the Ohio River starts in Pittsburgh and ends in Cairo where it runs into the Mississippi River, the overall flow of the water is moving east to southwest. Knowing rivers do not flow in straight lines, but with many turns and bends, including what I've heard to be called 'horseshoe' Bend in Evansville, I believe is a part of the current I am currently seeing. This is a topic I would like to further learn about."

Wonderers. "Wonderers" were represented in 50% of the notebooks. These were teacher candidates who observed something in nature and then posed a string of questions. It was as if their observations inspired question after question. For example, *Faith* wrote,

> "It makes me wonder if squirrels have families. I never see more than 2 or 3 of them together at the same time. It makes me curious about where they live.
>
> Do they choose certain trees? Can the squirrels burrow underground?
>
> We see squirrels almost every day but I never have really learned too much about them."

Robert wrote,

> "I do wonder what will happen to the trees who start budding right now? Will their life cycles end much sooner this year? Will the leaves fall off the trees in July rather than September or October? What will the weather be like if there are no leaves on any of the trees to provide shade in really hot weather?"

Planners. "Planners" were represented in 25% of the notebooks. These were teacher candidates who observed something in nature and would create a sort of "to-do" list of potential future classroom connections. It was as if these teacher candidates were in teacher mode throughout the entire 15 minutes of observing. For example, *Debbie* wrote,

> "While looking at my backyard I am feeling goose bumps creep up all over my arms.
>
> I wonder why they are called goose bumps? Maybe it is an illness that geese get. I think goose bumps happen because the nerve endings under your skin get agitated because of the cold and they pop up a little bit above the skin to show they are under

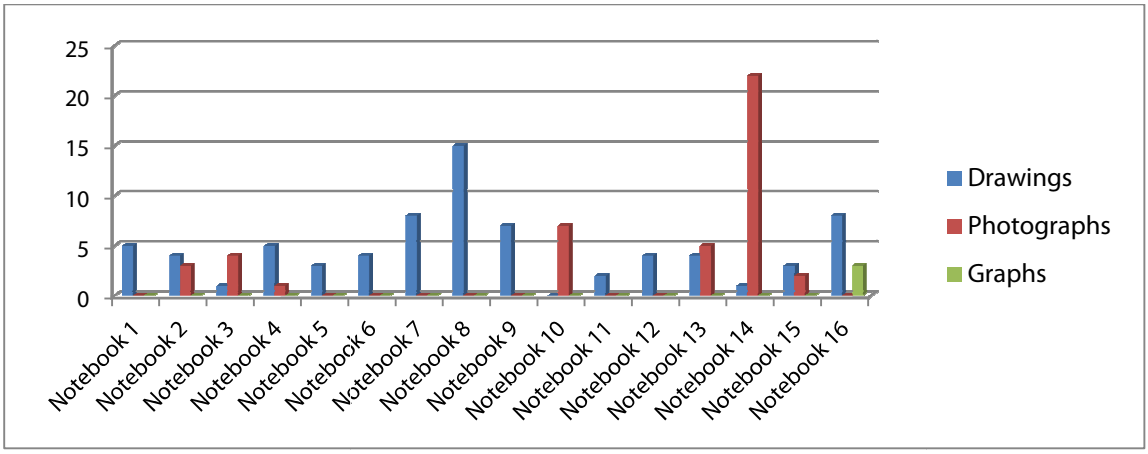
some stress. I fun activity to do with students would be to see at what temperature outside do we get goose bumps. Depending on the temperature of each student's goose bumps we could make a graph & analyze the data to see at what temperature the majority of the students started getting goose bumps. Then the students could hypothesis how they think goose bumps form. We could also analyze what qualifies a goose bump? The start of the goose bump, or the point at which the goose bump is fully inflamed above the skin. If the students don't verify these possibilities then the student's data [will] be incorrect."

Chloe wrote,

"I decided to walk down the trail a little ways to try and find the birds. I never did see them, but I did see this beautiful yellow flower instead. It was the only one like it in the area. I walked a little bit farther along the trail and found a beautiful purple flower. It too was the only one of its kind in the area. What are these particular flowers doing in the middle of a forest? How did they get here? Where are the other flowers like these two? Did they die off or were they never here to begin with? Since it is so dark on the mediation trail and not a very good place for plants to grow (the dirt has many rocks in it and the only other living plants in the area are mainly moss and big tall trees), I would infer that these plants were not meant to be grown in this area. Perhaps people brought the seeds of these flowers over to the meditation trail and planted them here. Or maybe the wind picked up the seeds and carried them here. Or maybe an animal accidently brought the seeds to this area. This would be a great science activity to do with my students. They could plant seeds in different environments (rocky soil, dark atmosphere, sunlight, soil near a body of water, etc.), and then observe the plants to determine the environment that is most suitable for plant growth. I think it would also be a good idea to teach my students that plants are not always put into an area by people. We could visit several different environments that have plants in them. The students could observe the type and number of plants in each environment. They could then infer or draw their own conclusions about why those plants may be growing in that environment."

Again, ideas were posed but only one participant expanded upon these ideas by creating fictitious graphs (see Table 1) that future elementary students might create based upon the participant's observation.

Table 1. *Creative Content Per Notebook*



Focusing on the research question, "What are the structures and thinking processes that teacher candidates utilize when writing in notebooks?" Specifically, how do they express their thoughts during an observational-based prompt writing experience in an undergraduate, integrated science and mathematics methods course? When given the choice, students chose differing ways to record their observations and their thinking; they created their own unique system for organizing the information. The results indicated that three distinct categories of notebooks, that of reflector, planner, or wonderer could be established based on the structure and thinking processes from the teacher candidate's notebooks.

Discussion

Findings of this study indicate that participants made choices about how to place their observation documentation within each notebook entry. Each participant made a decision about how to format the words on the page and how the space would be used. Some inserted drawings as borders or in the margins, some placed photos following the written descriptions, and others put all photos or drawings at the end of each entry. Participants did not make changes in their self-developed formats once they began. It's as though they found something that made sense for each of them and continued with the chosen formatting pattern. Several questions emerge with this finding. One set of questions revolves around candidates' learning. Why were specific formats chosen? What connections to learning does their format bridge for them as compared to other formats with different candidates? Will candidates view their format better than others? And, importantly, to what extent are other types of categories/writers can be uncovered by extending the study to larger populations and different audiences?

Another set of questions revolves around future implications. Will this format be the one that they ultimately utilize with students? Are they cognizant of other formats and therefore ready to encourage and recognize the other formats with future elementary students?

The authors plan to research several of these questions with upcoming students. We encourage others to consider them as well and add to a growing body of research around the infusion of student notebooking with teacher candidates and elementary students.

Ultimately, this assignment and study led the professor to reexamine the assignment and its goals. Using a constructivist approach in assignments allowed for variability in recording observations in nature; however, the findings of this research indicate that the instructor should consider discussing with students the reasoning behind their choices. Fulton and Campbell (2004) explain that it is key for teachers of elementary children to help elementary students question and analyze the organizational strategies they choose to use in notebooks. One conclusion from this study suggests that this should also be done with those who would be teachers of those elementary students.

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Student-Described Engagement with Text: Insights are Discovered from Fourth Graders

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Abstract

This article reports on a research study investigating student-described engagement with self-selected text in a classroom where a core reading program (in the context of this study meaning instruction based primarily on manuals and commercial textbooks) comprised the majority of their literacy instruction. Fourth grade students were invited to characterize their responses to their self-selected reading within focus group discussions. Data instruments included audio taped focus group discussions, student photographs, observational field notes, and students' literature. Implementing the constant comparative method for data analysis, outcomes were determined and implications for classroom practice suggested.

Keywords: Elementary Reading Methods, Critical Literacy, Intrinsic Motivations for Reading, Children's Literature, United States.

Introduction

The Misuse of Children's Literature

Nurturing meaningful engagement between students and what they are reading by evoking students' personal and emotional connections to the text is a phenomenon that research has shown to enhance meaning making (Cochran-Smith, 1984; Barone, 2011; Pantaleo, 2004; Short, 1992; Sipe, 1998). However, classroom practices can sometimes create stumbling blocks that hinder students' deeper understandings (Rosenblatt, 1982). The problem lies within several areas one of which is the lack of teacher education programs requiring a course or courses in the study of children's literature (Hoewisch, 2000). Cooper (2007) admonished that educators acquire strong instructional background knowledge about children's literature and how to use literature for supporting children's psychosocial development.

Another problem area is the practice of implementing comprehension strategy instruction using children's literature that narrowly focuses on understanding story elements, i.e., settings, characters, problems, and events, rather than textual analysis (Calkins, 2000; Collins, 2004; Daniels, 2002; Fountas & Pinnell, 1996; Harvey & Goudvis, 2000; Keene & Zimmerman, 1997). This shift was most likely fueled by the

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mandates for students to show adequate progress in high-stakes reading tests (Guthrie, in press).

A further area of concern is the use of core reading programs (i.e., manuals and commercial textbooks) which tend to lump reading instructional strategies together without regard to matching text type or genre to the appropriate strategy. For example, informational texts (e.g., expository texts), rather than narrative texts, lend themselves well for teaching such strategies as K-W-L, Concept Mapping, T-Notes, QAR, SQ3R, Learning Logs, Main Idea and Detail Charts. These strategies are primarily used to help students gain and learn information from text that they can take away from the text to use primarily on a test. In comparison, stories, or narrative material, are more suited to invite students to make personal and emotional connections to text, thereby enhancing deeper understandings of these genres (Nathanson, 2006).

Textbook Reading

An additional road block that stands in the way of students forming deeper understandings of text is that the majority of school reading is based upon traditional textbooks (Alvermann & Moore, 1991) which consists primarily of standard forms of traditional language that limit the possibility for multiple discourses among students (New London Group, 1996). Both new and highly experienced teachers are frequently required to maintain a level of standardization to a prescribed reading program, rather than develop curriculum that aligns with what research has suggested as being pedagogically sound practice for teaching students reading and language (Pease-Alvarez, Samway, & Cifka-Herrera, 2010; Spencer, 2009). Some teachers have even referred to specific reading program manuals as “the Bible” (see Compton-Lilly, 2011). This pressure to adhere to highly specified reading programs have shown to be fueled by high-stakes accountability polices (Achinstein & Ogawa, 2006; Colburn, 2001, 2005; Stillman, 2009; Stillman & Anderson, 2011). In a response to this pressure, teachers have reduced their reading curriculum to skills and strategies (Crosland & Gutierriz, 2003; Oullette, Dagonstino, & Carifio, 1999; Valli & Buese, 2007). This has placed teachers into an imposed contradiction to teach in ways that are in opposition to what they know are best literacy practices (Dooley & Assaf, 2009; Valli & Chambliss, 2007).

Consequences of Skills-Based Reading Instruction

A serious consequence could follow if students’ primary experiences with reading are for skills instruction alone, they may ultimately see reading as a chore and something only connected to school work. Dyson (2003, 2008) and Compton-Lilly (2007) reported how today’s expectations for literacy instruction narrows the opportunities for students to develop a rich repertoire of literary understanding. Dyson (2003), following a study of students’ literacy growth over time, argued that students do not learn literacy in a series of stages with sequentially learned skills that are the same for all students. However, literacy instruction today has seen a shift from student-centered, differentiated curriculum and instruction to mandated core programs, i.e., manuals and commercial textbooks, that treat all students as if they are all the same (Handsfield & Jimenez, 2008). In these situations, teachers are encouraging students to respond to their reading through sub-skill development (Cooper, 2007) as frequently seen on worksheets that lead them to the same convergent way of thinking about a text.

Motivation to Read

Past research has demonstrated that students’ success in reading is linked to their intrinsic motivations to read (Gottfried, 1990; Guthrie & Wigfield, 2000). Wigfield and Guthrie (1997) described students’ motivations to read in terms of their personally held values, beliefs, needs, and goals. Consequently, when classroom reading instruction is

based upon what students are interested in reading, the greater potential exists for students to expand their efforts towards reading (Pitcher et al., 2007).

Another area that past research has shown to inspire students towards reading is allowing them some choice in what they read (Kurkjian & Livingston, 2005; Livingston & Kurkjian, 2003; Worthy, 1996; Worthy, Turner, & Moorman, 1998). Worthy (1996) argued that if students are not reading text that they enjoy, they may develop an aversion to reading that could last the rest of their lives. Strommen and Mates (2004) also echoed this view by arguing that a serious problem exists when students experience the majority of classroom reading assignments as unconnected to their interests and needs that they soon will become nonreaders. In related research, Pacheco (2010) furthered this problem by claiming that current classroom practice in reading instruction has seen a reduction in allowing students choices in what they read based upon assumptions that students do not always choose literature worthy for learning. Additional research has suggested that what students choose to read on their own frequently is not viewed school-worthy enough to count as literature (Comber & Simpson, 2001; Janks, 2000; Lewison, Leland, & Harste, 2008; Vasquez, 2001).

Unique Reading Experiences

Cognizant of the current landscape of reading instruction in today's classrooms, the aim of this study was to discover how students were engaging with self-selected text in a classroom where the teacher was expected to teach reading from a core reading program and to prepare students to take standardized reading tests. With this in mind, in responding to literature discussion prompts focused on eliciting students' personal responses, would students, for instance, mimic their core reading instruction and respond in similar ways, most often focusing on the rote literary comprehension aspects of a text, or would they express a more critical, personal interpretation of text based upon their perspectives, opinions, and beliefs?

The theoretical framework for this study is grounded within reader response criticism. This school of literary theory focuses on the reader and his or her personal and unique experience of a literary work. The reader is viewed as an active participant who creates meaning from the text through interpretation. Rosenblatt (1969, 1982), a prominent theorist in reader response criticism, held that readers experience a text through the melding of the emotional and intellectual dimensions of reading, and that readers need to have an engaged relationship with a text, or a "lived-through" experience before being able to critically analyze a text, and this involves emotional and intellectual aspects of the experience. She argued that these reader responses are not mutually exclusive from each other, but instead, work in concert with each other depending on the reader's purpose or stance for reading (1982). This engagement or transaction (Rosenblatt, 1978) between the text and the reader is necessary for positioning the reader to experience the joy of reading, and thereby increasing the likelihood that he will become a life-long reader. Moreover, Rosenblatt (1976) proposed that there exists a transactional event between the reader and the text that takes into account the reader's social and cultural context. Based upon this assumption, when students demonstrate understanding of text, they do so through the lens of their personal perspectives, opinions, and beliefs. Pantaleo (2004) contributed to this understanding by examining students' textual connections through small-group discussions and found supporting evidence that students' discussions about literature reflected their personal understandings of the text as they expressed interpretations in relationship to their own life experiences.

Students read to gain something from the experience. Within Rosenblatt's (1978) reader-response theory, a reader positions himself or herself in a particular stance

towards a text. If the focus is to take knowledge away from the text, then an efferent stance is assumed, whereby the reader will think about the informational concepts and details to be retained for personal use. When readers are focused on a story or "poem," then they will more likely be thinking about the feelings, emotions, and perspectives conveyed within the text and use these as bridges to make connections to their own humanness. Rosenblatt held that the relationships between texts, narrative and expository; and stances, aesthetic and efferent; represent dominat tendencies in readers, but not necessarily rigid divisions. In turn, readers can and do form informational attitudes towards narrative texts and emotional attitudes towards expository texts.

When students' needs are met through reading, this is something that they not only want to repeat, but also to share with each other. It is through these student exchanges that students learn to understand themselves and those around them (Rosenblatt, 1982). Teachers can capitalize on students' natural emotions by reading aloud to them selections that build excitement, intrigue, mystery, and that are laced with juvenile humor. Students frequently express their emotions through non-verbal ways such as wide-eyes, gaping mouths, and tense bodies. When students experience reading in this manner, the activity becomes something that they want to repeat.

When teachers want students to experience the emotion, feelings, since of social justice, or human connectedness through reading, then the appropriate texts lie within the narrative genres of fiction (Stoodt-Hill & Amspaugh-Corson, 2009). Story related activities that would influence students to connect emotionally to the text might include dramatization (see Paley, 1981, 1990), visual representations of the story which could take the form of graphic arts or multimedia formats (see Bedard & Fuhrken, 2011), and peer discussions, poetic interpretations, and community service projects (see Adams, 2007). Through these types of responses, students are engaged in multimodal approaches to learning (De Koning & van der Schoot, 2013; Gardner, 2006), transmediation (Mills, 2011; Siegle, 2006), and aesthetic responses to texts (Greene, 2001; Johnson, 2008; Lohfink & Loya, 2010).

Studies on motivation and effective teaching strongly suggests that children's literature plays a key role in engaging students (Pressley, Dolezal, Raphael, Mohan, Roehrig, & Bogner, 2003). Intrinsic motivation to read is tied to a student's joy in reading that is done "for its own sake," which is characterized by the student's excitement and interest in the act of reading (Guthrie & Wigfield, 2000). It is through this excitement and motivation that literary relationships are born. The context in which students are engaged in reading instruction can have a powerful influence on the stance that students assume while reading. In other words, what students are being asked to do in their reading classroom will have an influence upon the reading connections that they form (Sipe, 2008).

Open-ended Response to Reading

Sipe (2000), in a study examining the spontaneous responses of second graders to literature found that they used their comprehension and interpretation of story events as springboards into their own creative purposes. In a similar context, while investigating a group of second graders who were allowed and encouraged to respond to literature through creative expressions, Adomat (2010) found that the students' understandings of the literature was enhanced. Taking a different, but related approach, Soundy and Drucker (2010) investigated how students used illustrations in their literature as models for their own creations. They found that the students were able to demonstrate their own literary understandings through self-created illustrations.

Austin (2010) examined readers' responses to a novel and found that her participants responded to how the author created the characters, setting, problem, events and theme. In addition, she claimed that a reader's background knowledge and experiences relative to the content of the novel, had a strong impact upon the reader's responses. In addition, Mellor and Patterson (2000) as well as Smagorinsky and O'Donnell-Allen (1998), suggested that students develop reader responses in relationship to how authors have situated characters both socially and culturally within a narrative.

Martin, Smolen, Oswald, and Milam (2012) analyzed the oral and written responses of eighteen third grade students while they read literature that contained themes of social justice. They concluded from their data that the students responded to their readings with a heightened sense of respect, caring, and understanding towards other people in need. In addition, Moller (2012), indicated that while students were discussing a novel in which the author brings to the forefront concerns about the social and political treatment of a certain group of people, the students became increasingly empathetic in their understanding that at first, was lacking.

Heath (2013) provided evidence based upon her three decades of research on the learning lives of working-class families that students seek out reading opportunities that develop and broaden their individual special interests. She asserted that it is crucial for educators to pay attention to what interests students and to support them in their choices of learning projects. Additionally, in a study involving 384 students, Pitcher, et al. (2007), discovered that students were most motivated to read literature that connected to a topic that held special interest to them. Moreover, they found that students' reading interests and needs usually did not match the assigned reading in their classrooms.

In her earlier research, Heath (1986) argued that developing a child's imagination through reading was the necessary component for comprehension and textual interpretation, and therefore, teaching to the imagination through children's literature should be the goal of reading instruction. Vygotsky (1978) pointed out that imaginative thinking is the precursor of abstract thought. He held that children's imaginative play leads to the creation of a zone of proximal development that enhances problem-solving skills beyond what the child currently is capable. Cooper (2007) further confirmed that imaginative play and imaginative literature are connected through their mutual support for helping children develop problem solving skills and in addition, enhancing their intellectual, social, and emotional development. Researchers such as Coles (1989) and Greene (1995) admonished the necessity of imaginative literature for the promotion of self-awareness, creation of new knowledge, and the awareness of social aims. Frequently, when students' imaginations are sparked, their responses are manifested through out-of-school, self-generated, and spontaneous multimodal activities (Siegel, 2006) that spring from literature, but are not teacher assigned. For example, students role-play character action (Sipe, 2000), illustrate visualized content (see De Koning & van der Schoot, 2013), create videos (see Schillinger, 2011), develop storyboards (see Bogard & McMackin, 2012), or record songs (Cardany, 2012).

We, as educators, have the responsibility to ignite spontaneous and intrinsic reader responses within students; however, when teachers adhere to a core literacy curriculum, which is typically standardized (one-size-fits-all) and scripted, they are in effect assuming that all students are the same, or "generic" (Luke, 1995/1996), and there is scant opportunity for students to experience authentic lived-through engagement (Rosenblatt, 1969, 1982) with a text that would cause them to create the literary relationships necessary to foster a life time of reading desire and enjoyment.

These are the concerns that led to this present study, and insights were discovered from the primary source, the students.

Method

Participants

The goal of the study was to describe and interpret social phenomena in a natural setting (Schwandt, 1994). Therefore, the study utilized the constructivist paradigm of being descriptive, qualitative, and naturalistic (Guba & Lincoln, 1994). Atkinson and Hammersley (1994) explained that qualitative researchers are not understood simply as objective cameras for recording data, but rather interpret the data through the perspectives of their own subjectivities and intellectual backgrounds, and become part of the context that they are studying. Glaser and Strauss (1967) explained that researchers who act from the constructivist research paradigm do not approach data with rigid expectations, but rather build grounded theory based on the conceptual relationships they construct from the data. In addition, Tracy (2013) described qualitative research as immersing oneself into the context being studied in order to make sense of it.

The School

The study was developed over the course of five months in a fourth grade classroom located in an urban community made up of two adjoining cities with a population of about 100, 000 located in the Midwestern United States. The school itself has a population of about 400 students Kindergarten-grade six, with 89% European American, 5.3% African American, 3.7% Hispanic, and 3.9% Asian American.

The Teacher and Researcher

The classroom teacher, Connor (pseudonyms used throughout), was in his eighth year of teaching, all spent in the fourth grade. Both his undergraduate and master's program emphasized the constructivist approach that involved children in actively constructing their own meaning through social collaboration within the classroom setting.

As the researcher, I added my own background to the social context of the classroom. My teaching experience included 14 years as an elementary classroom teacher. Although I am presently a university professor and researcher, the common ground between myself and Connor as classroom teachers enabled us to communicate fluidly with understanding.

The Students

The classroom students were a heterogeneous group of nine boys and 11 girls. There was one African American girl and one Asian American boy, and the rest were of Anglo European ethnicity. In this class all students were either reading at grade level or above.

The Classroom Context

The classroom was organized with student desks clustered in small groups, tables, book shelves with novels and reference materials, and a computer area with four desk-top computers. During Connor's literacy block, students were engaged individually and silently in a version of the Daily Five (Boushey & Moser, 2006). Connor's version of the Daily Five involved students in reading alone, listening to books on tape, working on writing, and working on a computer with a spelling program. While students were working by themselves, Connor called small groups to come to a kidney shaped table in front of the classroom for reading instruction from the manual Guided Reading: Good First Teaching for all Children (Fountas & Pinnell, 1996) that he used for his core

reading program. Adhering to this core program, Connor delivered instruction, according to the manual, in "story" elements including characters, plots, and themes; however, included within the directions are for the students to look for important ideas and concepts, which are elements more typically associated with expository text.

Most of the books that Connor used followed the story grammar format, and the book list in the manual mainly lists narrative titles. For homework, students took their group assigned books home and wrote summaries in a journal. At home, students also kept a reading log in where they recorded the number of pages read and the amount of time spent reading self-selected books. In the middle of the literacy block, students engaged in sustained silent reading (SSR) and ate a snack, after which the Daily Five resumed along with the guided reading instruction.

Data Collection

Observational Field Notes. I kept a researcher's journal (Maykut & Morehouse, 1994) in which I wrote various types of notes throughout the study. I wrote descriptive notes about the context of the setting including the appearance of the classroom and the activities of the students and teacher (Bogden & Biklen, 2007). Merriam (1998) asserts that observations represent a first-hand encounter with the phenomenon of interest and when combined with interviewing, allow for a more complete interpretation. I recorded reflective notes regarding my ideas for the procedures for the study that would best fit into the social context of the classroom (Richardson, 1994). I wrote summaries of conversations that I had with Connor that later served as member checks (Guba & Lincoln, 1989). While the students were involved in the focus interviews, I wrote analytic reflections that represented my initial or gut reactions (Tracy, 2013) regarding my interpretations of the responses that the students were conveying to me.

Audio Recordings. The students were audio taped during the focus group interviews in order to obtain the best possible record of their exact words (Patton, 1990). The students spoke in their own words in response to the interview prompts and were not following any type of a predetermined script or survey.

Photographs. Connor provided photographs of all the students. The photographs provided rich, descriptive data that I used during data analysis to bring back memories of the students that served to further my understanding and interpretation of their spoken words on the audio tapes (Bogden & Bilken, 2007).

Literature. The literature that the students discussed during the focus group interviews was documented and became part of the analysis process. Students were not required to bring literature, and they were not limited in what they decided to discuss.

Phases of Data Collection. The study was constructed in a series of phases over five months. During the first phase, the goals were to gather data specifics about the school, teacher, and students. During the second phase, data were gathered relating to the classroom's culture, routines, and organization. It was during this phase that plans were made between Connor and me for implementing the focus group interviews. The last phases of the data construction were the focus group interviews.

Focus Group Interviews. In qualitative research, interviews can be thought of as a conversation with a purpose (Lincoln & Guba, 1985). Interviews can range on a scale from highly structured where the interview questions are carefully formulated beforehand, or an unstructured format, where the interviewer asks and actively listens for the sake of understanding what the interviewees are experiencing and communicating in their own words (Maykut & Morehouse, 1994). The type of interviews chosen for this study were semi-structured, focus group interviews. Merriam (1998) explains that the semi-structured interview is halfway between the structured and

unstructured interview with some of the same open-ended questions asked of all the participants in pursuance of the phenomenon under study, but allowing for questions and answers to naturally occur. Similarly, Tracy (2013) described focus group interviews as guided group discussions that are characterized by interactive dialogue between the interviewer and the participants. This above description illuminates the focus group interviews for this present study.

The focus interviews were recorded in two ways, notes taken during the interview and audio recordings. The students were randomly assigned to five groups for the interviews.

The aim of the study was to discover from the participants how they were responding to the literature in their lives given the current emphasis on testing and focusing reading instruction on preparing students to take these tests. For the purpose of learning from the students, the following open-ended, focus interview discussion prompts were created and are presented below along with the intended rational for each one.

1) Tell me the title of a book, magazine, or something else that you are now reading or have recently read that you really liked. The aim of this prompt was to discover the genres and formats of literature the students enjoyed along with giving them the approval of discussing alternate literature that may or may not be connected to classroom practice. In addition, the prompt was intended to be easy for the students to answer, therefore acting as a segue into an open-ended discussion framed by the subsequent prompts.

2) Tell me what you liked about the literature. The intention of this prompt was to discover from the students their intrinsic motivation for reading the literature they chose to discuss.

3) Tell me about activities, either in school or out-of-school, that you did, that were related somehow to the literature that you read. This could also be an activity that you have not done yet, but would like to do someday. This discussion prompt was created to discover from the students how they were responding to the literature they were reading.

4) What about a book, magazine, or other reading material draws you to want to read it? The purpose of this prompt was to find out from the students if they had a specific genre or set of text characteristics that appealed to them when selecting literature for their personal enjoyment.

Data Analysis

Preparation of the Data Analysis. In pursuance of making the data collected during the duration of the study readable, workable, and to provide for trustworthiness, the taped focus group discussions were transcribed, the researcher's journal was typed, and the photographs of the students were printed. The data were coded as to types and sources (Maykut & Morehouse, 1994).

Unitizing. The next phase of data analysis was to identify the units of meaning contained within the data. Lincoln and Guba (1985) described a unit of meaning as the smallest piece of information about something that can be understood without any additional details other than the knowledge of the broader context from which it came. Unitizing is a component embedded into the constant comparative method of qualitative data analysis (Glaser & Strauss, 1967; Lincoln & Guba, 1985). Maykut and Morehouse (1994) explained that the constant comparative method, identifying and categorizing specific units of information and comparing the units to previous

information, provides the researcher with a clear direction for engaging in analysis of data that is both challenging and illuminating. Lawrence-Lightfoot and Davis (1997) furthered defined this analysis practice as examining all of the data for repetitive refrains.

Discovery. The units of meaning gleaned from the data were further refined during the discovery phase of analysis. Taylor and Bogden (1984) described this process as looking for recurring words, phrases, and concepts across the units of meaning. The discovery list for this study was constructed and reconstructed three different times in taking multiple soundings (Gilligan, Brown, & Rogers, 1989) while searching for subtle meanings and complex perspectives expressed within the data. Rather than listening to a story, a story was being discovered from the data (Lawrence-Lightfoot & Davis, 1997).

Inductive category coding. During this process of data analysis, the prominent ideas were selected from the discovery list, and each of these became a provisional category. This process continued with grouping the units of meaning into related categories using the look/feel alike criteria advanced by Lincoln and Guba (1985).

Rules of inclusion. Once the units of meaning were grouped into categories, they were examined to determine the overall message contained within them. This information, or rule of inclusion, then became a propositional statement of fact grounded in the data (Taylor & Bogden, 1984), and used to either include or exclude subsequent units of meaning for each category. Once these were determined, the units of meaning were coded as to their rule-based category.

Examining relationships and patterns across categories. Further syntheses of the data involved examining relationships between categories and studying the propositions for those that stood-alone or formed salient relationships and patterns (Maykut & Morehouse, 1994). During this final analysis in applying the constant comparative process, it became evident that some of the categories shared ideas that were related. These ideas were grounded in the data and stood as evidence of what I was learning from my participants in the study, and is what led to the determination of the study outcomes, which are presented and discussed in the next section

Results And Discussion: Defining The Students' Text Engagements

Five outcomes emerged from the data analysis process and revealed the nature of the students' responses with the literature they chose to discuss. Each outcome is discussed below along with example evidence grounding the outcome within the data and past research.

Outcome 1: Students Respond to Text through the Enjoyment of an Event in their Reading

This outcome was evidenced in the data by those students who expressed literary understandings of events described in stories wherein the characters are involved in solving problems that sometimes leads to unique and humor-filled situations. This outcome from the present study expands upon previous research from Sipe (2000) suggesting that students respond to stories through interpreting and evaluating events. In the data excerpts below, Fed recounts a funny event in his book where some characters are pranked with a bucket of water being thrown on them. Billy Bob details a recurring event in his book wherein whenever the main characters encounter bad luck, they blame it on a family curse. Rob is impacted by an event in his book where two characters receive broken bones as consequences of their ill-conceived actions. Selected examples from the data that stood as evidence that appeared to be representative of this outcome included the following:

Fred: I am reading Diary of a Wimpy Kid [Kinney, 2007]. It is funny, because on Halloween, whenever teenagers walk by, his dad will throw a bucket of water on them, and I like that because it is funny…I like to read funny books.

Billy Bob: I am reading Holes [Sachar, 2000]. I like that part where he gets sent to jail, because, well actually, because they keep on blaming their great, great, great grandfather, they say no good pig steeling great, great, great grandfather, I think…Um, because every time they blame him and um, when he got sent to court, he was at the wrong place at the wrong time, and that's the curse from his great, great, great grandpa.

Rob: I am reading The Invention of Hugo Cabret [Selznick, 2007]. I like the part where the girl and the boy were going to break into the apartment, but the boy slammed his hand in the door and broke it, and the girl dropped a box on her leg, and she broke her leg.

Data that represented this outcome was reflective of the students' reading instruction in the classroom with their core reading program which emphasized recalling events from the plots of stories. During the discussion, the students' body language and inquisitive expressions aimed at me gave me the impression that they thought I had a correct answer in mind, and they were charged with finding out what it was. This too, was indicative of their classroom reading instruction wherein they were asked to relay details of the stories back to their teacher. Even though the discussion prompts were intended to be open-ended, students seemed to be constrained, possibly due to being on unfamiliar ground. This outcome was indicated in past research findings suggesting that reading instruction based on core programs, narrowly focuses on story elements rather than on textual analysis (Calkins, 2000; Collins, 2004; Daniels, 2002; Fountas & Pinnell, 1996; Harvey & Goudvis, 2000; Keene & Zimmerman, 1997).

Outcome 2: Students Respond to their Reading through Self-creative Endeavors

Patterns in the data demonstrated that students responded to their reading through creative expressions that sprang from the text. This outcome builds upon previous research by Adomat (2010) confirming that students use literature as a platform for expressing their understandings through a variety of creative modalities. Additionally, Sipe (2000) also concluded that students engage and respond to literature by using their comprehension of the text as a springboard into their own creative expressions. Moreover, Soundy and Drucker (2010) suggested that students use the illustrations in literature as models for their own creations, thereby demonstrating their literary meaning making and understanding. In the data excerpts below, Fred gives an account of how he responded to his book by creating a three dimensional representation of himself reading the book. Frankie felt inspired to mold a clay dragon like the one depicted in his book. Kinsey details a bookmark that she made after reading her book, but then comes up with an idea influenced by her book to create her own, unique version of the story. Rob conveys that he drew a picture of himself reading his book. Isabella also made a drawing after reading her book wherein she represented the front cover. Some data examples that were categorized into this outcome are given below:

Fred: I made the book out of a paper and a self-portrait of myself with the book in my hands and it looks like I am reading it.

Frankie: I want to make a clay dragon like they did in the book [Ice Fire, D'Lacey, 2006]. I like adventure stories.

Kinsey: I like James and the Giant Peach [Dahl, 1961]. I have this Thinkmark [http://www.thinkmark.org/], and I put this page number down, and I write what was interesting on that page, and like something that either I don't like, I like, or doesn't make

> *sense or something….Maybe just like write, in writing workshop time, maybe write like um, maybe kind a like a book that has talking animals like…Like maybe I could make a big leaf that they imagined that could never get so big.*
>
> *Rob: After I read the book, I made a picture of myself, and I drew a picture of the book and put the book in my hands.*
>
> *Isabella: When I read the book [The Lost Treasure of the Emerald Eye, Stilton 2004], I always like to write a response after, and um, sometimes I like to draw the cover.*

Students really struggled with thinking about having done or doing anything creative in relation to their book that they chose to share. After clarifying with each other and again looking to me for the answers, they came up with something to talk about. However, the self-portrait that Fred and Rob discuss was actually a school assignment. The Thinkmark and "write a response" that Kinsey and Isabella share, were also school assignments. This outcome also supports previous research findings showing that today's literacy instruction narrows the opportunities for students to develop creative expressions that represent their engagement and understanding (Compton-Lilly, 2007; Dyson, 2003, 2008). In contrast, however, Frankie reflects back to his book and comments that he wants to make a clay dragon. This unit of meaning was very exciting to discover, and also suggests that he was willing to explore with a more intrinsic expression of his inner text relationship in an unconventional modality, at least, not experienced in his classroom instruction.

Outcome 3: Students Respond to their Reading through Self-Created Goal Setting Related to Special Interests

Evidence grounded in the data suggested that students' literary responses were connected to their personal goals that they set for themselves that were related to their individual special interests. This evidence from the present study expands upon past research from Heath (2013) suggesting that students seek out reading opportunities that develop and enrich their special interests. Equally important, this outcome builds upon past research from Pitcher et al. (2007) indicating that students like to read literature that connects to their personal hobbies and activities in their search for more information. As evidenced from the data excerpts below, Skyler felt stirred from her reading to go camping, and Elizabeth shared that she enjoys digging, something that happened in her reading, and that she had already engaged in. A couple of examples from the data representing this outcome are as follows:

> *Skyler: I am reading the book The River [Paulsen, 1993], and I like my book because it has a lot of nature in it…I like the books that are informational…The information that maybe you could use for writing or a subject…The activity that I would like to do is go camping.*
>
> *Elizabeth: The activity that I already did was digging [reading Holes (Sachar, 2000).*

The data that formed this outcome was scarce and lacking, but supports previous research pointing out that current practices in reading instruction has seen a reduction in allowing students choices in what they read based on the assumptions that students do not always choose literature worthy for learning or even reading material that would count as literature (Comber & Simpson, 2001; Janks, 2000; Lewison, Leland, & Harste, 2008; Vasquez, 2001). This serious problem is evidenced in the data for this present study, and echoes the concern that if students are not reading text that represents their

interests and goals, they could develop an aversion to reading (Worthy, 1996) and stand the risk of becoming nonreaders (Strommen & Mates, 2004).

Outcome 4: Students Respond to their Reading through the enjoyment of the Author's Writing Creativity

Through the refinement of the data, there emerged the outcome that the students responded to authors' creativities in developing characters, settings, problems, humor, and including, making nonfiction interesting. This outcome supports previous research from Austin (2010) suggesting that students develop text-related responses to how authors portray characters, develop problems, content, and theme. Additionally, this outcome connects to the research of Mellor and Paterson (2000) and Smagorinsky and O'Donnell-Allen (1998) who further provided evidence that students engage with text and develop literary responses connected to how they perceive characters acting in association with how authors have created the narrative. As suggested from the selected data excerpts below, Fred, Isabella, Billy Bob, Elizabeth, and Rob, all appreciated how the authors of their literature created the experiences of humor. Isabella discussed liking literature characters and mystery problems that the reader can work through to solve. Frankie recounts how the author of his book used a lot of interesting, descriptive words that were unique. Elizabeth conveyed her interest in how the author of her book created intriguing nicknames for the characters. Rob commented that he looks for a theme of humor in the literature he reads, and if he likes the first book, he looks for more by the same author. Kinsey related that she connects with books that have exciting plots. Included below are selected examples from the data that represented the categories that formed this outcome:

Fred: I am reading Diary of a Wimpy Kid [Kinney, 2007]… it is funny.

Isabella: I read the book the Lost Treasure of the Emerald Eye [Stilton, 2004]. I like about the book because it has a problem in it and I like how it is very funny and stuff… It's like I write the genre, ah the connections, and the things that I like, and the characters and stuff…I always like the books that have mysteries and big problems that you have to solve and stuff, and I like funny books and stuff.

Billy Bob: I like sports magazines with jokes in them.

Frankie: I am reading Ice Fire [D'Lacey, 2006]. I like it because it is very descriptive…Like they use sayings and sort of things that you really don't hear, like it describes people, and it described this witch and said her teeth looked like curled up snails…I like adventure stories.

Elizabeth: I am reading Holes [Sachar, 2000] and I like the book because I like all their nicknames, and they all have nicknames…I look for the books that are funny and stuff like that.

Rob: I like to read stuff that has humor, or if sometimes if I've read the first book and there is a series, I will look for the whole series.

Kinsey: I like James and the Giant Peach [Dahl, 1961]… It is interesting and um it just has like a lot of talking animals and stuff that come to life…The fact that a peach grows bigger than a house and they go inside of it….I look for stuff that is interesting, 'cause I don't like reading books that don't have very much interesting things in them, because then you never come to an interesting thing, and it gets a little boring in that book… Like I tried reading, I forgot the title but it was like a Brat's Girl book [Multiple Authors, 2003-2006], and all it was talking about was the Brats girls and like um a concert that they were going to, and it never had like interesting things or like a mystery or something that they had to do or something, or like into it, what they did and stuff.

The data that formed this outcome was more plentiful as compared to the units that formed the other outcomes. Reasons for this are provided from past research confirming that today's reading instruction is grounded in sub-skill development, i.e., grammar, main-ideas, details, vocabulary, making connections, and literary elements (Crosland & Gutierriz, 2003; Oullette, Dagonstino, & Carifio, 1999; Valli & Buese, 2007). The concern with this practice is that it can impede students from fully engaging with text and forming the deeper, emotional relationships necessary to insure enhanced meaning making (Cochran-Smith, 1984; Barone, 2011; Pantaleo, 2004; Short, 1992; Sipe, 1998).

Outcome 5: Students Respond to their reading through Self-expressed Caring for Others

This outcome was evidenced in only one unit of meaning that was generated from one student. It is included as an outcome because of the value it represents. This outcome expands upon past research from Martin, Smolen, Oswald, and Milam (2012); and also including the research from Moller (2012) suggesting that students develop a heightened sense of social awareness and concern for others based upon their reading of literature in which the authors have brought these concerns to their understandings. Billy Bob was the only student in the study that indicated this response to his reading when he said that he was inspired to donate to charity. The data excerpt with his comment is included below.

> *Billy Bob: I would like to donate to charity like they did [Holes (Sachar, 2000].*

There was only one unit of meaning that formed this outcome and given today's focus on raising social awareness and empathy with students, should have been many more. The lack of data units for this outcome stands to confirm a serious problem inherent in a one-size-fits all core reading program that leads students to the same convergent way of thinking about a text (Cooper, 2007). Instead of exploring a more critical, personal interpretation of the text based upon individual perspectives, opinions, and beliefs, students are being prepared to take high-stakes reading tests (Guthrie, 2002).

Limitations and Future Directions

The participants of this study comprised students from one fourth grade classroom situated in one elementary school. Future investigations could examine a different grade level, across grade levels, or across schools. The participants in this study were predominately European American. It would be beneficial for future studies to include a more diverse population with regards to ethnicity. The setting for this study was a medium sized city located in the Midwestern United States, it would be of interest for future research to examine a small, rural community not connected or in close proximity to a larger metropolitan area, and located in a different region of the United States or a different country.

Conclusions

This present study is significant because it advances multiple theories regarding the adverse effects of core curriculum policies surrounding the teaching of reading and language by supporting these propositions, many of which have been expressed in opinion papers, with student-generated evidence. Additionally, in comparison to previous qualitative studies that began with examining data based upon established categories, the findings of this present study emerged from a discovery process grounded in the data analysis and not from predetermined categories. Finally, this

present study differs from many past studies in that the students' literature-based responses were generated from their self-selected literature and not from pre-selected literature determined by the researcher or classroom teacher. Given these significances, the findings of this study were the results of an authentic discovery process (Lawrence-Lightfoot & Davis, 1997).

Fortunately, many of the mandated state and federal curriculum policies are beginning to expire and there have been many studies that have suggested their ineffectiveness (Gamse, Bloom, Kemple, & Jacob, 2008; Spencer, 2009; Pease-Alvarez, Samway, & Cifka-Herrera, 2010). Teachers are becoming freer to center their curriculum on student needs and cultural significances. But how can teachers guide their students in forming deeper, long lasting relationships built upon emotional and intellectual connections to what they read? Reader response will need to be nurtured within students. Teachers can begin by allowing and providing for students to make their own personal choices in what they read. This will not be easy, as students that have long been schooled with generic, one size-fits-all reading curriculum, may have developed an aversion to reading or they may have a poor self-image of themselves as a reader. Interviews and surveys can be given to students to discover their reading interests, and then teachers and librarians can work together to provide the literature that students are most excited about. Once students have the literature in hand that they most desire, then teachers can work to elicit reader response from them by first modeling their own response during a highly engaging read aloud. This may need to happen through several books or events. Eventually, students will begin to think beyond the literal, text-structured questions typically asked during guided reading lessons, and think more deeply about how they are feeling inside about what they are hearing or reading. It is helpful for teachers to stop at key parts during a read aloud event and illicit this emotional response from students to draw out their thoughts and criticisms, allowing and encouraging students to freely express themselves without being judged right or wrong by teachers or their peers. This may happen slowly at first, but once students become comfortable with realizing that the teacher does not already know the answer and that they are not being put into a contrived position of trying to figure out what it is-watch out! The mold will be broken of the teacher with a short question and the student with a short answer, and students will start having meaningful discussions that will flow between each other as they make meaning together, and the language arts block will become more student-centered, than program-centered. Some teachers may not feel comfortable at first, especially if they are used to following a scripted curriculum where the path is heavily trodden, student and teacher senses have been dulled, and the chance of discovering new meaning together is not promoted. But when teachers join students in making meaning together from a shared book, both will come away from the experience with new and exciting perspectives about themselves and the world in which they live.

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Pre-Service Social Studies Teachers' Understandings about the Nature of the Social Studies

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Abstract

Social studies is one of the main courses of the elementary and middle school curriculum in Turkey. Social studies took educators attention because it prepares students as exemplary citizens. The term of social studies has been started to use at the end of 1960's in Turkey. Thus, there have been several definitions and classification of the social studies. Understanding the nature of the social studies is crucial for pre-service social teacher because they will teach this course two-three years later. The purpose of this study is to investigate pre-service social studies teachers' understandings about the nature of the social studies. The author used descriptive survey model in this study. The sample consisted of 309 pre-service social studies teachers from a public university in the middle west of Turkey. The data were collected through Social Studies Preference Scale. The results indicated that Turkish pre-service social studies teachers have positive attitudes toward all of the three traditions of the social studies (Social Studies as Citizenship Transmission, Social Studies as Social Science, and Social Studies as Reflective Inquiry). Also, according to the results, male pre-service social studies had more positive attitudes than female pre-service social studies to the social studies as citizenship transmission tradition. In addition, participants in the lower grade level produced more superior acceptance on Reflective Inquiry traditions in comparison with students in the higher grades.

Keywords: Social Studies Traditions, Nature of the Social Studies.

Introduction

The study of human enterprise across space and time, which is one of the main components of the social studies, has always been part of the education (Ross, 2006a). However, the course of social studies has emerged and been part of the school curriculum at the beginning of the 20th century in the United States to the response of the press of cultural,

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racial, and gender differences (Crocco, 2004; Kilinc, 2012). The most accepted idea about the origin of the social studies is that the term of social studies was introduced in 1916 by the National Education Association's (NEA) 1916 Committee on Social Studies (Ross, 2006b; Singer, 2005).

From the birth of the social studies in 1916, several definitions of social studies have been proposed by scholars (Clements, Fielder, & Tabachnick, 1966; Evans, 1988; Hanna, 1957; Nelson, 1994; Singer, 2005; Wesley, 1937). Each of the definition has different point of view about the social studies. National Council for the Social Studies (NCSS) announced a comprehensive definition of the term in 1994, to reach general definition after decades of debate regarding the definition and goals of the social studies.

Social studies is the integrated study of the social sciences and humanities to promote civic competence. Within the school program, social studies provides coordinated, systematic study drawing upon such disciplines as anthropology, archeology, economics, geography, history, law, philosophy, political science, psychology, religion, and sociology, as well as appropriate content from the humanities, mathematics, and natural sciences (NCSS, 1994, p.3).

The term of social studies has been started to use as a school subject at the late 1960's in Turkey. It became part of the elementary school curriculum in 1968 (Öztürk, 2012) and middle school curriculum at the beginning of the 1970's (Çayır & Gürkaynak, 2007). Except for the period of 1985-1997, social studies has been taught at both elementary and middle schools. In the last curriculum change, social studies course encompasses a variety of social science disciplines and civics (Açıkalın, 2011). After the last change of social studies curriculum in 2005, the main purpose of social studies was proposed "to provide an opportunity and appropriate environment for individuals to understand and make contributions to themselves, the society in which they live on the basis of their own demands and skills, within the framework of the General Aims of Turkish National Education" (Safran, 2005).

As well as United States, there have been several definitions of the social studies in Turkey (Doğanay, 2005; Sönmez, 1997). According to Açıkalın (2011), defining social studies and placing it as an independent course in the elementary and middle school curriculum is important for teachers. Similarly, understanding the nature of the social studies is crucial for pre-service social studies teachers because they are going to be teaching this course. Thus, the purpose of this study is to investigate pre-service social studies teachers' understandings about the nature of the social studies.

Social Studies Traditions

Social studies course is considered as one of the main elements of school curriculum because it prepares young generations as citizens (Kilinc, 2012). According to Fenton (1966), social studies aims to prepare students to be exemplary citizens, teach students how to think, and to pass cultural heritage to them. Indeed, as Parker asserted, "without historical understanding, there can be no wisdom; without geographical understanding, no cultural or environmental intelligence. Without civic understanding, there can be no democratic citizens and, therefore, no democracy" (Parker, 2012, p. 3). This is why social studies is considered as a crucial lesson by educators.

The social studies curriculum has been an ideological battleground throughout the twentieth century because of its importance (Kilinc, 2012; Ross, 1997). Difference point of view about social studies for its definition (Metcalf, 1963) and purpose arises because of several reasons. According to Engle (1980), the problem is threefold: Ambiguity within the

profession and among people generally over goals, lack of clarity as to the relationship between the social studies and the social sciences, and failure to make necessary distinctions between the role of scholarship and that of teaching. On the other hand, Kennedy (1979) asserted that lack of epistemological agreement caused this ambiguity.

Several researchers in the field studied the foundations of the social studies and identified some approaches (Engle, 1960; Fenton, 1966; Newmann, 1975). Engle (1960) described three rationales for the social studies. The first approach conceived social studies as social sciences. The second approach viewed social studies as mainly concerned with developing good citizen. The third approach was the unreflective inculcation or imposition of certain content and values (Stanley, 1985). In their studies, Barth and Shermis (1970) and Barr, Barth and Shermis (1977, 1978) highlighted this problem and offer a new point of view to the social studies. They identified three major traditions to the teaching of social studies:

- Social studies as citizenship transmission
- Social studies as social sciences
- Social studies as reflective inquiry.

Table 1. *Three traditions of the social studies* (Barr, Barth, & Shermis, 1977, p. 67).

Traditions	**Purpose**	**Method**	**Content**
Social Studies as Citizenship Transmission	Citizenship is best promoted by inculcating right values as a framework for making decisions.	Transmission: Transmission of concepts and values by such techniques as textbook, recitation, lecture, question and answer sessions, and structured problem solving exercises.	Content is selected by an authority interpreted by the teacher and has the function of illustrating values, beliefs, and attitudes.
Social studies as Social Sciences	Citizenship is best promoted by decision making based on mastery of social science concepts, processes, and problems.	Discovery: Each of the social sciences has its own method of gathering and verifying knowledge. Students should discover and apply the method that is appropriate to each social science.	Proper content is the structure, concepts, problems, and processes of both the separate and the integrated social science disciplines.
Social Studies as Reflective Inquiry	Citizenship is best promoted through a process of inquiry in which knowledge is derived from what citizens need to know to make decisions and solve problems.	Reflective Inquiry: Decision making is structured and disciplined through a reflective inquiry process which aims at identifying problems and responding to conflict by means of testing insights.	Analysis of individual citizen's values yields needs and interests which, in turn, form the basis for student self-selection of problems. Problems, therefore, constitute the content for reflection.

Moreover, Newmann (1975) asserted new classification after these researchers. According to him environmental competence is one of the crucial components of the social studies. He also emphasized the importance of critical thinking skills for dealing daily issues (Stanley, 1985). In addition, in his book, *Social Studies Wars*, Evans (2004) identified five main competing camps which struggled at different times to retain control of social studies or to influence its direction. These camps are traditional historians, mandarins, social efficiency educators, Deweyian experimentalists, and social re-constructionists. All of the definitions and classifications of social studies had impacts on other countries' understandings of the nature of the term.

The development of the social studies in Turkey was mainly impressed with the United States. The most accepted classification in Turkey is Barr, Barth & Shermis's (1978) classification that includes three social studies traditions: citizenship transmission, social science and reflective inquiry (Kaymakçı & Ata, 2012). Understanding this classification is important, because social studies curriculum development in 2005 was mainly affected by these three social studies traditions. Indeed, the social studies curriculum change in 2005 highlighted both social science and reflective inquiry traditions besides citizenship transmission (Ata, 2006). Thus, several researches have been conducted in Turkey to explore how these traditions conceptualized by teachers (Doğanay & Sarı, 2004; Kozan, 2002; Özmen, 2010, 2011). However, there have been very few studies that explore pre-service social studies teachers' perception of the nature of the social studies (Açıkalın, 2011). For this reason, the purpose of this study is to investigate pre-service social studies teachers' understandings about the nature of the social studies. Therefore this study focuses on the following research questions:

- To what extent are pre-service social studies teachers' attitude levels about the traditions of the social studies classified by Barr, Barth, and Shermis (1978)?
- Are there any significant differences between male and female participants' perception of social studies traditions?
- Are there any significant differences pre-service social studies teachers' perception of the social studies traditions by grade levels?

Method

In this study, descriptive survey model was used. In general, descriptive survey studies are concerned with assessing attitudes, opinions, preferences, demographics, practices, and procedures (Gay, Airisian, & Mills, 2006). Survey research involves the collection of information from a sample of individuals through their responses to questions. Survey research is useful for documenting existing community conditions, characteristics of a population, and community opinion (Guyette, 1983). It is also an efficient method for systematically collecting data from a broad spectrum of individuals and educational settings (Fraenkel & Wallen, 2003).

Sample

The participants of the study were selected through convenience sampling during the 2012-2013 academic year. A convenience sample is described as a group of individuals who conveniently are available for study (Fraenkel & Wallen, 2003). The sample consisted of 309 pre-service social studies teachers from a public university in the middle west of Turkey. The author has included 1st – 4th grade pre-service social studies teachers to the study. A total of 322 pre-service social studies teachers participated in this research. The author excluded 13

of the participants from the study because they did not fill out the whole scale. Table 2 and Table 3 have some information about participants' gender and grade level.

Table 2. *Information about participants' gender*

Gender	*Frequency (f)*	*Percentage (%)*
Female	169	54.7
Male	140	45.3
Total	309	100

Table 3. *Information about participants' grade level*

Gender	*Frequency (f)*	*Percentage (%)*
Freshmen	59	19.1
Sophomore	89	28.8
Junior	86	27.8
Senior	75	24.3
Total	309	100

Data Collection Tool

The author used Social Studies Preference Scale, which was translated to Turkish by Kaymakçı and Ata (2011). The original version of the Social Studies Preference Scale was developed by Barr, Barth and Shermis (1978). A five point Likert scale (strongly disagree -1, disagree -2, neither agree nor disagree -3, agree -4, strongly agree -5) was used to identify the level of participation on the questions. Each social studies traditions has 15 items, five items for purpose, five items for method, and five items for content. The general rule of the scale is that the lower your total score the more strongly you disagree with the statement in the cell and, conversely, the higher the number the more strongly agree with the statement in the cell.

Each of the items in the scale has a corresponding number in the matrix below (See Table 4). For instance if one strongly disagree with the statement 4, the researcher place 1 next to the number 4. Total rating in each cell at the place marked "cell total". To reach tradition total, one should add together the three cells totals in each column (Barr, Barth & Shermis, 1978).

According to this calculation the lower score would be 5, and the higher score would be 25 for each cell; and the lower score would be 15 and the highest score would be 75 for each patter.

Table 4. *Social studies traditions*

	Social Studies as Citizenship Transmission	Social Studies as Social Science	Social Studies as Reflective Inquiry
Purpose	4	9	17
	14	15	24
	29	18	26
	30	31	34
	37	44	42
	Total	Total	Total

Table 4 (Cont.). *Social studies traditions*

	Social Studies as Citizenship Transmission	Social Studies as Social Science	Social Studies as Reflective Inquiry
Method	12	11	1
	19	38	16
	20	41	22
	23	43	28
	33	45	32
	Total	Total	Total
Content	5	2	8
	10	3	13
	21	6	25
	39	7	27
	40	36	35
	Total	Total	Total
Tradition Total			

Tablo 5. *Interpreting the Matrix*

Dimensions (Purpose, Method, and Content)	Tradition (Citizenship, Social Science, and Reflective Inquiry
5 to 9 Strongly disagree	15 to 30 Strongly disagree
10 to 15 Disagree	31 to 45 Disagree
16 to 20 Agree	46 to 60 Agree
21 to 25 Strongly Agree	61 to 65 Strongly Agree

White (1982) calculated the reliability coefficients for the various subscales of the survey and found that the survey is reliable (citizenship transmission .81, social science .78, and reflective inquiry .77). The general Cronbach alpha internal consistency coefficient of the scale was calculated by Doğanay and Sarı (2004) in Turkey and it was found .88. Kaymakçı and Ata (2011) found the Cronbach alpha internal consistency for citizenship transmission tradition .83, for social science tradition .81, and for reflective inquiry .88. The author calculated the Cronbach alpha internal consistency of the whole Social Studies Preference Scale for the study .89. Also the author has calculated Cronbach alpha for each dimension and found that it was .79 for Social Studies as Citizenship Transmission, .83 for Social Studies as Social Science, and .70 for Social Studies as Reflective Inquiry.

Analysis of the Data

The data were analyzed through descriptive analysis, independent sample t test, one-way multivariate analysis of variance (MANOVA), and one-way analysis of variance (ANOVA) in a statistical package program. $\alpha = 0.05$ significance level was taken as the basis for significance test between groups.

Findings

The following findings emerged from this study in order to obtain pre-service social studies teachers' understandings about the nature of the social studies.

Findings Associated with First Research Question

Social Studies Preference Survey was used to explore how pre-service social studies teachers feel regarding social studies education. The result of the Social Studies Preference Survey showed that all of the three traditions of social studies preference emerged from the analysis of participants' responses.

Table 6. *Tradition scores and rank order for the entire sample of pre-service social studies teachers*

Tradition	*N*	*M*	*SD*
Social Studies as Citizenship Transmission	309	57.43	7.89
Social Studies as Social Science	309	60.65	7.22
Social Studies as Reflective Inquiry	309	59.70	7.01

According to the results (see Table 6), participants expressed that social studies as social tradition ($\overline{X}$ = 60.65) is the most accepted tradition. The second most accepted tradition is social studies as reflective inquiry ($\overline{X}$ = 59.70). Social studies as citizenship transmission tradition ($\overline{X}$ = 57.43) is the less accepted tradition by pre-service social studies teachers. In other words, the result of the survey showed that participants favor social studies as social science tradition over others.

On the other hand, if the findings of the study were addressed by considering Barr, Barth and Shermis (1978) work, it is appeared that participants accepted the tradition that mixes all three traditions, social studies as citizenship transmission and social science and reflective inquiry. According to this tradition, participants accepted all of the three traditions' perspectives about social studies.

Table 7. *Participants' attitude levels about the traditions of the social studies*

	Social Studies as Citizenship Transmission	Social Studies as Social Science	Social Studies as Reflective Inquiry
Purpose	Agree	Strongly Agree	Strongly Agree
Method	Strongly Agree	Strongly Agree	Strongly Agree
Content	Agree	Strongly Agree	Agree
Tradition	Agree	Strongly Agree	Agree

Findings Associated with Second Research Question

Independent-sample t tests were conducted to evaluate whether there was a difference between male and female pre-service social studies teachers on the perception of social studies traditions (Social Studies as Citizenship Transmission, Social Studies as Social Science, and Social Studies as Reflective Inquiry). The test was significant $t(307) = -1.98$, $p = 0.04$ for social studies as citizenship transmission tradition. Male pre-service social studies ($\overline{X}$ = 58.40) had more positive attitudes than female pre-service social studies ($\overline{X}$ = 56.62) to the citizenship transmission tradition. The author calculated effect size ($d = -.23$) and found it was small (Cohen, 1992). According to t-test there are no other significant differences between genders on the perception of Social Studies as Social Science and Social Studies as Reflective Inquiry.

Table 8. *t-tests table about social studies perceptions by gender*

Tradition	Gender	*N*	$\overline{X}$	*SD*	*Df*	*t*	*p*	Effect size
Social Studies as Citizenship Transmission	Female	169	56.62	7.76	307	-1.98	.04	-.23
	Male	140	58.40	7.96				
Social Studies as Social Science	Female	169	60.37	6.97	307	-.757	.45	
	Male	140	60.99	7.54				
Social Studies as Reflective Inquiry	Female	169	59.71	6.74	307	.01	.99	
	Male	140	59.70	7.34				

Findings Associated with Third Research Question

A one-way multivariate analysis of variance (MANOVA) was conducted to determine the effects of grade level (freshmen, sophomore, junior, and senior) on the three dependent variables (Social Studies as Citizenship Transmission, Social Studies as Social Science, and Social Studies as Reflective Inquiry). A significant difference was found among grade levels on dependent variables, *Wilks's Λ* = .92, $F(9, 737) = 2.67$, $p = .005$. The multivariate η^2 based on *Wilks's Λ* was small, .03.

Analyses of variances (ANOVA) on the dependent variable were conducted as follow-up tests to the MANOVA (See Table 9). The ANOVA on the Social Studies as Reflective Inquiry tradition was significant, $F(3, 305) = 2.76$, $p = .04$, $\eta^2 = .026$; while the ANOVA on Social Studies as Citizenship Transmission tradition $F(3, 305) = .953$, $p = .41$ and Social Studies as Social Sciences $F(3, 305) = 1.09$, $p = .35$ were non-significant.

Table 9. One-way ANOVA results for social studies traditions by grade level

Tradition	Source	*SS*	*Df*	*MS*	*F*	*p*
Social studies as Citizenship transmission	Between Groups	178.108	3	59.369	.953	.415
	Within Groups	18997.6	305	62.287		
	Total	19175.75	308			
Social studies as Social Sciences	Between Groups	171.325	3	57.108	1.094	1352
	Within Groups	15924.9	305	52.213		
	Total	16096.2	308			
Social studies as Reflective Inquiry	Between Groups	400.108	3	133.369	2.759	.042
	Within Groups	14746.1	305	48.348		
	Total	15146.2	308			

Post hoc analyses to the univariate ANOVA for the Social Studies as Reflective Inquiry tradition consisted of conducting pairwise comparisons to find which grade level accepted the tradition most strongly. Each pairwise comparison was tested. First grade (freshmen) students produced significantly superior acceptance on Social Studies as Reflective Inquiry tradition in comparison with second graders (sophomore). There is no other significantly differences amongst grade levels.

Conclusion

Over the past decades, different points of view can be seen in the literature both in the United States and Turkey. There are many ways of analyzing and explaining the nature of the social studies. Each approach can help sensitize educators and students to the nature of the social studies. It is crucial for pre-service social studies teachers to know social studies traditions because they are going to teach in this field. Knowing different social studies traditions helps teachers to design their courses. Social studies teachers should consider these traditions and examine the content of the social studies, handle with teaching methods and the reason why they are teaching social studies. After this process, they can either choose one of the traditions or create a new tradition by combining existing ones.

In this study, pre-service social studies teachers' understandings about the nature of the social studies were analyzed by considering gender and grade level. The findings of the study showed that Turkish pre-service social studies teachers have positive attitudes toward all of the three traditions of the social studies (Social Studies as Citizenship Transmission, Social Studies as Social Science, and Social Studies as Reflective Inquiry). Also, the results reveal that participants would rather social studies as social sciences traditions than Social Studies as Reflective Inquiry and Social Studies as Citizenship Transmission traditions. This findings support the results of previous researches (Doğanay & Sarı, 2005; Kaymakçı &Ata, 2012) that indicate same results. The results of the study also suggested that Turkish pre-service social studies teachers are struggling to define the boundaries of the three traditions. It can be concluded that by analyzing Table 7, participants accepted the tradition that mixes all three traditions.

The finding of the study reveals pre-service social studies teachers' attitudes toward social studies traditions did significantly differ by gender. According to the results, male pre-service social studies had more positive attitudes than female pre-service social studies to the social studies as citizenship transmission tradition. However, there are no other significant differences between genders on the perception of other social studies traditions. Previous researches (Kozan, 2002; Özmen, 2010) have come to different conclusion on the effect of gender that pre-service teachers' attitudes toward social studies traditions did not differ by considering gender. In addition, it is concluded from the findings of the study that there is a significant difference between grade levels on Social Studies as Reflective Inquiry tradition. Students in the lower grade level produced more superior acceptance on Reflective Inquiry traditions in comparison with students in the higher graders.

In general, this study showed that pre-service social studies teachers have positive attitudes towards all social studies generations. This result reveals that, as it was mentioned before by Açıkalın (2011), social studies teacher education programs in Turkey need more focus on the discussion about the nature of the social studies. Assisting pre-service social studies teachers to make necessary distinctions between these traditions will contribute the development of the field in Turkey.

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Predictors of Quality Verbal Engagement in Third-Grade Literature Discussions

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Abstract

This study investigates how reading ability and personality traits predict the quality of verbal discussions in peer-led literature circles. Third grade literature discussions were recorded, transcribed, and coded. The coded statements and questions were quantified into a quality of engagement score. Through multiple linear regression, the researcher sought to determine the best predictors of verbal engagement in literature circle discussions. Results indicated that higher reading ability and extroversion along with lack of conscientiousness were significant predictors of quality verbal engagement in literature circle discussions. The researcher suggests that understanding literature circles through a lens of complexity may serve to promote more productive discussions. Finally, implications for instructional design are discussed.

Keywords: Literature Circles, Book Discussions, Personality

Introduction

Literature circles are generally understood as peer-led, student groups reading the same text with an opportunity to discuss content (Daniels, 1994). The goal of literature circles is to enhance the comprehension of text in a motivating and authentic manner (Almasi, 1996). Although there are many forms of literature circles (Almasi, O'Flahavan, & Arya, 2001; Bond, 2001; Brabham & Villaume, 2000; Burns, 1998; Clark, 2009; Daniels, 2002), most versions share some common features. In many cases, the groups are formed based on individual reading preferences. This initial choice of text is a key feature of literature circles that presumably promotes reader engagement (Daniels, 2002; Flowerday, Schraw, & Stevens, 2004; Peralta-Nash & Dutch, 2000). The opportunity to discuss the text is another integral element when implementing literature circles. The discussions provide an avenue for learning through social interaction (Vygotsky, 1978). Beyond these key features of choice and discussion, the forms of literature circles bifurcate and manifest themselves in many different forms.

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Daniels (1994) introduced a version of literature circles that possessed the key features described above, as well as structural roles for discussion. Roles, such as discussion director, word wizard, connector, summarizer, or illustrator were given to students in preparation for the literature discussion. In fact, many interpretations of literature circles, or book clubs, assigned roles to participants (Pearson, 2010; Sandmann & Gruhler, 2007; Tompkins & Tompkins, 2001). In support of this perspective, research indicated that students prefer some sort of preparatory work prior to discussion (Evans, 2002). However, preparatory methods varied in implementation. The structures ranged from rigid roles (Miller, 2002; Tompkins & Tompkins, 2001) to completely open discussion (Li et al., 2007). The differing structures might be attributed to varying teacher philosophies, grade level, student population, goals for literature circles, or a teacher's past experience with literature circles.

Pearson (2010) argued that designating students to roles in literature circles inhibited the discussions. Assigned roles limited the free-flowing aspect of the discussion. Pearson's class of 28 students served as the subjects in a study that used roles for discussion. The teacher implemented literature circles with mini-lessons and assigned roles including discussion director, summarizer, connector, and word wizard. Pearson hoped to see more exploratory talk (Mercer & Wegerif, 1999), but the found the roles to be too restrictive. The goal was to have children elaborate reasoning, use personal anecdotes, and back up their claims with text evidence. However, discourse analysis revealed that students only exhibited these desired behaviors when conversation switched from school discourse to an informal discourse. In other words, when students abided by the structured roles, the discussions were less likely to go beyond the minimum expectation. However, when students abdicated the roles, they were able to discuss freely. Pearson found that the less-structured instances produced more exploratory talk and thinking together. Pearson desired exploratory talk characterized by speculation and conversational tangents over the contrived discussions produced by limiting students to roles. The conversations permeating from restricted discussions were pedantic, contrived, and lacked the motivation originally sought by literature circles. A new direction of literature circles emerged with the aim to deviate from traditional discursive patterns in classrooms between teachers and students (e.g., initiate, respond, evaluate), to preserve the motivational aspect of the activity, and move towards more authentic conversations (Goatley, Brock, & Raphael, 1995).

Although most research agrees on some common tenants of literature circles, such as small groups reading the same text independently with an opportunity to discuss, providing choice, and preparing students for discussions, teachers and researchers are still seeking better ways to implement literature circles. Teachers have varied literature circle designs by delivering mini-lessons, changing preparatory methods, and offering support with conversational discourse. Researchers in turn measured the effectiveness of the new designs, and made practical suggestions to maximize the positive effects of literature circles on student learning. The related research, (Wood et al., 1976) however, indicates that when instructional scaffolding is removed from literature circle discussions, the complexity of the task increased.

In some ways, literature discussions are complex adaptive systems (Holland, 1992) in that the teacher creates a "container" (Eoyang, 1997) in which students are encouraged to discuss the text. Within a container however, chaos ensued because of the discussion's open format (Trygestad, 1997). Chaos was actually desired in discussions because chaos is evident when the unexpected is birthed from an occurrence, much like a fractal (Caine & Caine, 1997). The fractal is constant iterations of itself, but never the same. It starts with a basic configuration, but changes based on the situation. It will never be the same again. A conversation can be understood similarly, in that once it begins, the process is indeterminate, and the paths are

endless. (Boal & Schultz, 2007). Productive conversations are often nonlinear, so teachers and literature circle design should not try to fit a dynamic process into a linear structure (Cziko, 1989) such as providing an order for speaking, or assigned jobs in discussions. In the beginning, conversations may seem disorganized. However, as the discussion moves toward the edge of chaos (Caine & Caine, 1997), it begins to self-organize (Boal & Schultz, 2007). Discussants build off each other's knowledge and contributions to work towards coherence or a better understanding. The experience and interpretations of others can greatly enhance private understandings (Rumelhart, 1994). Conversational variables, such as a simple utterance of a personal connection to text are often unpredictable, but are necessary when engaging in a productive conversation. The product might be intangible; discussants not sure of where they are headed, because their destination is unseen in the beginnings of conversation. The destination might be thought of as resolution. This arrival, in chaos theory, is called emergence—the moment when all of the variables impact each other in a way that something new emerges. It can also be thought of as the "Ah-hah" moment, when disorganization suddenly completes reorganization. Eoyang (1997) argues the nonlinearity and constant bifurcations are additional variables in conversations that serve as the means for a new understanding.

Because literature circles are complex, there is a possibility for off-track discussions. Structure, modeling, scaffolding, and the transfer of learning help keep students focused and provide boundaries for discussion; otherwise, talks of birthday parties, video games, and recess can prevail (Dixon-Krauss, 1996). There is also potential for negative and interactions unrelated to the text (Clarke & Holwadel, 2007). Discussions are social processes, and it is important for literature circle discussions to have social norms, mutual respect, and students should be well versed in collaborative skills (Wiencek & O'Flahavan, 1994). Conversations inevitably go somewhere according to Chaos Theory, however if conversational skills are instilled prior to discussion, the likelihood of the discussion being more productive and positive may increase.

Different academic subjects have varying complexity, and research indicates that language arts' complexity might be due to the ill-structured domain in which it resides. Cognitive flexibility theory (Spiro, Coulson, Feltovich, & Anderson, 1988) posited that in order to understand ill-structured domains such as free-flowing discussions, one could not simply rely on intact schemata to demonstrate advanced knowledge; the learner or discussant must apply various schemata from the self and others, so discussions are inherently complex.

Krol's study (2004) measured the effects of a national cooperative learning initiative in the Netherlands. Up to this point, collaboration was rarely observed in the Dutch classrooms because whole-group teaching dominated. The Krol study measured cognitive development during a math and language arts task. In a pre/post-test design the treatment groups collaborated on a task, and the control completed the task alone. The group that collaborated in math did not perform significantly differently from the independent group according to the post-test. However, there was a high effect size (.70) in the language arts group. The researchers recognized the possibility that more than one interpretation of the selected passage could have accounted for the cognitive restructuring. In such a context, private knowledge was made public, discussed, and internalized again in a different way. The discussion of the reading fell into an ill-structured domain, an instructional activity that lacked structure; therefore, cognitive flexibility was needed (Spiro, Coulson, Feltovich, & Anderson, 1988).

Because literature circles are complex, they must be implemented carefully (Chan, 2010; Clarke & Holwadel, 2007; Day & Ainley, 2008). The instructional design of literature circles has

been researched extensively (Day & Ainley, 2008), but a gap exists in the research when considering group configuration. Researchers (Clarke & Holwadel, 2007) reported that changing pre-teaching methods, instilling positive conversational discourse, and providing a less structured preparation process created a context for discussion and enhanced literature circles. Still, little research exists that considers the intentional placement of students in the groups.

Understanding more about personality factors that influence individual participation in literature circle discussions could provide information to educators on how to organize literature circles for more optimal interaction. The related literature rarely discusses the intrapersonal factors that likely impact the students' social interaction. Intrapersonal factors such as individual leadership qualities have influenced student engagement (Li et al., 2007) and should be considered during social learning situations. Because literature discussions are considered social learning situations, the influences of human factors like personality are worthy of investigation (Chan, 2010).

Over the past century, personality theorists have struggled to create a personality structure that can house all attributes of individuals. Some argued that labeling personality based on a few factors is potentially limiting or reductionistic (Emmerich, 1968). Others believed that the power of language cannot be removed from connotative factors (Dingman, 1989). For example, different cultures and beliefs valued particular descriptors differently, thus self-rating or that of others was influenced by varying negative and positive connotations. Regardless of critique, however, some personality structures remained viable in the 21st century (Goldberg, 1990).

In 1884, Galton estimated that 1,000 adjectives were commonly used to describe people. In 1934, Thurstone empirically shortened the list to 60 adjectives. These adjectives were identified by asking 1,300 people to describe a well-known individual. After the 60 most common adjectives were identified, the researcher utilized multiple factor analyses and found five independent factors. The five factors independently encompassed the 60 adjectives. Goldberg (1990) conducted a similar validation study using over 1,700 trait terms. The research employed five different factor analysis procedures, all of which confirmed the five-factor model.

The Five Factor Model, referred to as the "Big Five", was established by Fiske in 1949 and remains a common measure of personality (Anusic, Shimmack, Pinkus, & Lockwood, 2009). The Big Five personality traits are extroversion, agreeableness, conscientiousness, emotional stability (also referred to as neuroticism), and openness. According to this model, extroverted students were enthusiastic and energetic. Agreeableness was understood as compassion and the ability to cooperate. When a student was efficient and organized, he/she was described as conscientious; therefore, a lack of conscientiousness could be characterized by disorganization, carelessness, and spontaneity. Emotionally stable students were secure and confident. Openness measured a student's propensity to enjoy new experiences or the level of curiosity a student exhibits (Anusic et al., 2009; Barbaranelli, Caprara, Rabasca, & Pastorelli, 2003). These classifications have been used to rate personality in a variety of fields, such as sociology, psychology, marketing, entrepreneurship, and education (GoslingLab, 2012). The model has been studied extensively and has yielded high coefficients (.90) of relatedness across studies (Kaiser, Hunka, & Bianchini, 1971). Other researchers (Norman, 1963; Tupes & Christal, 1992) corroborated Fiske's (1949) original study and personality research contended that no matter how large or broad a personality inventory, the items could be categorized in a few robust factors (Dingman, 1986; Goldberg, 2001).

Although there are other personality models, the Big Five model is the most dominant in personality research (Donnellan, Oswald, Baird, & Lucas, 2006). Attempts have been made to expand the model into six or seven factors, but research (Digman & Inouye, 1986) indicates that five are sufficient. One of the largest collections of child personality data comes from the Hawaiian Islands. It includes 88 teachers' reports on 2,572 elementary students. Using this large data pool, Digman and Inouye (1986) found a weak sixth dimension of creativity, but ultimately contended that five dimensions were sufficient in capturing personality traits. Other research sought to downsize the model into two or three factors (Marsh, Craven, Hinkley, & Debus, 2003; Ng, Cooper, & Chandler, 1998), but again, the model remains a reliable means for measuring personality traits in children and adults (Digman & Inouye, 1986).

Some researchers prefer a shortened assessment rather than asking participants to fill out thick packets to measure personality, especially when the researcher wishes to reduce the burden on the subjects (Muck, Hell, & Gosling, 2007). The Ten Item Personality Inventory (TIPI) (Gosling, Rentfrow, & Swann, 2003; GoslingLab, 2012) is a reliable measure of the Big Five personality factors (Donnellan et al., 2006; Gosling et al., 2003). The brief TIPI can be used when larger assessments might be cumbersome to young students or when time is limited. Research contends that the TIPI is a valid compromise between efficiency and reliability (Jonason, 2011), and is an efficient approximation of larger inventories measuring the Big Five character traits. (Muck et al., 2007).

Although the TIPI has never been used with young children in published research, other brief measures of the Big Five have been validated with children as young as five. Measelle, John, Ablow, Cowan, & Cowan, (2005) assessed 91 children ages five to seven and claim that children as young as five can self-report measures of personality. Children rated themselves on a brief measure of the Big Five while parents and teachers served as external raters. The children's self-reports were compared to the external ratings provided by the parents and teachers. The results include a correlation coefficient of .60. Therefore, it is reasonably safe to assume that children beyond the age of five years are aware of and can reliably report their personality traits through brief measures.

Other assessments of the Big Five have been used to study other phenomena in young children. In a study (Jensen-Campbell et al., 2002) of middle school children, two of the Big Five personality factors: extraversion and agreeableness predicted acceptance among peers in middle school. In addition, higher ratings of agreeableness also predicted that students were less likely to be victimized. Another study (Lay, Kovacs, & Danto, 1998) using the Big Five inventory correlated procrastination and lack of conscientiousness among 280 students in grades 3-5. The study utilized teacher reports of students and students' self-report data. The researchers were able to reliably predict higher observed procrastination in students who lacked conscientiousness (Lay, Kovacs, & Danto, 1998). Beyond the import of such studies, this research reiterates the ability of children to self-report measures of personality, as the personality reports were consistent among the students and teachers.

It is important to consider group configuration and monitor the interaction of students in literature circles because the interactional dynamics of the groups change when a teacher is removed. In a study involving 29 ethnically and socioeconomically diverse third graders, Maloch (2002) noted difficulty when transitioning from teacher-led to peer-led discussions. As cited previously, Maloch studied third graders for five months as they transitioned from teacher-led to peer-led literature circles, and she found the peer-interactional component of literature circles problematic. Students responded positively to teacher's scaffolding of conversations through facilitation and mediation, yet some students struggled in the

absence of the teacher. Students were off task, negative, and were less likely to discuss the text deeply. However, in other studies, when teachers did not intervene, students were observed assuming leadership roles (Li et al., 2007). Students interact differently in peer-led discussions, but the interactions are not always for the better (Clarke & Holwadel, 2007). The challenge includes identifying the students who might emerge as leaders and who might facilitate the discussions. Such students might facilitate the social construction of knowledge and groups can be configured accordingly. One might also speculate whether certain combinations of personality traits or ability are less likely to develop students' thinking about text. Examining factors that may predict strong verbal engagement may help extend the extant research related to literature circle implementation. In other words, perhaps text choice and reading ability should not be the only criteria that teachers use to determine the configuration of literature circles.

Teachers often spend a large amount of time preparing students for literature circles, and typically the instructional activity is used throughout the year (Miller, 2002); therefore, it is not unreasonable to utilize personality inventories as an additional consideration when grouping students. It is also helpful to consider whether highly engaged students facilitate the participation and understanding of other students during literature circle discussions. If literature circles are to be maximized, then discussions should be analyzed for quality of individual participation and whether students enhance the quality of the conversation or the depth of textual understanding. If students are leading one another to deeper textual understanding, perhaps the facilitative behaviors can be identified and taught to all students. Investigating student facilitation and group configuration of literature circle groups aligns with the belief that instruction should be effective and efficient (Mohr, Dixon, & Young, 2012). The current study aims to answer the following question: To what extent did personality factors, reading proficiency, and gender explain the quality of verbal engagement in literature circle discussions?

Method

This research was conducted in a suburban school district in the southwest. The elementary school is located in a middle class neighborhood serving 18% economically disadvantaged students. Student demographics in the school are 58% white (non-Hispanic), 19% Hispanic, 14% black (non-Hispanic), 8% Asian/Pacific Islander, and <1% Native.

The research participants were students in the first author's third grade class. All students were invited to participate in the research. In the end, a total of 27 students consented to the study, but only 25 were included in the analysis due to attrition. There were 10 females, and 17 males, none of which were identified as English language learners.

The students were given three choices of books to read. Students were called up strategically, as the choices varied slightly with ability levels. Student reading levels were based on their Developmental Reading Assessment (DRA; Beaver, 1991) scores in conjunction with current running records and MAP percentile scores. The books were leveled based on the Fountas and Pinnell system (Pinnell & Fountas, 2007). The book readabilities ranged from end of second grade level to beginning of fifth grade. Students were allowed to read the backs of the novels, thumb through them, and skim the pages to determine their interest level. Although the teacher controlled student choice by students' zone of proximal development, student interest was responsible for group formation. See table 1 for group descriptions.

Table 1. *Literature Circle Groups*

Group	Text DRA Level	Males	Females
Dinosaurs Before Dark (1)	28	1	2
They Came from Center Field	40	3	2
Dinosaurs Before Dark (2)	28	3	0
Holes (1)	50	2	1
Chocolate Touch	30	2	3
Dinosaurs Before Dark (3)	28	4	1
Holes (2)	50	2	1

Assessing Quality of Verbal Engagement

Students engaged in literature circles every day for 35 minutes—30 for reading, and five for discussion. Students typically read one chapter per day. Some groups decided to read more because their book contained shorter chapters. After completing their reading, they read independently until it was time to discuss. This gave groups with longer chapters, or slower paced readers, time to complete their reading before the discussion. After 30 minutes, students convened in their groups and discussed for approximately five minutes.

The primary researcher filmed each group twice, thus collecting seven to ten minutes of discussion for each group. The students were not told when their groups were to be filmed, as the teacher simply followed a rotation schedule. Some days were skipped due to student absences, school wide functions, or early release. The researcher followed a filming schedule created with the participating classroom teacher. The goal was to film video-record discussions that occurred during the beginning and the end of the text because the content of discussions varies at different times in the book. For example, a discussion at the beginning of the book might focus on character analysis as readers get to know the characters. However, a discussion at the end of the book may focus more on the plot. In the end, the researchers analyzed a total of 27 minutes. The researcher then transcribed the video.

In order to render a quality of engagement score, the transcribed discussions were coded based on the quality of student contributions (see Table 2). The quality score assignment was based on the three-story intellect (Costa & Kallick, 2000). Statements and questions were awarded 1, 2, or 3 points based on students' contributions. The first level is an input level that focuses on recall of text information. Some examples of level-one contributions include: recall, describe, name, or identify. The next level, processing, required higher-level thought from the reader. The reader was required to summarize, compare, sequence, infer, or analyze. The third level required output. Some examples of this level included: evaluating, speculating, predicting, generalizing, or judging. The researcher coded all utterances, such as statements that evidence higher-level thinking. In addition, students' questions were coded according to the elicited cognitive processes. For example, if a student asked, "What do you think the character will do next?", then a score of 3 was assigned because the question expected a prediction. Although the student was not making a prediction himself, he was using higher-level questioning to extend the discussion (Figure 1). Moreover, some may argue that predicting is a form of inferring, and this research agrees with the argument. However, when students infer to predict, the students enter the hypothetical realm associated with the third level intellect. All discrepancies were scored in favor of the student. For example, a prediction (level 3) was also considered an inference (level 2); however, a score of 3 was assigned because the student hypothesized based on their inference. The

scores were totaled into a Quality of Verbal Engagement (QVE) score. Finally, a graduate student coded a percentage of the statements to determine inter-rater reliability.

Table 2. *Discourse Coding Scheme*

Score	Level	Descriptors
1	Input	Name, Recall, Restate, Reread, Locate, Describe, State, Inform, Define, Identify, List
2	Process	Compare, Contrast, Classify, Distinguish, Explain (Why), Infer, Sequence, Analyze, Synthesize, Make Analogies, Reason
3	Output	Evaluate, Generalize, Imagine, Judge, Predict, Speculate, If/Then, Apply a Principle, Hypothesize, Forecast, Idealize

Matt: What is A.G.? [Infer = 2] This solicits an inference.
Jeremy: Yeah, what does that mean? [Speculating = 3] This solicits speculation.
Julie: Well, it didn't really say that—it just said it was on the suitcase. [Recall = 1]
Jeremy: Well, first, Stanley just thought it was probably a word. [Recall = 1]
Julie: Maybe it's like initials. [Infer = 2]
Jeremy: He thought it was Adgy. [Recall = 1]
Matt: It's probably initials. [Infer = 2]

Figure 1. *Coded Example from Holes (Sachar, 2001; 1998) Transcription*

The researcher did not employ an additional comprehension measure because of the purpose of the three-story intellect (Costa & Kallick, 2000). The three-story intellect was created to teach educators how to help their students think (Fogarty & McTighe, 1993). When the researcher observed students contributing at the varying levels, it was assumed the students were thinking at differing levels. The researcher assumed that students demonstrated comprehension through dialogue on one of the three levels.

Assessing Personality

The Big Five personality traits were measured with the Ten Item Personality Inventory (TIPI) (Gosling et al., 2003). The inventory was administered to each student who participated in the study. The profiles indicated levels of extroversion, agreeableness, conscientiousness, emotional stability, and openness. Because the language used on the survey was potentially difficult to comprehend for an intermediate grade student, synonyms and the example sentences from the *American Heritage Children's Thesaurus* (Houghton-Mifflin, 2007) were read in conjunction with each of the 10 items (Figure 2). The example sentences aided students in understanding the meanings of the items. The inventory was a self-reported measure and was also used in the author's pilot study, and the teachers agreed to 100% of the self-reported responses; therefore, this study did not require teachers to confirm the student responses.

Disagree Strongly - No way! That is not like me!
Disagree Moderately – That is not like me.
Disagree a little – Not really
Neither agree nor disagree – I don't really have this trait
Agree a little – This is a little like me
Agree moderately – A lot like me
Agree strongly – That's definitely like me!

Figure 2. *Prompt Key for the Ten Item Personality Inventory*

Synonyms and sentences from the American Heritage Children's Thesaurus (Houghton-Mifflin, 2007) used to help kids understand each personality trait.		
Trait	Synonyms	Sentence
Extraverted, enthusiastic	Passionate, excited	My dog always gives me an enthusiastic welcome when I get home.
Critical, quarrelsome	Judgmental, disapproving	The librarian was critical of the plan to save money by ordering fewer books.
Dependable, self-disciplined	Trustworthy	A dependable friend will always be there in a time of need.
Anxious, easily upset	Worried	Ross was anxious about his visit to the doctor.
Reserved, quiet	Shy	He did not act out much, he was quiet and reserved.
Sympathetic, warm	Concern for others, understanding	My friends were very sympathetic when I had my tonsils removed.
Disorganized, careless	Unorganized, forgetful	It was careless of the circus performer to leave the tiger's cage unlocked.
Calm, emotionally stable	Unworried	Danielle was the only one who remained calm when the fire alarm went off.
Conventional, uncreative	Standard, normal, regular	My parents thought about getting married in a hot air balloon, but they settled on a more conventional wedding in a church.
Open to new experiences, complex	No synonym	We went skydiving because we liked new experiences.

Figure 2 (Cont.). *Prompt Key for the Ten Item Personality Inventory*

Assessing Reading Ability

Data from the spring administration of the Measure of Academic Progress (MAP; (Northwest Evaluation Association, 2011) were used to determine students' reading achievement. The Reading MAP test is a computer assessment that assesses student reading achievement and progress based on grade-level norms. The MAP provides a percentile score based on the normal performance of students at the same grade level. The test is an adaptive test based on item-response theory where the test reacts to student responses, thus becoming more difficult or easier as students answer items. In the end, the assessment produces a variety of reading measures including the percentile score that was used in this study. The MAP test-retest reliability ranged from .76-.93. Ideally, reliability should not fall below .80, but the researchers explained that the reported range was due to the test question sets being different at each administration. The reported average Pearson correlation coefficient was .85, with a range of .69-.80, statistically demonstrating the test's acceptable reliability and validity (Northwest Evaluation Association, 2011).

Results

The data were analyzed through multiple linear regression in R (R Development Core Team, 2010). QVD score is the dependent variable, and the predictor variables are 1) MAP percentile 2) Extroversion 3) Agreeableness 4) Conscientiousness 5) Emotional Stability and 6) Openness. A global test of model assumptions (global statistic, skewness, kurtosis, heteroscedasticity, and link function) were all met. No outliers were detected by the Bonferonni test with a significance of $p < 0.05$. The variance inflation factor was examined to

test for multicollinearity and returned false; therefore, predictors can be analyzed individually. Descriptive statistics are summarized in table 4.

Table 4. *Descriptive Statistics*

Measure	*Mean*	*Min*	*Max*	*SD*
QVD	18.24	4	37	10.34
MAP Percentile	64.68	21	97	23.43
Extroversion	4.6	2.5	7	1.16
Agreeableness	5.02	2.5	7	12
Conscientiousness	5.58	3	7	1.53
Emotional Stability	4.66	1.5	7	1.53
Openness	5.46	3.5	7	1.24

To what extent do personality traits and reading proficiency explain the quality of verbal engagement in literature circle discussions? According to table 5, several factors predicted QVD. Reading proficiency (MAP percentile) significantly predicted QVD scores, $b = .27$, t(18) = 3.92, $p < .01$. Extroversion also significantly predicted QVD scores, $b = 2.97$, $t(18) = 2.16$, $p < .05$. However, the estimate was negative. Finally, conscientiousness significantly predicted QVD scores, $b = -4.03$, t(18) = -2.72, $p = .01$. The negative slope suggested that a lack of conscientiousness predicted higher QVD. These factors also explained a significant proportion of variance in QVD scores, $R^2 = .49$, $F(1, 18) = 4.816$, $p < .01$.

Prior to the regression, a power analysis for linear multiple regression was conducted. The upper bound degrees of freedom was 6, the lower bound 18, effect size (F^2) of 0.15, and significance was set at 0.05. The resulting power statistic was 0.19. The researcher was seeking an R^2 that would be higher than 0.19. The adjusted R^2 was 0.49, indeed higher than 0.19, therefore significance was assumed.

Table 5. Summary of Regression Model

	Estimate		Std. Error		*t* value	*Pr*(>|*t*|)[a]	
(Intercept)		27.48	11.48	2.40		0.03 *	
MAP Percentile	0.27	0.07		3.92		0.001 **	
Extroversion		2.97	1.37		2.16		0.045 *
Agreeableness		-1.70	1.47		-1.15		0.26
Conscientiousness	-4.03	1.48		-2.72		0.01 *	
Emotional Stability	-0.63	1.06		-0.60		0.56	
Openness	-1.18	1.42		-0.83		0.42	

[a]Significance codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Discussion

This study examined QVD in an open ended version of literature circles. The aim was to explore personality factors and reading proficiency in relation to the QVD in peer-led literature discussions. The results indicated that higher reading ability and extroversion along with lower conscientiousness predicted 49% of the variance in QVD. Perhaps personality factors should not be ignored when configuring literature circle groups.

Although the results seem intuitive, this study was important because it empirically introduces new factors to account for when implementing or assessing literature circles. If the true purpose of literature circle discussions is to increase the quality of understanding, then the design should focus on the environment in addition to preparatory methods and use of comprehension strategies.

Because personality factors are beyond the control of the teacher, literature circle design should strive to make the personality factors insignificant. This could be done by establishing group norms that foster inclusion. For example, students should be taught to notice students not participating, and specific protocol for inclusionary methods could be initiated. A simple inquiry such as, "What do you think, Danny?" Or, specific questions could be directed to more introverted students, "Hannah, why do you think the character was afraid?" The protocol could be taught explicitly, and coached during literature circle meetings.

In addition, alternative methods of assessment should be employed. Highly introverted and conscientious students may not project their true understanding of text during discussion. This could be accounted for by allowing students to journal their personal understanding of the text, and new understanding based on the discussion.

The use of writing prompts could help students juxtapose their personal understanding with the meaning derived from discussion. For example, "I thought…" would prompt personal reflection, but "My group thought…" or "A group member helped me understand…" prompts meaning established in the group discussion.

It is warranted to reiterate the importance of quality reading instruction from the teacher (Mathes et al., 2005). Reading ability, the strongest predictor, is under the control of the teacher. Literature circles alone are not a sufficient reading program. While they provide ample time for practice in an authentic context, specific reading skills and strategies should be taught in other aspects of the balanced literacy program.

This study corroborated the contention that more proficient readers are typically more proficient discussants (Almasi, O'Flahavan, & Arya, 2001). However, because the groups were heterogeneous, the social interaction with knowledgeable others potentially benefited all students involved in the discussion (Vygotskiĭ & Cole, 1978). This study did not examine this aspect; therefore, the extent of learning through social interaction was unclear. Future research could explore quality of comprehension after the discussion.

This study had several limitations. First, the sample size was small. Although the power analysis revealed an acceptable statistic and assumptions for multiple linear regression were met, an increased sample size would have strengthened the study. Next, the quasi-experimental design utilized a convenience sample. The researcher only included students in his third grade class. Finally, no other studies exist that used similar coding for QVD, therefore no comparative analysis could be conducted.

However, future research could investigate different forms of literature circles with a similar coding mechanism. Other instructional episodes such as teacher-led grand conversations could also be analyzed. The research could compare the QVD in peer-led and teacher-led literature discussions. Teacher could also intentionally place students in groups based on personality inventories and evaluate the quality of the discussions.

Conclusion

This method of literature circles is in constant state of construction. The main focus in redesign is to improve students' quality of understanding text. Viewing literature circle discussion through a lens of complexity may help teachers promote an exploratory method

for negotiating meaning in groups. In essence, the teacher needs to create conditions for emergent comprehension in a complex adaptive discussion. Exploring additional factors in literature circle discussions should help teachers frame the design in a manner that maximizes successful engagement of all students.

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Diversity and Educational Challenges in Oslo and Los Angeles

- A Metropolitan Perspective nr 2

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Abstract

Receiving, accommodation and education of children with immigrant background is one of the challenging issues in almost all the metropolitan areas in many countries. In our study we are exploring the impact of demographic changes on political agendas, legal frames, educational approaches, research findings and student achievement in the field of education of linguistic minorities in Oslo, Norway and Los Angeles, USA. Although there are significant historical and socio economical differences between Los Angeles and Oslo, many of the educational challenges facing the educational policy makers and the linguistic minority students are quite similar.

Keywords: Education in Metropolitan Areas, Linguistic Diversity in Education, School Achievement, Oslo, Los Angeles.

Introduction

Although different in many respects, both Los Angeles and Oslo are ports of immigration in their respective countries. The public school systems in each city are charged with educating large numbers of immigrant children whose home language differs from the national language of the country. In both cities, the academic achievement of the largest immigrant group lags in national and local measures. In both cities, the education of immigrants and the strategies to be used have become politically controversial, and policies for learning the national language have been buffeted by ideological winds. In both cities, the economic and social future depends on the successful education of immigrant children. Thus, an exploration of immigrants and their progress as learners of the national language may be

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profitable to educators in both countries, and such an exploration may serve as a basis for future research. In our first paper, which appeared in an earlier number of this journal, we have focused on Los Angeles (Kerchner & Özerk, 2014). In this paper, we are focusing on Oslo.

Immigration in Norway

Norway has a long history of emigration. During the period of 1850-1950, about a million Norwegians immigrated to the United States. During World War II the country was occupied by Nazi Germany. After the occupation, Norway intensified its industrial development with a great success. As a result, during 1950's Norway received some hundreds of refugees from Hungary and in 1960's some from former Czechoslovakia, but the main immigrant groups were from other Scandinavian countries as a result of labor demand in the industry and service sectors. By 1967 the country changed from being an emigration country to become an immigration country.

In 1970 statistics, the biggest immigrant groups were from other Scandinavian countries, Sweden and Denmark, and English-speaking immigrants from the U.K. and U.S., this as a result of oil industry jobs in the North Sea. Beginning in the 1960s, small industries and the service sector needed labor. Several thousands of young male workers mainly from India, Pakistan, former Yugoslavia, Turkey and Morocco came to Norway. At the same time, the country started to receive refugees from Vietnam and Chile. In 1975 Norway introduced a law to regulate immigration curbing the automatic ability of male immigrant workers to bring their families to Norway. Still, in the period of 1975–2010, the number of immigrants increased as a result of family reunion and refugees mainly from Pakistan, Vietnam, Iran, Iraq, Somali, and Afghanistan. At the same time, many immigrants came from European Union countries like Poland and Germany as a result of the economic cooperation agreement between Norway and the EU. In 2010 new arrivals from Poland became the largest immigrant group. By 2010 there were 552,000 immigrants or people born to immigrant parents. They represent 11.4 percent of the country's population of 4,858,200. They come from about 200 different countries. (SSB 2010) However, 50 of those countries are represented by fewer than 20 people. Some 257,000 have a European background, 199,000 persons have a background from Asia, 67,000 from Africa, 18,000 from Latin-America, and 11,000 from North America and Oceania. The fastest growing immigrant population is from Poland, Germany, Pakistan, Somalia and Iraq. They have come as labor migrants, as refugees, as students, or as a result of family-reunion.

About 35 percent of immigrants have Norwegian citizenship.

Table 1. *The Country of Origin of the Main Immigrant Groups in Norway*

Country of origin	Population 1.1.2010	Country of origin	Population 1.1.2010
Poland	52 125	Bosnia-Herzegovina	15 918
Pakistan	31 061	Iran	16 321
Sweden	31 193	Turkey	15 998
Iraq	26 374	Sri Lanka	13 772
Somalia	25 496	Russia	14 873
Germany	22 859	Philippines	13 447
Vietnam	20 100	U.K.	12 843
Denmark	19 298	Kosovo	12719
Lithuania	11341		

Source: SSB aktuell statistikk 2010

No Schooling for Illegal Immigrants

In contrast to policies in the U.S., undocumented or illegal immigrant children do not have the right to go to public schools. According to the Education Act of 1998, as in previous laws, every child in the country between the ages of 6 and 16 years must attend school. However these children must be a Norwegian citizen or have legal residency in the country of longer than three months. Each legal resident has a state-issued identity number, which is necessary for enrollment in school, and it is against the law for a school to enroll a student without a residency permit and an ID number.

The Structure and Basic Policy of Education of Norway

Compulsory education in Norway lasts ten years and consists of primary and lower secondary education. Upper secondary high school education is optional. The responsibility for ensuring that appropriate schooling is accessible to children, young people and adults has been assigned to educational authorities in each county. Individual municipalities operate primary and lower secondary schools, while the upper secondary schools are administered at the county level.

The higher education sector comprises educational programs at the universities and university colleges. Admission to these programs is normally contingent upon completion of three years of upper secondary education. With the exception of a few privately-run institutes, all institutions of higher education are operated by the state. However, each institution enjoys a large degree of academic and administrative autonomy.

Public education in Norway is free up to and including the upper secondary level. Tuition for higher education programmes at state-run institutions is normally minimal.

The Storting (Norwegian national assembly) and the Government are responsible for specifying the objectives and establishing the budgetary frameworks for the education sector. The Ministry of Education and Research implements national educational policy.

Although locally operated, schooling in Norway is based on a common standards and a national curriculum. However, Norwegian schools are expected to adapt teaching to the abilities and skills of the individual pupils. Special education is available for persons with disabilities or those with special needs who are otherwise unable to participate in ordinary schooling. Norwegian education policy stipulates that consideration be given to the special needs of language minority pupils in order to better enable them to complete upper secondary education and pursue higher education and employment. As a result of the increase in immigration, the number of pupils belonging to language minorities is on the rise.

The Norwegian public educational policy is based on equality and equity. The principle of equal rights to education for all members of society is the main guiding principle in the country's educational policy. Both the 1997 law of education and national curriculum document of 2006 stress the Norwegian concept of equity: "…to provide equal opportunities in education regardless of abilities and aptitudes, age, gender, skin color, sexual orientation, social background, religious or ethnic background, place of residence, family education or family finances."

Furthermore 'positive discrimination,' 'inclusive education,' and, 'adapted education' are seen as important strategies to accomplish equity in education: "To ensure Equity in Education for all, positive discrimination is required, not equal treatment. Equity in Education is a national goal and the overriding principle that applies to all areas of education." With regard to 'inclusive education', the officials stress the following:

"…everyone should participate in society on an equal basis – academically, socially and culturally. This places demands on the education arena and on each individual, who must be able to build good relations while respecting individual differences and values."

The national curriculum document (Knowledge Promotion 2006) stress the following:

"Adapted education within the community of pupils is a basic premise of the comprehensive school for all. The education shall be adapted so that the pupils can contribute to the community and also experience the joy of mastering tasks and reaching their goals. When working on their school subjects, all the pupils shall encounter challenges that they must strive to master and which they can master alone or with others. This also applies to pupils with special difficulties or particular abilities and talents in different areas. When pupils work together with adults or each other, the diversity of abilities and talents may strengthen the community and the learning and development of the individual. The diversity of pupil backgrounds, aptitudes, interests and talents shall be matched with a diversity of challenges in the education. Regardless of gender, age, social, geographical, cultural or language background, all pupils shall have equally good opportunities to develop through working with their subjects in an inclusive learning environment. Adapted teaching for each and every pupil is characterized by variation in the use of subject materials, ways of working and teaching aids, as well as variation in the structure and intensity of the education. Pupils have different points of departure, use different learning strategies and differ in their progress in relation to the nationally stipulated competence aims. The provisions governing special education shall be applied when more comprehensive adaptation is required than what can be arranged within the framework of the regular teaching."

After introducing the national curriculum document in 2006 the minister of education announced a strategy-plan for implementation of equal education in practice in 2007. The main purpose for the plan (Equal Education in Practice 2007) has been:

1) Improving the language skills of minority language children of preschool age.
2) Improving the educational achievements of minority language students in basic education.
3) Increase the proportion of minority students and apprentices who commence and complete upper training.
4) Increase the proportion of minority students in higher education and better opportunities for implement training.
5) Improve Norwegian language proficiency adults to increase opportunities for education and Active participation in work and social life.

Furthermore, the document stresses that:

The Government will work against racism and for a tolerant, multicultural society. Everyone shall have the same rights, obligations and opportunities regardless of ethnic background, gender, religion, sexual orientation or functional efficiency. We will invest in people by to give them access to development and new knowledge in kindergarten and school, in higher education, continuing education, and through research. From 1980 to 2006 there has been more than a tripling of the immigrant population. Without this immigration, Norway would lack manpower and expertise in several areas. Cultural diversity is not only an enrichment of each of us, but the immigrant population also brings important resources to the wider community through cultural and linguistic competence - knowledge that is very important in our work nationally and internationally.

The Impact of Immigration on the Norwegian Schools

Norway has 19 counties and 430 municipalities. While all have an immigrant population, and in 7 of 19 counties the immigrant population comprises more than 10 percent of the population, immigrants are concentrated in Oslo.

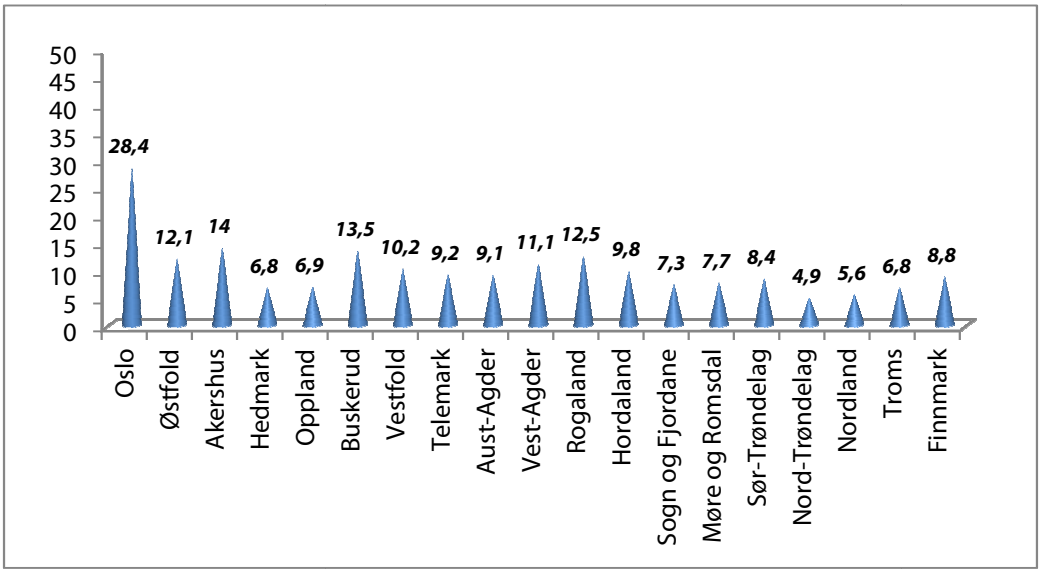
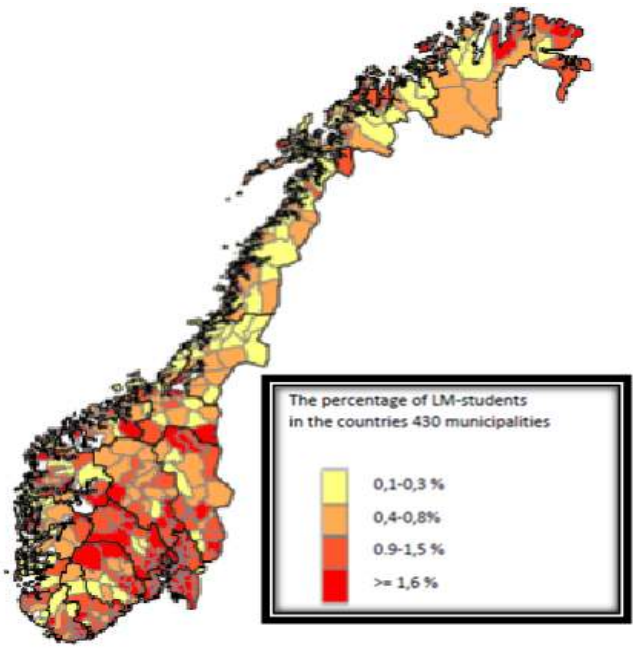


Figure 1. *Immigrant Population by County in Norway*

It is difficult to find data about the number of students at compulsory education (6-16 years of age) and secondary high schools (for those at 16-19 years of age) who have another first language than Norwegian. For unknown reasons, the Norwegian Statistic Burå stopped gathering data about this group of students. The last figures from 2004 show that there are linguistic minority students in all the 430 municipalities in the country. But in most counties, the percentages are very small. The following figure illustrates the linguistic minority student (LM-student) demography in the compulsory education in Norway:



In the school year of 2010-2011, about 43,900 students with another first language than Norwegian were provided what is called "supportive language teaching."

In upper secondary high schools (for those at 16-19 years of age) language minority students are also concentrated in Oslo, as the following figure shows. Only three counties have more than 1,000 such students.

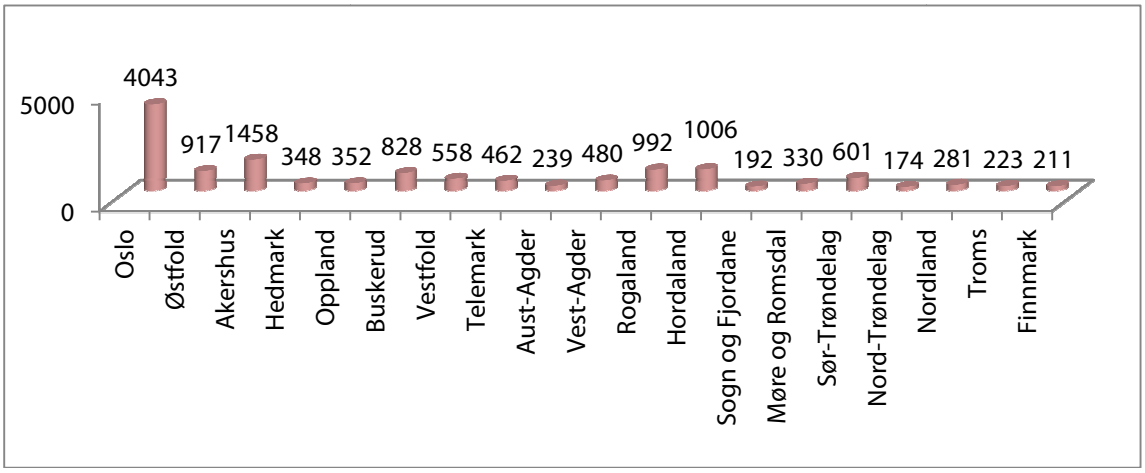


Figure 2. *Language Minority Students in Upper Secondary High Schools in Norway*

Immigration and the Oslo schools

Oslo is the capital city and is both a municipality and a county. As a municipality it has the responsibility for compulsory education for those at 6-16 years of education. As a county it has the responsibility for secondary high schools for those of 16-19 years of age.

The capital city of Oslo has the largest population of immigrants and Norwegian-born to immigrant parents, both in relative and absolute figures. Of Oslo's 587,000 inhabitants, 170,206 have an immigrant background. They represent 29 percent of the city's population. There were also high proportions of people with immigrant background in neighboring cities and counties: the municipalities of Drammen (22 per cent), Lørenskog (19 percent), and Skedsmo (18 percent). Oslo, is administratively divided into 15 townships that fall into sections of the city; the East End that has an immigrant population of 34.7 percent and West End with an immigrant population of 18.5 percent.

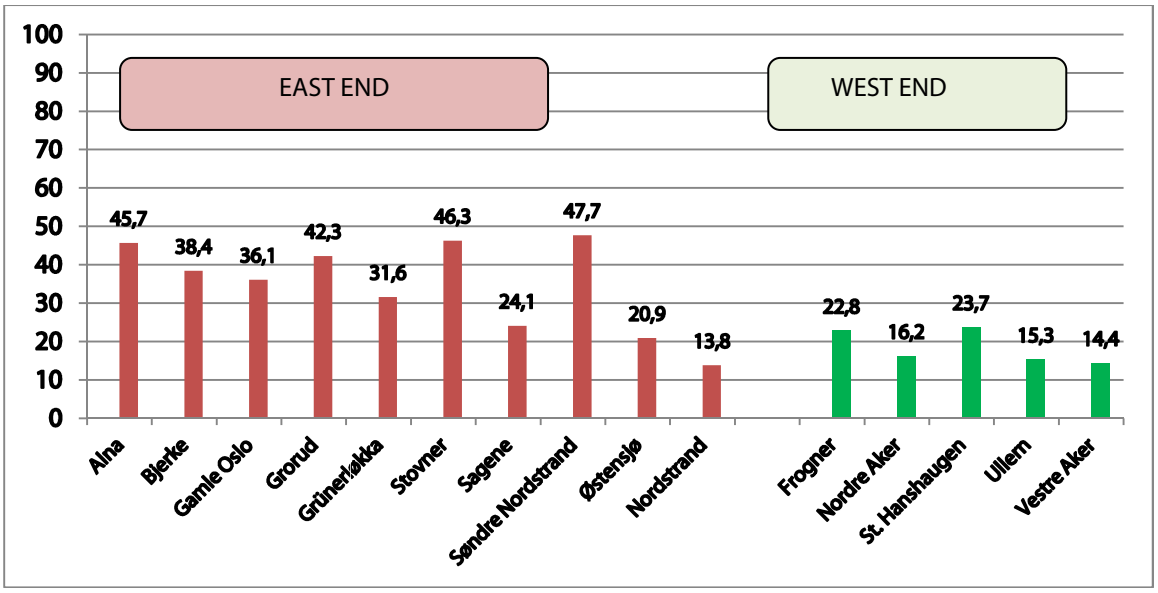


Figure 3. *The percentage of Language Minority Students in different townships in Oslo*

According to 2010 statistics (SSB, 2010) , immigrants in Oslo comprise 33.5 percent in the age group 6-15 (primary) and 31.5 percent in the age group 16-19 (upper secondary school) (SSB 2011). Figure 3 shows the distribution of these children in different townships in Oslo. These figures indicate that there higher percentage of linguistic minority children in the East End schools than the West End schools.

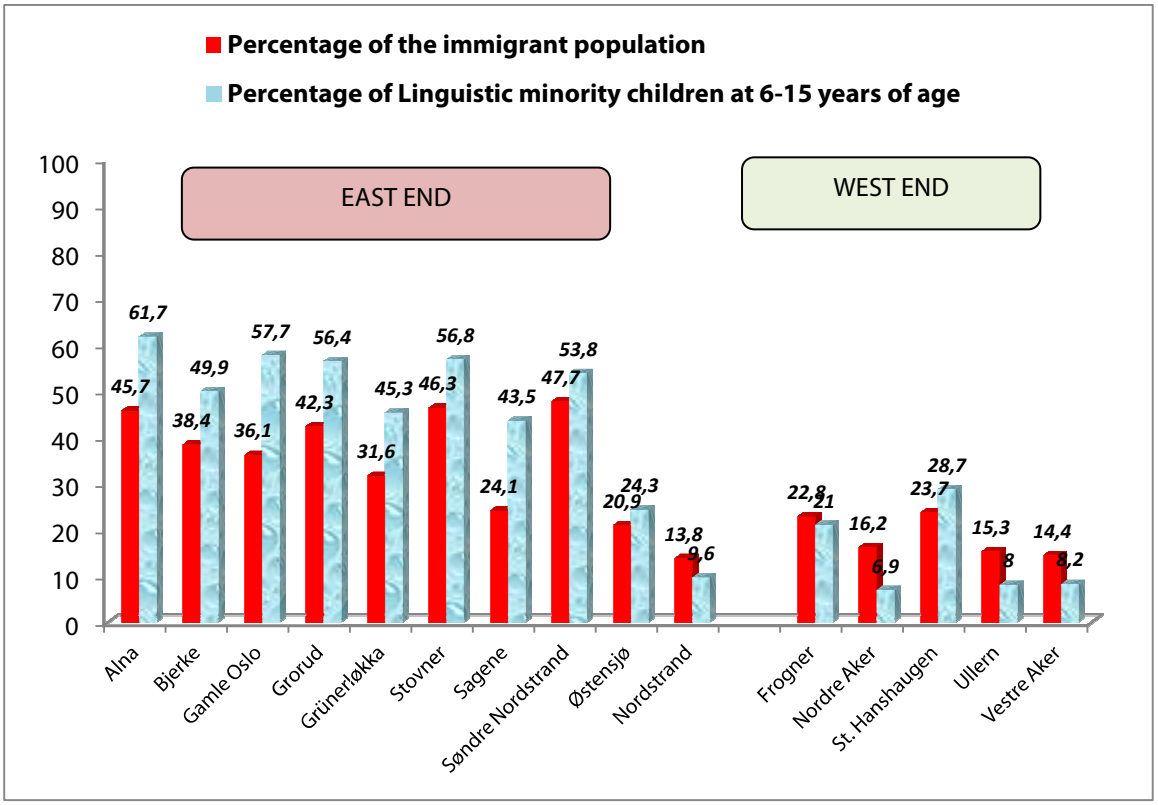


Figure 4. *Distribution of Immigrants and Language Minority Students in Oslo*

As one can see in Figure 4, except for Nordstrand in East End (Nordstrand is usually being considered as West End-township in the East End), the percentage of the 6-15 years of age with linguistic minority background is higher than the percentage of the immigrant population in the respective township. When it comes to the West End, except St. Hanshaugen, the percentage of the linguistic minority children at 6-15 years of age lower than the percentage of the immigrant population in the respective township.

The East and West parts of Oslo also differ economically. Immigrant populations are concentrated in those townships with lowest income per capita income (Özerk 2003). Several studies show that the 10 percent of the population with highest income in some West End townships earns 50 times more than 10 percent of the lowest income in the some East End townships. Table 2 illustrates the discrepancies in income per family income in the 15 townships in 2007.

Table 2. *The discrepancies in income per family income in the 15 townships in 2007*

All figures in thousands of NOK

	Gross income 2007, average	Gross income 2007, median	Taxable gross possessions 2007, average	Taxable gross possessions 2007, median
EAST END				
Alna	292	279	382	221
Bjerke	310	287	420	211
Gamle Oslo	297	280	292	113
Grorud	281	270	364	202
Grünerløkka	308	291	292	106
Sagene	316	306	319	127
Stovner	290	268	401	229
Søndre Nordstrand	294	272	362	199
Østensjø	331	272	477	255
Nordstrand	418	324	876	304
WEST END				
Frogner	465	323	1592	186
Nordre Aker	406	338	796	301
St. Hanshaugen	353	311	437	129
Ullern	575	376	2858	469
Vestre Aker	599	365	3050	478

Source: Marjan Nadim and Roy A. Nielsen: Barnefattigdom i Norge. Omfang, utvikling og geografisk variasjon. Oslo, Fafo, 2009. Fafo report 2009:38. The EU definition of child poverty has been used: Households with less than 60 percent of the median income, adjusted for households with more than 50,000 NOK in possessions.

Of 85,000 children in poor families in Norway 2006, 15,900 lived in Oslo, which comprises 14.7 percent of all children in Oslo compared to 7.9 percent in the country. 78 percent of the children in poor families are children of immigrant families in the East End. The high rate of child poverty in Oslo is mostly an effect of the large immigration to the city and the immigrants' problems to establish themselves in the job market and receive enough income to support large family (Nadim & Nielsen 2009).

Apartment prices in the West End rose more than the prices in the East End in the 21st century. From 2003 to 2006 prices in the districts of Stovner, Grorud and Søndre Nordstrand rose by less than 25%, and the prices in Frogner, St. Hanshaugen and Ullern rose by around 40%. All five West End townships had higher price increases than the highest increase in the

East End. The price per square metre for apartments varied in November 2008 in the East End from 21,000 in Søndre Nordstrand to 33,000 in Sagene, and in the West End from 36,200 in Nordre Aker to 43,200 in Frogner (Norwegian Apartment Market Foundation 2009).

Norwegian Language Learners in Oslo

As mentioned earlier, Oslo has the largest immigrant population in Norway.

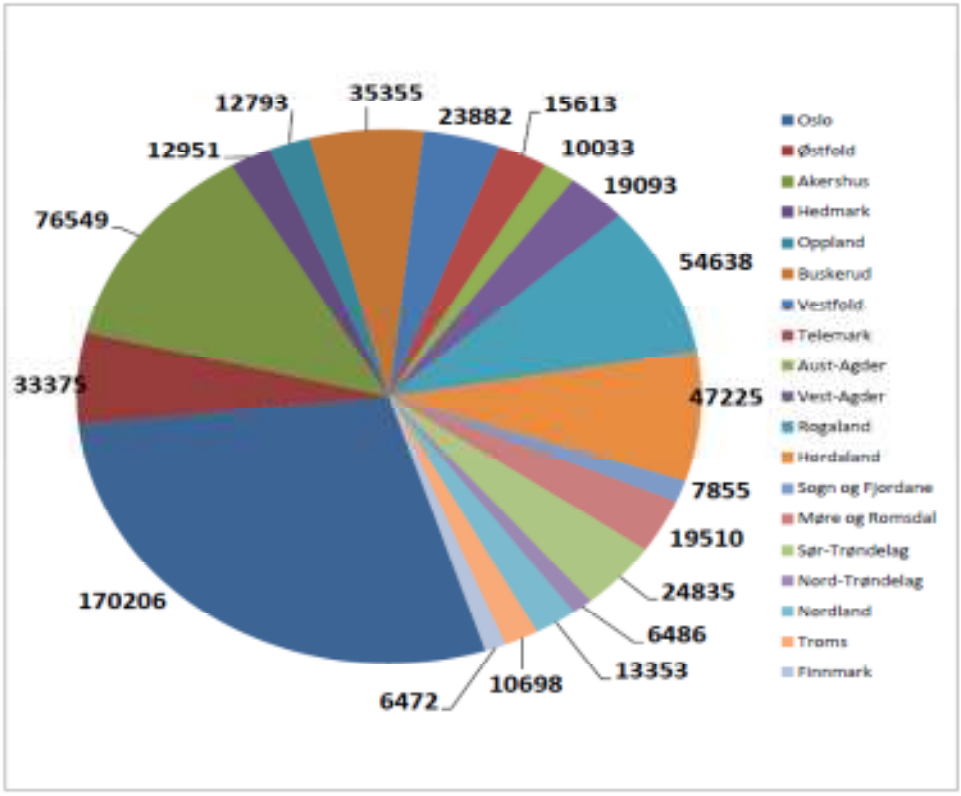


Figure 5. *The distribution of immigrant population in 19 counties in Norway*

About 33.5 percent of the children in the city's 135 schools have a mother tongue other than Norwegian, about 120 languages total. But there is great imbalance among the schools. For example, the following table shows the percentage of the linguistic minority children in the school (Grunnskolen) for basic education for 6-16 years of age:

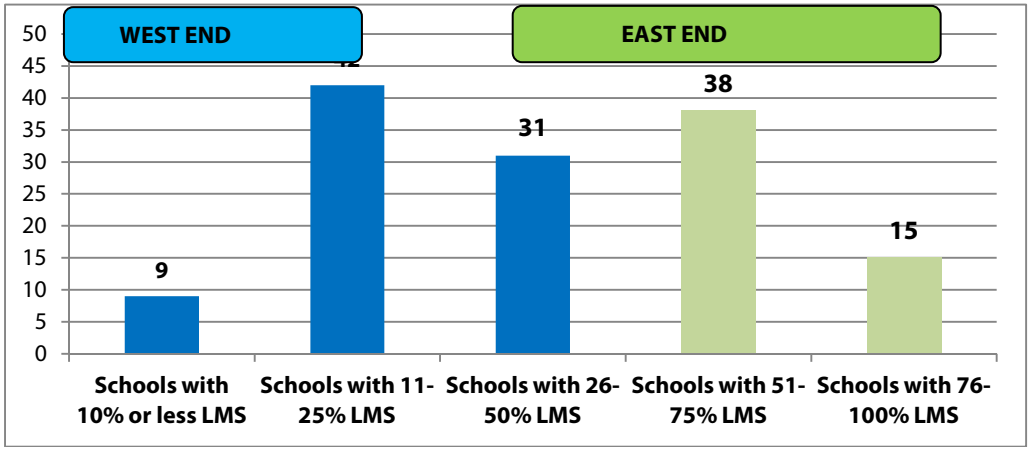


Figure 6. *Norwegian Language Learners by Percentage in West End and East End Oslo Schools*

As one can see in the figure, there are 53 schools, 39 percent of the schools, in which LMS comprises more than 50 percent of the school population. All of these schools are located in the East End townships.

In order to illustrate the linguistic diversity in these schools, consider three East End basic schools in Oslo. One is elementary school with 1-7th grade students, the other is junior high school with 8-10th grade students, and the third one is a combined basic school with 1-10th grade students. Figure 7 shows the linguistic diversity at Ammerud School, an East End elementary school which serves 556 students at 1-7th grade.

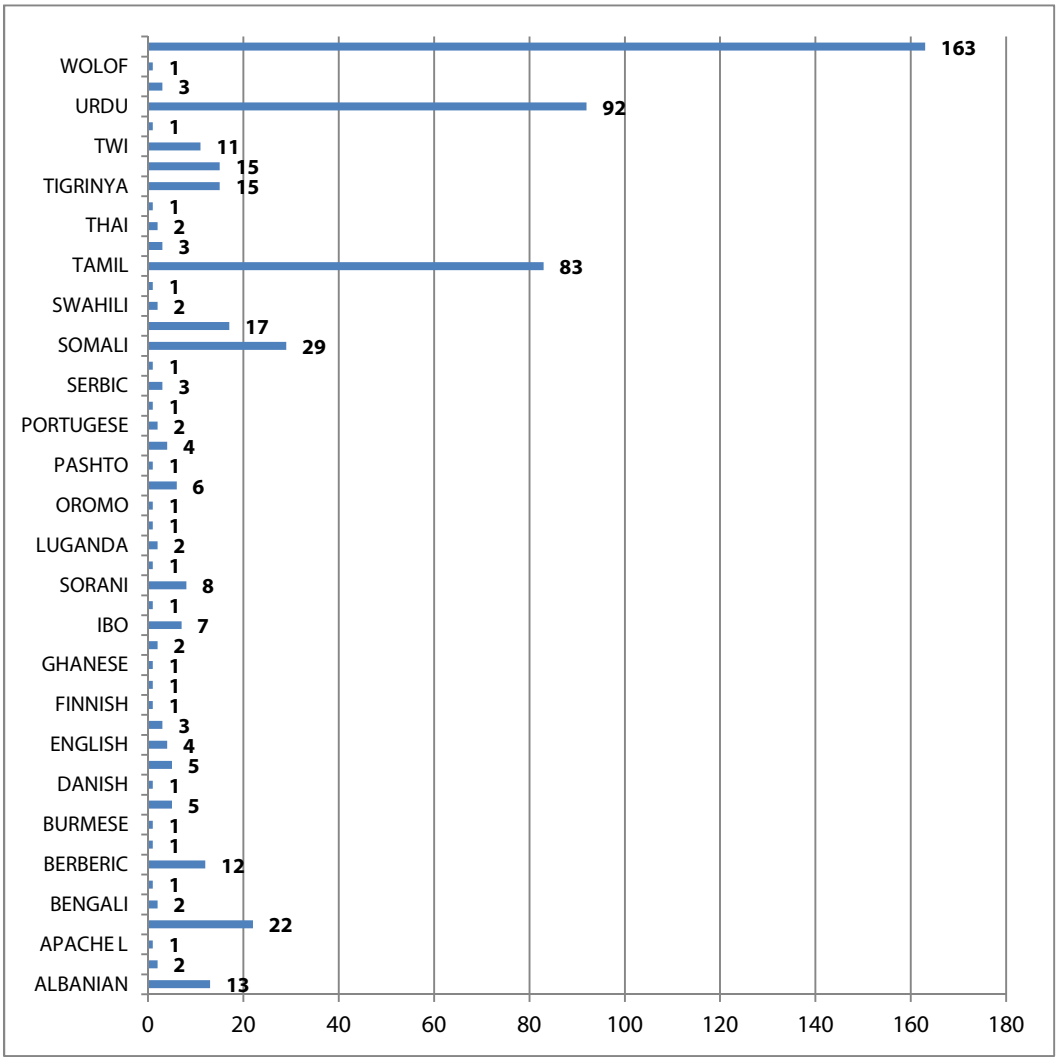


Figure 7. *Linguistic Diversity at Ammerud School, Oslo*

As one can see, 393 of 556 students, ie 71 percent of them, are LMS speaking 47 different native languages. 240 of 393 LMS, ie 61 percent of LMS, are defined as Norwegian Language Learners (NLL) and they are provided *additional* supportive Norwegian language teaching.

Figure 8 shows the linguistic diversity at Apalokka School, an East End junior high school that serves 405 students at 8-10th grade.

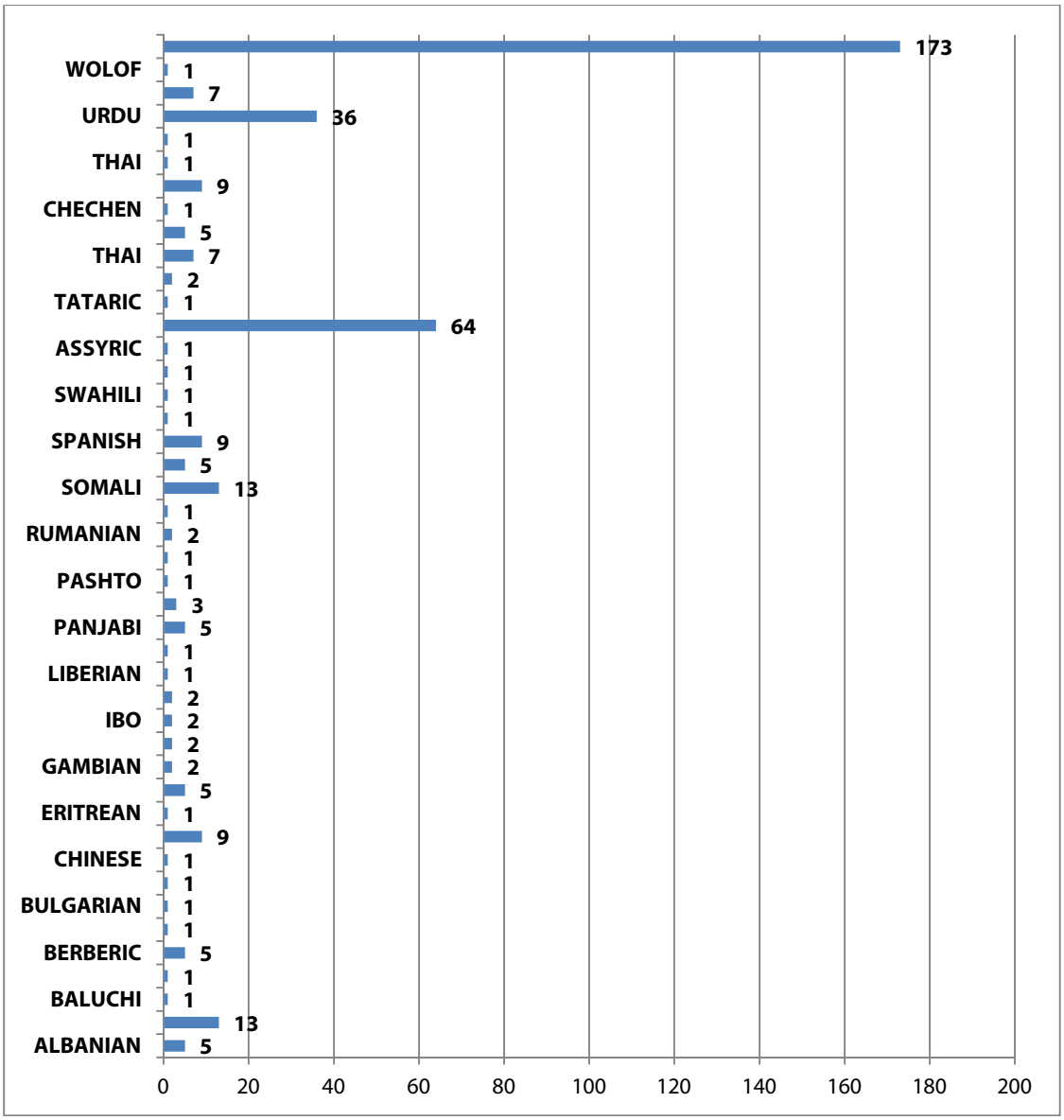


Figure 8. *Linguistic Diversity at Apolokka School, Oslo*

232 of the 405 students at Apalokka are LMS. They represent 43 different native tongues. They comprise 57 percent of the student population at the school. 81 of 232, ie 35 percent of them, are defined as Norwegian Language Learners (NLL) and receive additional supportive Norwegian language teaching.

The third example is Rommen School, a combined basic school that serves 1-10th grade students.

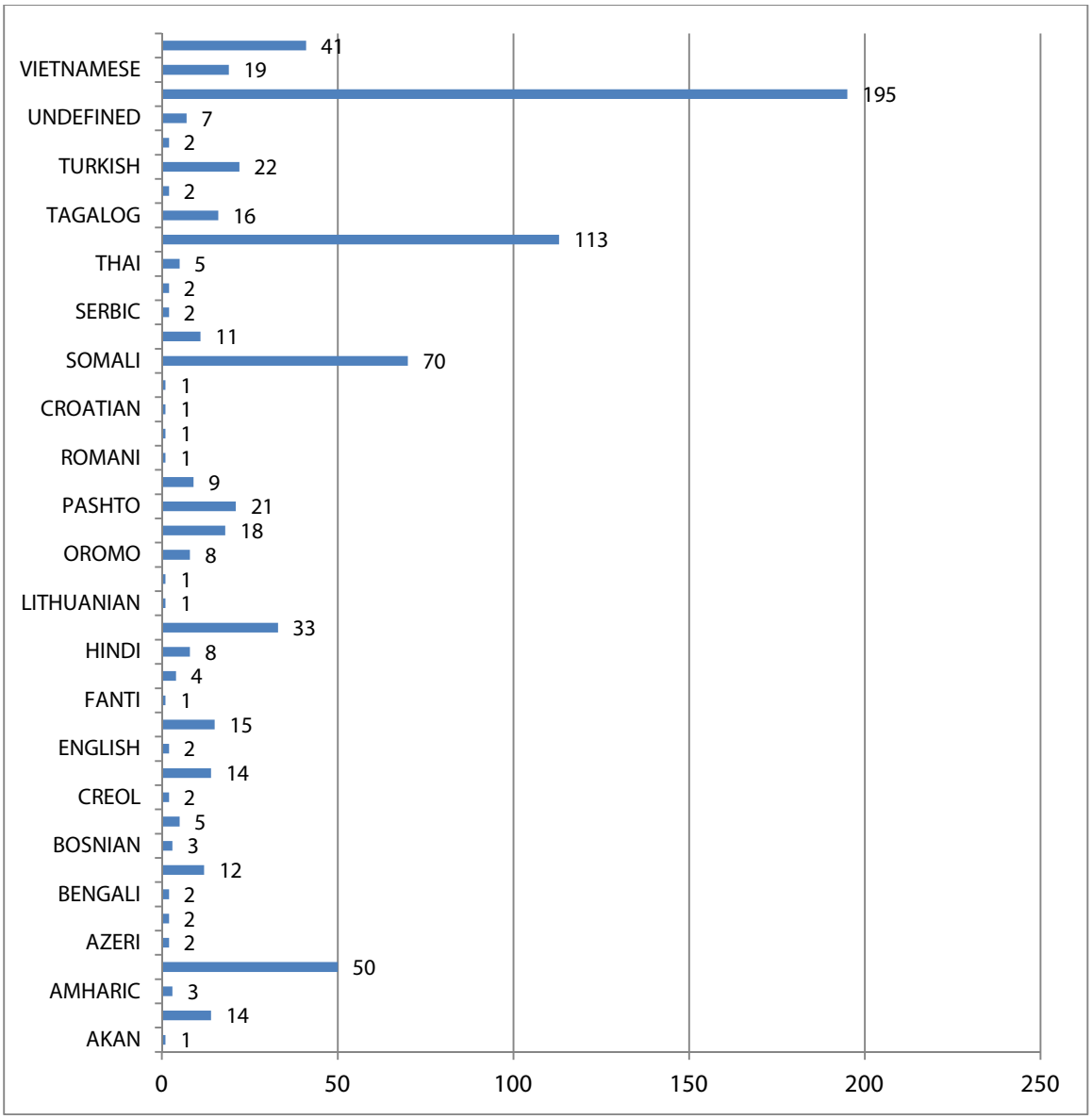


Figure 9. *Linguistic Diversity at Rommen School, Oslo*

There are 742 students at the school; 701 of them are LMS. In other words 94 percent of the school's student population is LMS. They represent 41 different native tongues. 412 of 701 LMS are defined as LMS with limited Norwegian language proficiency and therefore they are provided additional Norwegian language teaching.

As one can see in the figures above, there is what we can call 'super linguistic diversity' in many of Oslo schools.[1]

One of the characteristics of the linguistic super diversity in the Oslo schools is that no single LM student group dominates the school population in many schools, but the total number of students with different languages does. This may be one of the differences between Los Angeles and Oslo schools. In L.A., children whose first language is Spanish are the dominant LM group in most schools.

[1] Vertovec, S. (2007): 'Super-diversity and its implications'. *Ethnic and Racial Studies* 29(6): 1024-54.

Education Policies Since the 1960s

In 1975 Norway introduced a new immigration act aimed at strengthening regulation of immigrant labor, but the law became known as one that stopped immigration. However the number of immigrants and immigrant students increased because of what are known as family-reunion refugees—family members joining someone who had previously immigrated—and an agreement with the European Union that gives EU citizens the right to immigrate to Norway.

In 1975 there were only about 2,500 linguistic minority (LM) students in the country, including those who spoke Sami—the language of the northern natives—Swedish, and Danish. Local schools arranged language courses for them, and the responsible municipalities and counties covered the costs. That year the Ministry of Education began economic support to cover extra expenses for Norwegian language programs. There were no bilingual or mother tongue classes at that time. The main educational programs for LM students were introductory classes for newcomers and supportive Norwegian language courses. In 1978, the Ministry began to support 2-4 hours of mother tongue instruction for groups of 12 students with the same native language, a policy that continued until 1987. In addition, by 1984 Norway introduced an opportunity for LM students to get exam credit for a mother tongue course.

From 1987 to 1997

By 1987 there were 11,639 LM students in Norway.[2] A new National Curriculum (NC) was introduced giving LM students the right to get 2-5 hours a week of mother tongue instruction in addition to other school subjects and Norwegian as a second language instruction was formally introduced. *Functional bilingualism* became a goal and thousands of LM students received mother tongue instruction, as many groups of students were offered transitional bilingual education during their initial three

The majority of LM students lived in Oslo, and there were 96 bilingual classes involving LM children with 11 different mother tongues. Many of them were based on team teaching, one Norwegian teacher and one bilingual teacher in the same classroom that mixed students whose native language was Norwegian with those having a different mother tongue.

However, in the early 1990s the political climate began to change. A small far right-wing party, which garnered only about 4 percent of the votes nationally, began to criticize bilingual education and mother tongue teaching. In local Oslo elections, the party gained 15 percent of the votes and became a coalition partner to the Conservative Party. The conservative coalition began to challenge the Labor Party's social policy nationally. The political climate at the time favored right-wing perspectives at a time when increasing joblessness combined with an increasing number of refugees from Iran, Bosnia-Herzegovina, and Somalia, and the far right-wing party, Progress Party (*Fremskritspartiet),* increased its votes in the following elections through the entire country.

In response, the Labor Party changed its policies. Beginning in 1993 new National Curriculum measures were introduced, and by 1997, 33,307 LM students lost provisions for mother tongue teaching and transitional bilingual education.[3] In Oslo the extent of special services for LM students changed dramatically. The new policy provided *supportive Norwegian language teaching* for only those students who could not benefit from subject-based classes in which Norwegian was the only language of instruction. (Subject matter

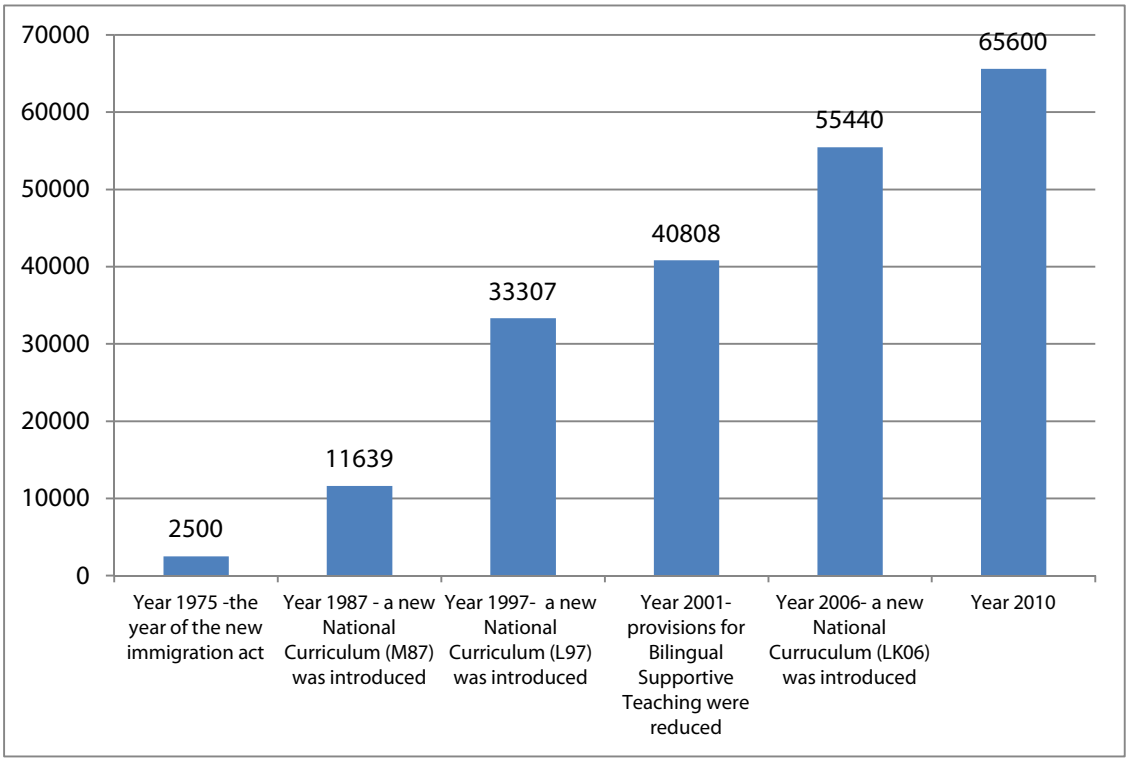
[2] SSB Aktuell statistikk nr 3/98.
[3] GSI, 1997.

teaching in a mother tongue was allowed only for a limited period.) Functional bilingualism was no longer to be an educational goal.

This policy caused huge debates in the country and in education research circles. Subsequently, several proposals were introduced from research circles and the Socialist Party to reintroduce mother tongue teaching for all students who were interested in it and to reintroduce bilingual education in schools with high numbers of LM students. These were rejected by Parliament. Meanwhile, the number of LM students continued to increase; by 2001 there were 40,808.[4] By 2010 there were 65600 LMS in the basic schools of Norway[5]

2003-2011: New Political Voices and Test-Driven Policy

In 2003, a Conservative-Centrum coalition took power in Norway. A new national curriculum reform process was started, partly in response to was perceived as poor showings on international tests: PIRLS, PISA, and TIMSS. By 2006, the reform process produced the current National Curriculum document that was given the name Knowledge Promotion (Knowledge Promotion 2006/Kunnskapsløftet 2006). And as figure below shows, the number of LM students continued to increase.



Source: Özerk, K. (2003) Sampedagogikk. Valsett: Oplandske Bokforlag.

Nygard, G. (2010): Innvandring og Innvandrere. Oslo: SSB

Figure 10. *Changing Educational Policies while the number og Language Minority Population was increasing in the schools*

[4] Statistisk sentralbyrå 2002.
[5] Nygard, G. (2010): Innvandring og innvandrere. Oslo: SSB.

As the number of LM students increased over the last three decades, governments of all political stripe—right, center, or left wing—were concerned with that these students gain sufficient proficiency in Norwegian to be able to benefit from conventional schooling. The core question, was how? Even as the country reformed its national curriculum several times, it did not have a detailed insight about the academic situation of LM students in Oslo or the country, but a few studies began to create a picture of these students.

Heesch, Storaker and Lie (1998) analyzed the national data from TIMSS (The Third International Mathematics and Science Study) and found that 9 year-old children with LM background in Norway scored 10 percent lower than native speakers in natural science and math. Among 13-year olds, the discrepancy was 11 percent in math and 14 percent in natural science.[6]

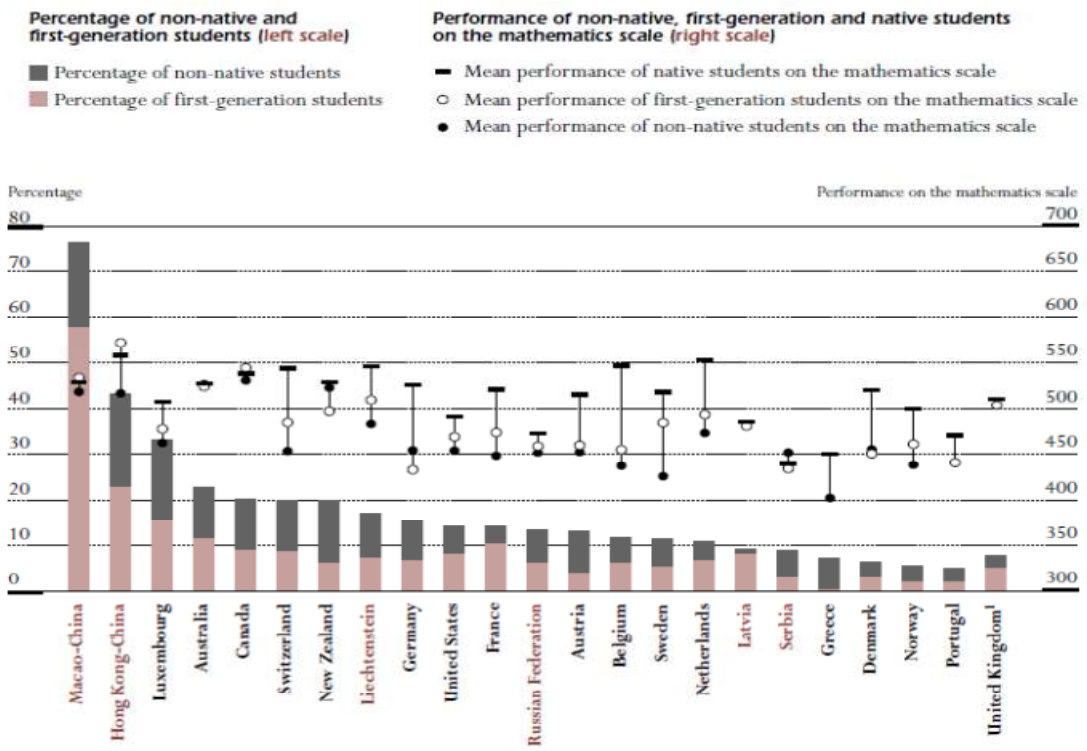
In a study of 131 LM students Özerk (2005) found polarization tendencies among LM students: about half of them scored very well, and half very poorly. Almost none were at the middle level.[7]

Hvistendahl and Roe (2003) studied the achievement level of 218 LM 15-year old students who participated in PISA (Program for International Student Assessment) in reading, math, and natural sciences. They found that the average results of LM-students from Norway were significantly (about 50-60 points) lower than their Norwegian counterparts.[8]

Wagner (2004) analyzed data from PIRLS-2001 (Progress in International Reading Literacy Study 2001). She found that among the countries studied, the biggest difference between native speakers and LM students was in Norway.[9]

When the Organization of Economic Cooperation and Development released the math test results of PISA 2003, the results obtained by Norwegian students were interpreted as unsatisfactory overall, and the results obtained by LM students were worse. As one can see in Figure 11, there are three categories of students: native Norwegian speaking students, Norwegian born LM students and non-Norwegian born LM students. The performance gap between native speakers and LM students is about 70 points, a larger gap than that recorded for the United States but smaller than for many northern European countries.

[6] Heesch, E.J., Storaker, T. & Lie, S. (1998): Språklige minoriteters prestasjoner i matematikk og naturfag. En komparativ studie av TIMSS-resultatene i matematikk og naturfag til språklige minoriteter og barn av norske foreldre. Oslo: Institutt for lærerutdanning og skoleutvikling. Universitetet i Oslo.
[7] Özerk, K. (2005): Enten-Eller – Polariseringsrendenser blant språklige minoriteters læringsutbytte . Oslo: Spesialpedagogikk nr 5 p. 10-17.
[8] Hvistendahl, R. & Roe, A. (2003): Språklige minoriteter i PISA-undersøkelsen. I:Aasen, J., Engen, T.O. og Nes, K. (red.*): Ved nåløyet. -Rapport fra konferansen Hvordan klarer minoritetselevene seg i skolen?* Hamar: Høgskolen i Hedmark, Rapport nr. 14 – 2003.
[9] Wagner, Å.K.H. (2004). Hvordan leser minoritetsspråklige elever i Norge? En analyse av minoritetsspråklige og majoritetsspråklige 10-åringers leseresultater og bakgrunnsfaktorer i den norske delen av PIRLS 2001. Stavanger: Nasjonalt senter for leseopplæring og leseforsking.



Note: Only countries with at least 3 per cent of students in at least one of these categories.
1. Response rate too low to ensure comparability (see Annex A3).
Source: OECD PISA 2003 database, Table 4.2f.

Figure 11. *International Comparison of Student Performance among Native and Non-Native Students, 2003*

Not unexpectedly, these differences persist for students who speak a language other than Norwegian at home. Such differences occur across all countries, and on this measurement Norway and the United States exhibit similar gaps of about 50 points.

Differences in socioeconomic level account for part of the disparity in math test scores, but in Norway only about half of the test score gap between LM students and native speakers.[10]

"Equal Education in Practice" – Not Similar but Equal

The PISA results put pressure on the Conservative-Centrum coalition government. In addition to launching the National Curriculum reform mentioned earlier, in 2003 the minister of education and research, Mrs. Kristin Clemet, presented a comprehensive strategy plan called "*Equal education in practice!* Not *similar* but *equal.*" The document gained huge media attention from the. In the foreword of this official document the minister says:

Unfortunately we do not have equal education for all. There are great differences between minority language and majority language pupils and students. Those from language minorities – whether they were born and grew up in Norway or have come here later – consistently show poorer results than majority language students. This applies to both participation in and benefit from education. Why is this so?[11]

[10] OECD PISA 2003 database, Table 4.2h.
[11] Likeverdig utdanning i prasis 2003.

Significantly, the government recognized that the country had changed. "Norway has become a multicultural society, and now we have multicultural schools," the report said. And in a substantial shift the Education Act was amended in 2004 introducing what is known as Paragraph §2-8 that states:

Linguistic minority students have the right to get supportive Norwegian language teaching until they are able to benefit from the subject teaching/content area teaching in Norwegian. In case of need, LM students should also be offered bilingual teaching/mother tongue teaching until that can benefit from instruction in Norwegian.

But in order for schools to implement the new law and get economic support from the central government, education officials required LM students to be tested to determine their proficiency level in Norwegian. A strange situation followed in which schools were required to test students, but the country had no specified examination to specify whether a student would be declared *limited language proficient*. The schools could use any test they wanted, even observation notes by teachers.

The new law also made supportive additional language services and bilingual support subject to parental approval. To get services, the school principal and the LM child's parents are required to sign a document giving or denying permission to classify a student as limited language proficient. Without this designation a student attends ordinary classes without additional support.

If parents agree, and a LM student is classified as limited language proficient, the schools must document that funds allocated for a particular student are spent on that student. This practice continues until the school documents that a student "can follow ordinary teaching in Norwegian with academic benefit."

Özerk (2006) conducted a study of §2-8 using a sample of 25 Oslo schools, about 18 percent of the schools in the capital. These schools used 17 different tests; none of them had been designed to assess Norwegian language proficiency among LM students.[12] As the study showed, the law incentivizes labeling students as limited language proficient, and "once a LM student is defined as limited language proficient, it's most likely that he/she will always be limited language proficient."[13]

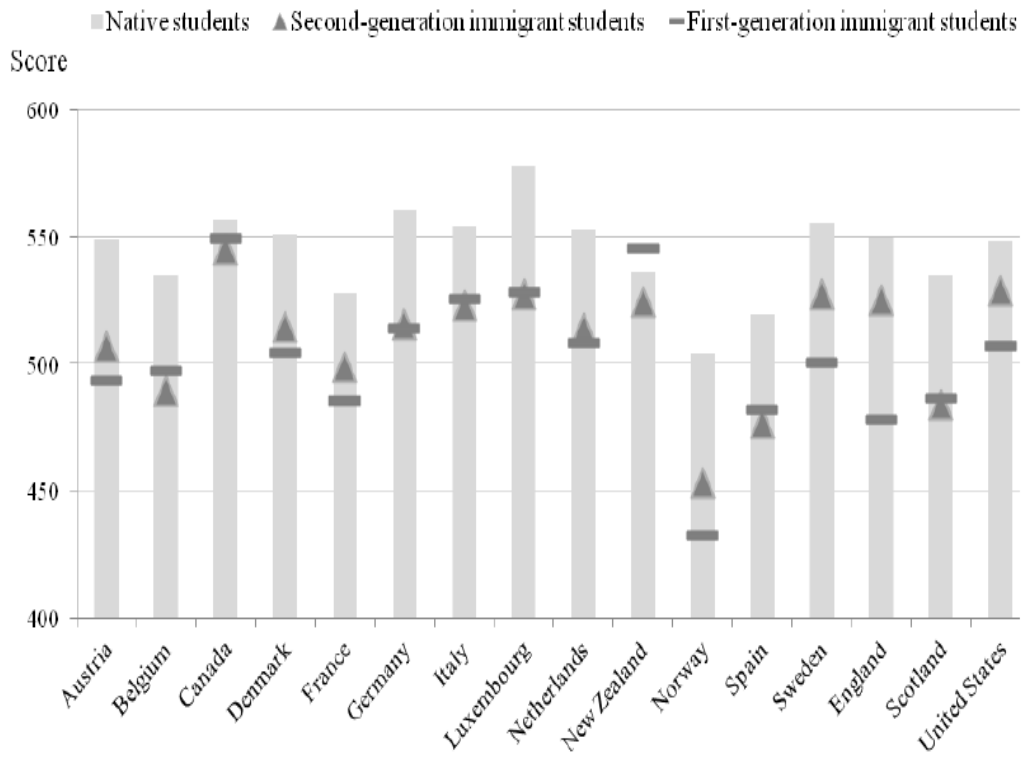
As a result, the number of students labeled as limited language proficient has ballooned. In the 2010-2011 school year there were 54,344 students ages 6-16 in Oslo public schools. Nearly 40 percent of them (21,626) were LM students. Over 60 percent of these students (13,701) are classified as limited language proficient and receive funding from the central government. In addition, 3,800 students receive additional support for bilingual instruction.

In Oslo, the LM students represent 120 languages. There are 246 bilingual teachers covering 26 languages. The funding allowed by §2-8 created 800 new positions in the city. Since many language groups are too small and their residences scattered, many students receive only supportive Norwegian language teaching and not bilingual instruction.

[12] Özerk, K. (2006): Avvik og merknad. Valsett: Oplandke Bokforlag.
[13] Özerk, K. (2012): Minoritetsspråklige elever og opplæringslovens paragraf 2–8. Bedre Skole. Nr 1. 90-92 p 92.

LM Underachievement Still Challenging

In 2006, the same year that the *Knowledge Promotion* national curriculum was introduced, results from the PIRLS 2006 assessment of reading were released. In many countries, first and second-generation immigrant students performed near average or slightly above in 4th grade reading. Norway lagged all other countries, falling behind France, Spain, England, and Scotland where immigrant students also scored lower than the 500-point mean on the test.

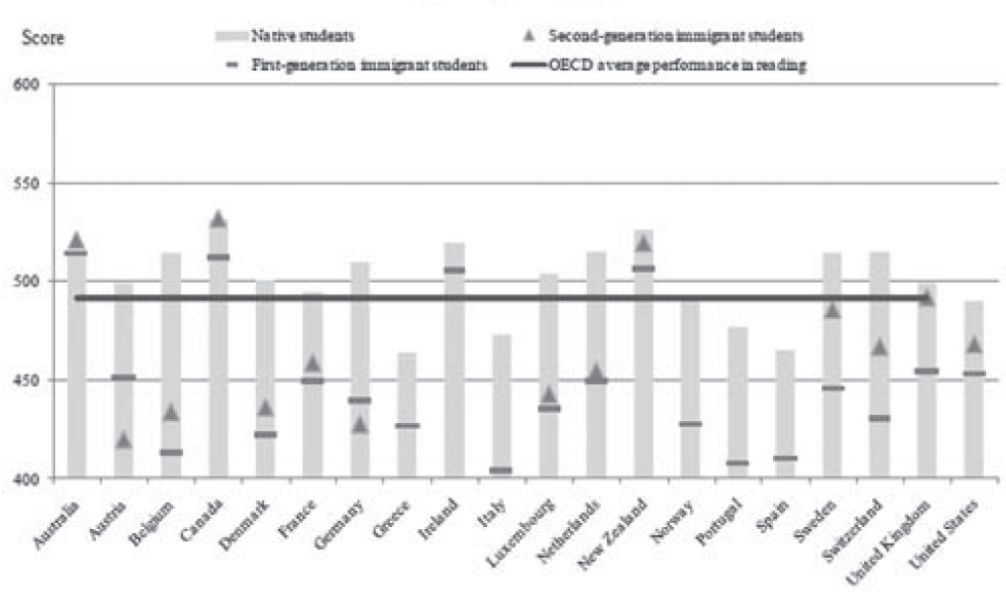


Source: IEA, PIRLS 2006 Database.

Figure 12. *Results of Achievement by 4th Graders in Reading, PIRLS-2006*

Norwegian LM students did no better on the PISA science results for 15-year old students. The difference between LM speaking students and native speakers was 87 points. A gap of 38 points equates to approximately one year of schooling. The differences were also very high in reading (71 points) and Mathematics (70 points). Astrid Roe and Wenche Vagle analyzed the results of PISA 2009 and found that LM students continued to score significantly lower than their Norwegian speaking peers.[14]

[14] Roe, A. & Vagle, W (2010): Resultater i lesing. In Marit Kjærnsli & Astrid Roe (Eds.), *På rett spor - Norske elevers kompetanse i lesing, matematikk og naturfag i PISA 2009*. Oslo: Universitetsforlaget. 59 - 92



Note: A difference of 38 scores points is roughly equivalent to a year of schooling. Data for the United States are from PISA 2003.

Source : OECD PISA 2006 database; OECD PISA 2003 database.

Figure 13. *Results of Achievement by 15-Year Olds in Science, PIRLS-2006*

After *Knowledge Promotion* was introduced the Ministry of Education (formerly the Ministry of Education and Research) mandated national testing in reading, math, and English for 5th and 8th graders (10 and 13 years old). As one can see, the difference between native Norwegian speakers and LM students is the greatest in reading and that differences are minor in English and math.

Official statistics also reveal that dropping out of school is a problem in upper secondary schools in Norway particularly for LM students. As Table 5, shows the percentages of the upper secondary students who had enrolled upper secondary schools in 2004 and who did not completed after 5 years and were no longer enrolled:

Table 3. Dropouts in Upper Secondary Schools (17-19 Years Old) in 2009

	Total	Men	Women
Of total population in upper secondary schools	26%	30%	22%
Of LM-students with another country than Norway as their place of birth	41%	48%	34%
Of LM-students with Norway as the place of birth	28%	36%	21%

As mentioned earlier, the upper secondary education (age group: 16-19) is a right, free of charge, but not compulsory in Norway. Statistics show that LM-students participate in upper secondary education as much as others, but they spend more time to complete it. Also, as one can see in the table it is more common for LM students to drop out of upper secondary school than pupils without LM background.

Different Cities; Similar Issues

Surveys of practice, such as this one, are often most useful when they raise interesting questions and lines of investigation. Both the similarities and the differences between the two cities suggest deeper inquiry.

At the outset, we suggested that despite their obvious differences, Los Angeles and Oslo shared a common concern and the attendant public policy problems of educating language minority students, who represent a large percentage of their student population.

In both cities, language minority students lag in student performance, and they dropout before completing high school or upper secondary at unacceptable rates. In both cities achievement lags behind that of other students, although those students who achieve language proficiency achieve at much higher rates.

In both cities the pursuit of a solution to language learning issues has been hampered by political and policy instability. Ideology and partisan politics trumped pedagogy and research, often to the detriment of learning. Bilingualism, and bilingual teaching, which has a strong research base, became the object nativist politics often aimed at the immigrants themselves. In Los Angeles this has resulted in an "English-only" approach to instruction that leaves many students behind and does not capitalize on the social and economic benefits of true bilingualism. In Oslo, bilingualism has ebbed and flowed with the tides of changes in political parties.

Instability itself, regardless of the underlying political ideology, is a detriment to the achievement. In the U.S. as well as in Scandinavia, jurisdictions that demonstrate long-term stability in instructional approaches demonstrate higher achievement.

Because both Oslo and Los Angeles have been negatively impacted by instability brought on by changes in governments and ideologically driven policies, a comparative study that matches stable and unstable environments would provide useful information. In the case of Norway, this might be accomplished by comparing practices and policies in that country with Finland, which has a much more stable educational regime. In the case of California, this might be accomplished by comparing practices and policies with another state, such as Massachusetts, known for long running educational reform policies.

There is also interest in the ways the schools diverge.

First, Norway as a country has a coherent immigration policy, and thus there are no students who are "illegal" or undocumented in school. This means that the life prospects of immigrant students in Norway are not clouded by immigration status as they are in the United States. There substantial hope that the deadlock in about immigration policy will be broken following the 2012 presidential election, but as this is written there is more substantial hope than substantial substance.

Because Norway provides an example where there are no (or at least very few) immigrant children whose legal status in the country uncertain, a comparison between schools—a pair of elementary schools, for example—would help Californians better understand the issues present when children are schooled under a legal cloud and where both parents and children live in fear of interaction with public authorities, including the schools.

Second, language learning faces largely different organizational and pedagogical issues. In Los Angeles, Spanish speakers make up the vast majority of English Language Learners, and second language issues are largely thought in that context. (This said, there are tens of thousands of students in the district whose native language is other than Spanish.) In Norway, many schools exhibit what is called super-language-diversity in which the school as

a whole is filled with new Norwegian language learners, but that there is no dominant mother tongue. The way one needs to organize a school when virtually the whole school is organized around the transition from Spanish to English is quite different from the way school is organized when there are seven or eight sizable language groups.

Because both systems have examples of super-language-diversity, a deeper examination of the practices, again through comparing individual schools in depth, would be interesting.

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SSB - Statistisk sentralbyrå 2002.

SSB aktuell statistikk 2010.

SSB aktuell statistikk 2011.

SSB Aktuell statistikk nr 3/98.

Özerk, K. (2003) *Sampedagogikk*. Valsett: Oplandske Bokforlag.

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Using the Branching Story Approach to Motivate Students' Interest in Reading[1]

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Abstract

This action research was to answer the pedagogical question: How effective can a branching story approach be as a motivational tool for elementary reading instruction? A branching story was created with hyperlinks built into a Powerpoint story. The young readers could interact with options at different turning points of the story, which activated the readers' curiosity, and promoted their decision making and thinking skills. The study was carried out in an all girl school, Saudi Arabia. A class of 20 fourth-graders participated in the study. For data collection and analyses, the students were assigned into four groups based on their previous reading achievements and interests. Students' responses to comprehension questions were tabulated. The unit-end survey results were analyzed. A majority of the participating students overwhelmingly enjoyed the experience. They were motivated to achieve the project goals sooner than planned. Kinesthetic learners demonstrated their academic potentials well beyond their performance under the traditional reading instruction.

Keywords: Branching Story, Narrative Reading, Multimedia Technology, Reading Instruction

Introduction

Reading Instruction

Reading contributes to improvement of individuals' minds and expansion of human beings' imagination. People are travelling far away in their minds during their reading activities (Sofsian, 2006). Reading improves vocabulary and the readers' power of word. Learning how to read at an early age helps with a higher level of intelligence and greater academic achievements as well as emotional development (Ciampa, 2012; Edgington, 1998; Sofsian, 2006). Young readers have more self-confidence than the nonreaders (International Reading Association (IRA), 2012; National Association for

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the Education of Young Children (NAEYC), 2009). Students' reading achievements correlate with the time they spent in reading activities (Gambrell, 2011; Swartz & Hendricks, 2000). Therefore, all children must have the needed time and opportunities to practice reading.

Moss and Terrell (2012) said that independent reading is an essential element of quality reading programs. Independent reading offers students a good opportunity to practice their reading skills. However, reading independently does not begin as an independent effort. It is a collaborative effort among students, educators and also parents (Sofsian, 2006).

IRA and NAEYC (2012) confirmed that effective teachers depend on their reading knowledge, current studies, appropriate expectations and understanding of children's strengths and needs to build their instructional strategies. They create developmentally appropriate goals and then find the appropriate instructions to achieve the goals. The developmentally appropriate instruction should be challenging, but achievable. The practice focuses on students' overall development in all domains of cognition, emotion, language, morale, and kinesthesis skills (Abu-Jaber, Al-Shawareb, & Gheith, 2010). This instruction includes daily dependent and independent reading experiences with stories and informational books.

Narrative Reading

There are many kinds of reading, including historical, scientific and narrative reading. Narrative reading is one of the most attractive and effective reading activities (Blyer & Perkins, 1999). Narrative is defined as a form of spoken or written communication, which tells a story. The word, narrative, comes from the Latin word *genarare* meaning 'to know' (Nathanson, 2006). Willingham (2004) believed that narratives have a privileged status in the learning process. Human minds deal with narratives in a different way compared with other types of reading discourse.

There are four fundamental advantages about narratives. They can be used to encourage everyone to love reading. Children prefer narratives (fiction) to non-fiction books. Secondly, narratives are easy to comprehend because there is repetition of names, phrases and vocabulary. Reading stories is generally a quicker experience than non-fiction reading (Nathanson, 2006). Thirdly, narratives build a story structure that facilitates making connection. Narratives should be viewed as an intrinsically teleological form, in which events can be explained by the prior events. Narrative stories are a chain of events that lead to conflicts and complications (Cronon, 1992). In addition, narratives can be facilitated through on-line processing and inference-making.

Moreover, narratives are persuasive tools that impact values and morals that may help to change the beliefs and ideas of individuals toward the world (Mar, Djikic, & Oatley, 2008). Fictional narratives may reinforce moral development and improve empathy. Reading narratives can influence one's character. The stories create shared meaning, beliefs, and visions that readers can associate with (Hakemulder, 2001; Kelly & Zak, 1999). According to Kelly and Zak (1999), narratives enable readers to dive into the story world, make readers part of the story world.

Narratives in Islam are equally valued in its education. The narratives are about human or nonhuman creatures that demonstrate representative good or bad behaviors (Yusef, 2011). The role of the creatures is to cultivate among people morally sound behaviors and avoid immoral ones. Aljefri (2008) argued that the Islamic narratives are used for religious, intellectual, behavioral, and social skills' development. The narratives represent truth of divinity, universe, human beings and lives, instill values, as well as teach how to construct a better society. They also carry as in any literature of

other cultures the elements of stories, such as plots, setting, events, and characters to achieve educational goals. Because of the human needs to create meaning and make connections between knowledge and experiences, narratives are part of human traditions in all cultures. They help to protect the culture by telling, retelling and exploiting a culture's heroes against the threat of their enemies (Kelly & Zak, 1999). Therefore, this literacy mode is popularly used in all countries and cultures.

Motivation to Read

Reading is considered as the first duty that Prophet Mohammad had received from Allah through the angel Gabriel. In Muslim culture, people, old and young, are expected to read the Qur'an as well as other books so that people may live a fuller life. With so many advantages of reading and obligation to become literate citizens, people are not necessarily interested in reading. Some Muslims today are not voluntary readers, that is, they do not have the desire to read different books. UNESCO (cited in Alaga, n.d) recently reported that Arab countries have the highest percentage of illiteracy in the world. Reading activity is one of the least interesting hobbies for quite a number of people in the Arab world. A study of 80 Arab people (Afifi, 2012) indicated that the participants only read one book a year. An individual in the Arab countries spends an average of only 6 minutes in reading (outside the Qur'an) per year while individuals in European countries and America read for an average of 200 hours a year. While 35,000 books are published in America and 85,000 books in Japan a year, only 5,000 books are published every year in the Arabic world. Obviously, lack of reading resources and little motivation to read are problems in the Arab countries, including in Saudi Arabia.

Gambrell (2011a) described motivation to read as "the likelihood of engaging in reading or choosing to read" (p. 5). People with high motivation to read find time to read, consequentially improve their reading skills. Social Cognitive Theory can help explain the reason for lack of motivation (Gambrell, 2011a). Learners do not imitate their teachers thoughtlessly. They need to cognitively realize the importance of reading while they follow the teacher's modeling. It asserts the role of self-efficacy in learning. Motivated readers read more than unmotivated readers, achieved higher levels in their reading classes, performed better on standardized tests of reading and had higher school grades (Applegate, 2011; Gambrell, 2011). Deci and Ryan (as cited in Ciampa, 2012) believed that motivation is critical to engage young students in the reading process. It is also a clear predictor of the students' future skills in reading. Students' motivation appears in their thoughts about themselves as readers and their opinion about the reading process (Ciampa, 2012). The most important reason for high motivation to read is that the more one reads, the better readers he/she becomes (Gambrell, 2011a). Lai (2013) found many useful ways to improve students' reading skills; however, students are not able to benefit from these ways unless they have the drive to read. Teachers at elementary schools are viewed as the most influential in students' motivation to read than the teachers after elementary schools (Ulper, 2011).

A powerful strategy for motivation is to offer opportunities for students to choose what and how to read. Retting and Hendricks (2000) asserted that choice is a strong force that urges students to become autonomous for their own learning. When students are given the chance to choose their reading assignments, they are more intrinsically motivated and have better performance (Ciampa, 2012).

Using Technology for Reading Activities

Over the past decade, with technological advancement, Saudis are becoming the biggest buyers in the world of technology (Alzubedi, 2012). Although Saudi Arabia has the fewest readers in the Arab world, Saudies are the best readers in fast reading by

using the new technology tools (Alhasan, 2010). The strong economic conditions in Saudi Arabia enable the Saudi people to use these devices easily. People are interested in multimedia tools. They prefer to use technological tools like smartphones for fast reading through social networks. This technology revolution in Saudi Arabia is affecting the youth's learning style, too. Conventional language learning methods are being challenged since this technology-savvy generation of students grows up with the 21st century technologies. There was no explicit data by far about time Saudi K-12 students spend with technology tools, but it was reported that American youth spent between 6 and 8 hours daily using technology tools (Petkove & Rogers, 2011). This generation of children considers e-book as "a new and unique medium" and many of them prefer digital reading to the conventional books (Ciampa, 2012; Reinking & Watkins, 2000). Innovative educators are using digital stories as an alternate tool to serve a powerful role of reviving language learning and culture as well (Rivera & Reuney, 2010).

Digital stories usually contain some multi-media features, such as videos, sounds, graphics, animations as well as choices for readers to practice their problem solving skills. All the features jointly form into a strong motivational force that attracts students to be responsible for their own learning and improve their self-independence (Austen, 2001; Oakly & Jay, 2008; Ciampa, 2012; Swartz & Hendricks, 2000).

Among digital stories, a branching story is structured with its unique features. Branching stories are narratives. They have different paths that encourage the reader to interact with the plot. It contains "directed graph of nodes connected by arcs that represent user choices. Every possible path through the graph represents a story that can be told to the user" (Riedl & Young, 2006, p. 26). The choices in a branching story engage readers into making a decision among the options and looking forward to the next event of the story. Branching stories can be compiled into different genres, such as fantasy, adventure, and even video games. They can be used for the purposes of entertainment as well as instructional practice (Lai, 2013).

There are many technological tools to create branching stories. One of the easiest and most common tools is Microsoft PowerPoint. Jones (2003) described PowerPoint as a presentation program, which was initially used widely in the business world, and then eventually brought into educational field. If used effectively, PowerPoint can (a) promote teaching and learning process for both students and teachers, (b) encourage teachers to facilitate their instruction in a professional matter, and (c) distribute the electronic file for and to students where the viewer of PowerPoint is free (Jones, 2003; Nouri & Shahid, 2005). The program can be a powerful motivational medium.

Purpose of the Project

The purpose of this study was to examine how branching stories could effect students' motivation to read. Most people in Saudi Arabia do not have the desire to read beyond their religious obligations. The problem starts during their childhood when they are not encouraged to read. The notion of reading is related to the notion of studying. This generation of technology-dependent students enjoy reading using technological tools. Therefore, a computer-based branching story was created in an effort to enhance students' intrinsic motivation in reading.

Research Design

This project went through several major preparatory stages: designing a branching story and related reading activities, obtaining approval from the university Institutional Research Board and also from Ministry of Education in Saudi Arabia, and then choosing a school that accepted this experiment.

Branching Story Design

In the process of designing a branching story, identification of its reader was the first to consider. All schools in Saudi Arabia are gender segregated, so the researchers knew that the study would be carried out in an all-girl school. Fourth or fifth graders were the target readers because they should have possessed the skill in independent reading and an ability to answer comprehension questions with evidence to support their answers. Thus a narrative branching story was planned to design for forth and/or fifth grade female students. In order to ensure that the story was developmentally appropriate, the native Saudi researcher first explored Saudi young girls' interest in stories they had read. Almost all Saudi female elementary children asked mentioned Cinderella as their favorite.

As a result, a branching story was generated, titled as "Cinderella Wants a Child", using a popular character from a popular fairy tale. The story starts where Cinderella's original version ends. It unfolds after Cinderella's happy marriage to the Prince. Cinderella has difficulty in getting pregnant. She faces the pressure of either being divorced from the royal family due to no help with the Western medicine, or going to the top of a far-away mountain to secure a magic herb. The story is not just for fun, but also to teach children moral lessons of love, bravery, and perseverance.

The branching story was structured as a narrative mediation tree (Figure 1). It includes 44 slides in total with graphics and scripts on each slide. Hyperlinks are built into 40% of the slides that take the readers to eight different paths and/or twists of the story. The eight paths loop and are intertwined. Two buttons are provided on each of 18 slides. Students can choose to click on either button and then be taken to the chosen path of the story development. A path contains between six and sixteen slides. The language on each slide is formal in order to improve students' vocabulary. Options are offered to maintain student's interest, but not provided on each slide because the purpose of this project was to promote students' desire in reading instead of playing a game.

The script was written in both Islam and English. The words on each slide varied in length in order to improve students' reading skills and avoid students' fatigue with continuous reading of the lengthy text. PowerPoint Presentation program was used to carry through the story. Pink color was chosen as a background because the Saudi girls who were inquired about their favorable figure associated Cinderella with the color of pink. Black was the chosen font color for sharp visionary contrast. Pictures and images were integrated to the slides to maintain young readers' interest and to promote their imagination. The feature of "rehearse time" was also built into each slide. This enables educators or researchers to record the time length during which a reader stays on each slide.

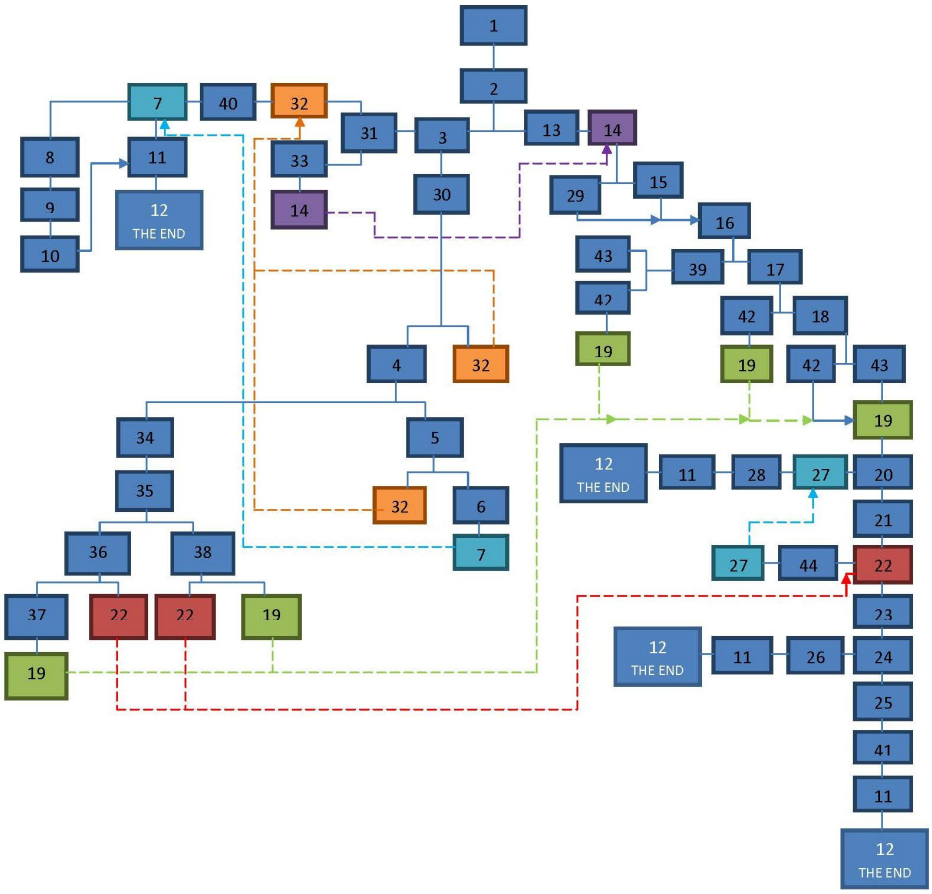

Figure 1. *Narrative Mediation Tree*

Project Activities

This branching story approach included four components for students to perform: 1) understanding of computer rules, 2) independent reading time of the branching story, 3) individual time to answer the comprehension questions on the worksheet, and 4) whole class sharing time.

The rules students should understand and comply with during independent reading time were:

- Do not start the activity without the teacher's permission.
- Choose only one option from the two provided.
- Do not go back to the previous slide after clicking the button.
- Use only computer mouse, not the keyboard.
- Stop reading at the end of the scheduled reading time.
- Do not use the computer while they answer the comprehension questions.
- Start reading on the second, third, and fourth day from where they stopped the day before.
- Tell the teacher when they reach the end of the branching story.

Comprehension is an essential component of the branching story approach. Ten comprehension questions were developed for students to answer after reading the story. The questions covered all levels of cognitive development. The knowledge-level questions were: What is Cinderella doing? What did Cinderella see? The prediction questions included: What do you think she would do? What do you think would happen to Cinderella next? What is your prediction of the story? And synthesis questions are: How would Cinderella find the treatment for her pregnancy? Why do you like Cinderella and some other figure(s) in the story? The last section of the whole class discussion was scheduled to provide students the opportunity to orally communicate their understanding of the story.

Participants

Twenty fourth-grade females were the participants. Complying with the research policies of the American university and the Ministry of Education in Saudi Arabia, the native Saudi researcher first needed to choose a participating school out of the Ministry's approval list. Because all schools in Saudi Arabia are gender segregated and the native Saudi researcher is a female, the school chosen had to be an all-girl elementary school. Furthermore, the researcher needed to ensure that the school should have enough computers for each participating student. As a result, a private school with a well-equipped computer lab was chosen. The principal there embraced this innovative study warmly. She made the decision on the participating teacher and her entire intact class because the teacher was viewed as a strong reader herself and a professional with a sincere interest in reading strategies.

The fourth graders between the ages of nine and ten in the entire class were all involved in the experiment. The students were divided into four groups based on their previously demonstrated interest in reading and reading achievements: four high readers (H 1-4), seven average readers (A 1-7), five low readers (L 1-5), and four highly active students (HA 1-4) with low academic performance.

Project Implementation

The entire study was planned for five days. The Islam version of the story was used. The native Saudi researcher performed as activity facilitator and observer. The teacher maintained to be the direct communicator with her students. The activity started at the beginning of the week, Saturday and continued on Sunday, and other days of the week. Thursdays and Fridays are weekends in Saudi Arabia. The activity lasted for 45 minutes on the first day and 40 minutes for the remaining days.

On each of the days, all the fourth graders transited from their classroom to the school computer lab after the regular school day. They each took their assigned seat in front of a computer that had a cover page of the branching story on the screen. On the first day, the teacher started by asking the students about the story of Cinderella, then informing them that the activity would let them know more about Cinderella after her happy marriage. The teacher explained the rules and procedures of the branching story approach, and then the students started independent exploration and reading of the story.

At the beginning, the students were very eager to start the process. Several of them watched their classmates for the first few minutes, and then got into the discourse themselves. A few just clicked on the option buttons to satisfy their curiosity of this new practice. The students all knew quite well how to use a computer, and did not have much difficulty with computer operation. Most of the questions they asked were related with what to do with the options. It was interesting enough to notice that the questions mainly related to what was "right" to do, such as "What is the correct button?" "Should I

click on this button instead of that?" "Is this a correct option?" Some students repeatedly asked the similar questions. They seemed to have a hard time in realizing that they were given options and autonomy to choose.

With the days progressing, more students looked more interested and engaged in the activity. They asked to come to the computer lab earlier. They quickly got into the quiet reading time after entering the lab. There was less informal chatting between the students during the reading time. They were so attentive to reading with their bodies leaning closely toward the computer screens. More students were willing to share their answers to the comprehension questions in written and orally. They were excited to tell about what they had read.

On the fourth day, students came to the computer lab and started immediately working on the story. It was apparent that a majority of the students accomplished the story and answered the comprehension questions well on the day. The researcher and the teacher decided to end the study one day earlier. However, it was encouraging to observe the few students who did not finish the entire story continue reading because they were still eager to know the ending of the story.

Data Report

The empirical data was collected. The researcher took anecdotal notes while observing the students. "Rehearse Time" was saved daily and recorded on the computers each day after students left the computer lab. The students answered the comprehension questions, demonstrating their understanding of the narrative they had read that day and predicted what would happen next. The whole class sharing time turned out to be a pleasant interactive opportunity for verbal story telling. The students completed the unit-end survey to express their opinions about this reading event.

Table 1. *Data report on student's reading time.* (Time was recorded in seconds.)

Slides / **Students**	**Slide 2** **64 words with options**	**Slide 12** **43 words no options**	**Slide 4** **70 words with options**	**Slide 27** **83 words no options**	**Slide 20** **28 words with options**	**Slide 33** **5 words without options**
H1	49 s	35 s	6	25	11 s	10
H2	51 s	35 s	50	92	25 s	46
H3	19 s	41 s	0 read	64	15 s	9
H4	45 s	55 s	24	0	32 s	
A1	58 s	24 s	0	16	7 s	8
A2	58 s	24 s	19	24	10 s	16
A3	52 s	39 s	0	51	12 s	35
A4	12 s	32 s	41	26	10 s	9
***A6**	28 s	23 s	19	9	18 s	28
A7	17 s	24 s	26	41	15 s	0
L1	76 s	107 s	0	75	41 s	0
L2	139 s	31 s	0	75	42 s	27

Table 1 (Cont.). *Data report on student's reading time.* (Time was recorded in seconds.)

Slides / Students	Slide 2 64 words	Slide 12 43 words	Slide 4 70 words	Slide 27 83 words	Slide 20 28 words	Slide 33 5 words without
L3	10 s	80 s	49	0	11 s	0
L4	30 s	12 s	32	83	11 s	0
L5	80 s	55 s	121 s	60	33 s	40
HA1	16 s	42 s	0	52	5 s	8
HA2	63 s	78 s	126 s	24	36 s	38
HA3	21 s	3	7	14	4 s	6
HA4	8	28 s	19	4	21 s	15

* A5 was absent for two days. So her record was not included.

The feature of PowerPoint "rehearse time" enabled the researchers to track how long a student spent on each slide. This feature showed progression of students' reading time. It helped the researcher be aware of each student's reading capacity. Table 1 tabulated the time the students spent in reading six selected slides. Slide 27 has the most words of 83 and Slide 33 contains only five words.

Students' reading time for those six slides can be divided into three different levels: long, average and short. The long time used would inform a teacher that a particular student might have difficulty in reading and/or comprehension when her answers to the comprehension questions were not an accurate summary of the narrative. The average time used could imply the time length a teacher should schedule for later. The short time used may lead to two possibilities that the student either did not read or a fast reader. Their comprehension answers could be associated as an indicator of either possibility.

Four students (two HAs, one A, one L) took longer than 60 seconds for reading Slide 2, beginning of the branching story. Six students (one H, two A, one L, two HAs) spent shorter than 20 seconds. The remaining students spent between 30-50 seconds to read slide. Three students (two Ls, one HA) spent more than 70 seconds to read Slide 12, which concluded the branching story. Two students (one L, one HA) spent shorter than 13 seconds on it. Majority of the students spent 20-50 seconds to read it. For reading Slide 4, two students (one L, two HAs) spent more than 120 seconds reading the slide. Five students (one H, two As, two HAs) took shorter than 20 seconds. The remaining students took from 20 to 50 seconds to read it.

Two L students spent longer than 40 seconds to read 28 words in Slide 20, which had two options. Three students (one A, two HAs) spent shorter than 8 seconds to read Slide 20. The remaining students used 13-30 seconds to finish reading the slide.

Four students (one H, three Ls) took more than 70 seconds to read Slide 27, which included 83 words with no options. Four students (two A, two HAs) spent shorter than 20 seconds. It took the remaining students 30-60 seconds to read this slide.

For reading Slide 33, which included 5 words with no options, four students (one H, one A, one L, one HA) spent more than 35 seconds. Four students (one A, one L, two HAs) spent shorter than 8 seconds. The remaining students spent the time between 10-30 seconds.

Examining the students' reading time of the six chosen slides, it was conclusive that more low students (L) and one highly active student (HA) needed a longer time to read the slides. The feature of "Rehearse Time" apparently tracked the time when a student stayed on each slide, but the researchers are cognizant that it entails more practice of this feature in the future to generate appropriate time length during which a student needs to read each of the scripts. The time gap between the students can imply multiple aspects of instruction regarding students' reading ability, attention span and interest in reading, etc.

Table 2 recorded the number of words and sentences the students put in their answers to the comprehension questions. Some questions required descriptive responses, such as what was Cinderella doing in order to get to the mountain? Or why do you think Cinderella would find the treatment? Students' answers were used to inform the researchers of their comprehension level of the branching story. Students from different groups demonstrated different levels of understanding. Students' responses to the comprehension answers without description were categorized as generic answers. A large number of words and descriptive sentences used in the answers belonged to the high level of comprehension.

Table 2. *Students' Answers to Comprehension Questions*

Student	Number of Words	Number of Sentences	Descriptive Answers	Generic Answers
H1	41	5	2	8
H2	41	8	4	6
H3	37	6	3	7
H4	40	4	3	5
A1	32	6	3	7
A2	74	9	7	1
A3	17	4	1	9
A4	36	7	2	8
A5	40	7	2	8
A6	71	12	6	4
L1	16	3	2	5
L2	4	1	1	6
L3	30	4	4	1
L4	25	6	4	3
L5	43	9	4	6
HA1	61	9	3	7
HA2	63	10	8	2
HA3	57	9	6	4
HA4	74	9	5	5

All the four HA and two A students responded with rather long answers of more than 55 words. They each wrote more than 10 sentences. Their answers were more descriptive than other classmates. Two L (4 and 16 words used) should be categorized as "low" because they wrote the least number of words for the comprehension questions. Their answers were more generic than descriptive. The answers from the remaining ten students 4 Hs, 3 As, and 3 Ls were categorized as "average". The average number of words in their answers was 38 words. The number of descriptive answers was appropriately three sentences from each student.

To the teacher's greatest surprise, the HA students answered the comprehension questions with a larger number of descriptive sentences than their peers of any other groups did. They demonstrated their understanding of the story clearly. The recorded release time revealed that three of them spent a relatively short time in reading the story. The teacher assigned them as highly active learners due to her previous difficulty in keeping them engaged into an activity or maintaining their attention for a longer period of time in class. This study offered them an alternate opportunity to display their cognitive potentials. Their minds responded much better with the interactive kinesthetic activity. Once the learning approach matched their learning styles, they could focus and achieve a lot better.

Table 3 displayed students' responses on the unit-end survey. Seventeen students participated in the survey. Due to family activity, three students did not attend school that day. The data revealed that 90% of the students (15 out of 17) viewed highly their experience with the branching story approach. They also expressed their desire to read more stories like this. Fifteen students preferred reading on a computer to a printed book. Thirteen students liked to have the feature of options in the branching story.

Table 3. *Result of Unit-End Survey*

Survey Questions	Answers	4 High Students	6 Average Students	3 Low Students	4 Highly Active
How was your experience with the activity of the branching story?	Great	100% (4)	83.3% (5)	100% (3)	75% (3)
	Weak	0%	16.6% (1)	0%	25% (1)
Do you like the Cinderella story?	Yes	100% (4)	83.3% (5)	100% (3)	75% (3)
	No	0%	16.6% (1)	0%	25% (1)
Were the instructions of reading the branching story clear?	Yes	75% (3)	66.6% (4)	66.6% (2)	75% (3)
	Not too much	25% (1)	16.6% (1)	33.3% (1)	25% (1)
	No	0%	16.6% (1)	0%	0%
How were the questions about the story?	Easy	100% (4)	50% (3)	66.6% (2)	75% (3)
	Average	0%	50% (3)	33.3% (1)	25% (1)
Do you like the options of the story?	Yes	100% (4)	50% (3)	100% (3)	75% (3)
	Not too much	0%	50% (3)	0%	25% (1)

Table 3 (Cont.). *Result of Unit-End Survey*

Do you like to read a hypertext story or a printed book story?	Hypertext story	100% (4)	66.6% (4)	100% (3)	100% (4)
	Printed story	0%	16.6 (1)	0%	0%
Do you like to have the same activity with different stories?	Yes	100% (4)	66.6% (4)	100% (3)	100% (4)
	No	0%	33.3% (2)	0%	0%
Do you like the pictures in the story?	Yes	100% (4)	66.6% (4)	100% (3)	75% (3)
	Not too much	0%	16.6% (1)	0%	25% (1)
	No	0%	16.6% (1)	0%	0%

The whole class sharing time was the culminating point of the branching story approach. The students were unexpectedly active in sharing their interpretation of the story with the classmates. The students' participation level was much higher than in the conventional reading activities according to the teacher. Some students responded the comprehension questions with the vocabulary at a more advanced cognitive level than before. Interacting with the story, making their own options for different paths, and using narrative writing to express their own comprehension of the story activated the students' minds and offered the students the opportunities to display their academic potentials. Their positive attitude in the entire discourse and demonstrated engaging behaviors manifested the effect of technology integration in motivating students' passion for reading.

The most amazing changes occurred on the four students who were labeled as "highly active" because they had a hard time in focusing, which consequently affected their reading grades negatively with the traditional instructional practice. Their behaviors and performance levels with this branching story approach were astonishing. They were engaged into the activities without any behavior problems in all the four days. Three of them showed their best cognitive skills never before in writing and verbal sharing. Even the other HA student who spent a little longer time in reading the story also outperformed many other peers in her answers to the comprehension questions.

Discussions

In summary, this project accomplished its original goals: the branching story approach interested students and motivated them to read. The experience energized students' enthusiasm in reading. They were eager to read the varied plots of the story and volunteered to share their understanding of the story. They were passionate about informing their classmates about what they had read due to the different path they each chose on the different days. They felt empowered with the options, and gained satisfaction of learning more twists of the story, even if one day earlier than some of their classmates. The students' participation level exceeded their performance with the conventional reading activities.

The recorded "rehearse time" reflected the students' increased focus on reading. By the end of the event, the time the students spent on each slide became longer. They became more serious about reading and understanding the content with decreased causal chatting among the students while reading. This branching story design created opportunities for students' engagement, and the engaged students worked hard. The

students' attitudes, learning and performance improved with more active self-efficacy and motivation.

The results of this project once again reinforce the necessity to differentiate instruction to promote all students' interest in reading. Traditional methods have proved unsuccessful in getting all students involved into an effective learning, especially with this E-generation. The kinesthetic learners require hands-on experiences. Doing, touching and taking part in physical activities promote their success in learning (Hutton, 2007). Transformed instructional strategies can function to facilitate students' learning and bring their potentials into full play.

It is vital to point out that adoption of technology into reading instruction will not totally replace the traditional methods. It should be a part of the entire pedagogy. Teachers need to have knowledge and proficiency to employ all kinds of teaching strategies that it takes to meet all students' needs. Teachers need to consider students' cognitive and affective level as well as culture of the entire school's instructional practice. Using technology tools should be age appropriate and match students' skills and abilities.

Limitations of the Study

All educators should be gender sensitive, and not stereotyping. As an initial effort in applying the branching story approach into reading instruction, Cinderella was chosen as the main character and the color of pink as a background. However, the researchers realized that Saudi young female students should be exposed to more branching stories with broadened cultural and social perspectives.

Recommendations for Future Application

The positive effects of this branching story approach hold implication for the future efforts to integrate the branching story approach in a wider scope of Arabic reading instruction. Therefore, the following recommendations were made:

1) More branching stories should be developed for instructional purpose and also for fostering life-long readers. Stories/Narratives from the printed books can be transformed into multi-media branching format. Educators, storywriters, even students should be encouraged to design branching stories as much as possible.

2) It takes time and some expertise to design a branching story, especially narratives that developmentally appropriate. Thus teachers should work collaboratively to design stories instead of waiting for the stories to come to them.

3) In order to reach and motivate all kinds of learners, the need to integrate updated technology into the regular reading instruction is obvious. Branching stories are just one kind of technology. Internet and social media can also be used in reading instruction to provide students with different kinds of e-books. A new generation of Saudi students is awaiting more e-reading opportunities.

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