Merisuo-Storm, Tuula: The development of writing skills of boys and girls during the first six school years. Nordisk Pedagogik, Vol. 27, pp. 373–385 Oslo. ISSN 0901-8050.

The aim of the study was to find out how pupils’ writing skills develop during the first six school years. The skills of 136 Finnish pupils (aged 6 to 7 years) were measured at the beginning of first grade, and tested again at the end of first, second and sixth grades. In fourth grade the focus was on pupils’ creative writing skills. The results of the study showed that the pupils’ performance in the initial test proved to be a good predictor of the development of pupil’s writing skills in later years.

Keywords: learning to write · school readiness · spelling · creative writing

Manuscript received: September 2006 (peer reviewed)

Tuula Merisuo-Storm, Department of Teacher Education in Rauma, University of Turku, Hämeenkatu 20 D 81, FI-20500 Turku, Finland. E-mail: tuula.merisuo-storm@utu.fi

The development of writing skills of boys and girls during six school years

The ability to write has a central role in learning, thinking and communicating with other people. During the primary grades pupils intensively rehearse spelling, handwriting, and the composition of stories and other texts. They learn to use writing as a means of communication. In addition, writing is a tool of learning various school subjects and skills. Consequently, a pupil’s writing difficulties can hamper his or her learning of other central skills and lead to more generalized learning disabilities.

For spelling a child needs ability to connect phonemes with corresponding graphemes and to use language-specific spelling rules. Handwriting requires adequate visual-motor coordination. However, a pupil may have difficulties in manipulating and guiding the pen. If letter formation is difficult, he or she has to concentrate on the motor skills for writing. As a result, less capacity is left for spelling and formulation of syntax and content. (Mäki, 2002, pp. 11, 19; Pollock & Waller 1997, p. 81)

The years before school are important for children’s future literacy skills. All the experiences that they have and the observations that they make in their home environment prepare them
for literacy. Generally, children who have had many experiences with books, other print materials, and writing tools before starting school learn to read and write more easily. However, children enter school with widely varying levels of reading and writing readiness. Teachers who are equipped with an assessment of each new pupil’s existing skills are therefore in a much better position to give targeted attention to their specific needs. Without such assessment it takes a considerably longer time for the teacher to recognize each pupil’s strengths and weaknesses.

The earlier it is possible to locate the weak points of a child’s skills, the easier it is to support his or her development with appropriate interventions. Moreover, every school starter should be allowed sufficient time for acquiring any basic skill they lack. According to Finland’s Comprehensive School Law, teaching should be adjusted to pupils’ age and readiness. In other words, teaching has to be adapted to the pupil’s level of development, not the pupil to the teaching. This is not an easy task because the skills of children of the same age differ greatly. In addition, children do not learn similarly even when taught with similar methods.

The first school years are an important phase of a child’s life. The children’s experience of this phase has a far-reaching effect on their attitudes towards school and it shapes their view of themselves as learners for years to come. Negative attitudes towards learning can reduce a pupil’s motivation and harm learning, whereas positive attitudes can do the opposite. (Oxford, 2001, p. 168). Consequently, it is vital to strengthen the weak points of pupils’ skills and give each child experiences of success.

The benefits of testing are not limited to students with weaker skills; when all pupils’ skills are measured it is possible to support also the development of children with excellent initial skills. When provided with tasks that are sufficiently demanding, such advanced pupils are likely to be more motivated to learn than in the absence of such stimulation, and their development is likely to be enhanced. Thus, an investment in individual pupil assessment at the very beginning of school can be expected to yield positive results in planning appropriate curricula for each child, in more effective focus of teaching effort, and in more efficient coordination of the work of class teachers and special education teacher.

Linguistic readiness

Many studies have found the most marked differences in school starters’ linguistic skills. Most children have achieved a good command of the fundamental structures of their mother tongue and the rules related to them by the age of five. They continually learn new words and expressions and they begin to perceive the relationships between them. During their sixth year, children’s understanding of language develops further, and their capability to use abstract language improves. At the age of seven, which is the age when children enter school in Finland, they understand approximately 24,000 words, although, naturally, the actively used vocabulary is more limited. The social and conceptual substance of words becomes more important, and most children possess basic communication skills. They are able to initiate conversations, ask questions, make suggestions, point out, as well as to listen to others, answer questions, and take turns talking. (Ikonen, 2000, p. 133.)

When starting school, children’s meta-linguistic awareness has usually developed well enough to enable them to use language to speak about language. Meta-linguistic awareness is connected to children’s cognitive development and especially to the development of the ability to keep in mind and to process two
things simultaneously. Furthermore, the child’s intelligence and the stimuli that his or her environment provides have an effect on this development. The term linguistic awareness refers to linguistic meta-skills. For instance, these skills appear in the child’s spontaneous correcting of linguistic errors, and ability to play language games and analyse language.

Moreover, the child understands that spoken language can be transformed into written language and vice versa. He or she also understands the difference between spoken and written language. Linguistic awareness enables the child to examine a text apart from its content, paying attention to the mechanisms of language. Linguistic awareness is the basis for learning to read and write. (Naremore, Densmore & Harman 1997, p. 161 ff.; Tolkchinsky 2003, p. 32; Whitehead, 1997, p. 75)

The term phonological awareness refers to the command of phonemic structures of language. It is considered the most important prerequisite for learning to read; for instance, several studies provide evidence of a connection between poor phonological awareness and dyslexia. Phonological awareness means that the child understands that words are made up of smaller units, syllables and sounds (phonemes). He or she is also able to manipulate these units, for instance divide a word into syllables or phonemes, remove a phoneme from a word, pick out a non-rhyme word from a list of rhyme words, and build words out of phonemes. (Beard, 1995, p. 19; Naremore et al., 1997.)

In written Finnish the spoken language is coded inflexibly into units in the phonemic level unlike English, for instance, in which the same letter-groups may signify different sounds in different words. Therefore, phonemic awareness is more important for learning to read and write in Finnish than in other languages. A child needs it for instance when he or she identifies the first or the last sound of a word, divides a word into phonemes or builds a word out of phonemes. Several studies show that a child’s success in these tasks is the best predictor of his or her future reading skills. Graphemic awareness is also important in learning to read and write. The term refers to the understanding of the connection between phoneme and letter, and the ability to manipulate the units of written language. (Initial teaching of reading in the European Union, 1999, p. 30; Yopp, 1999, p. 166 ff.; Yopp, & Yopp, 2000, 131 f.)

Several studies show that well developed phoneme segmentation skills are closely related to the early learning of reading. However, at preschool level many children still experience difficulties in segmenting a syllable or a word into its individual sounds; the longer the word, the more difficult the task. If the child perceives a word as a whole, he or she does not understand the question: «What does the word begin with?» An adult understands that the question refers to the sound that is uttered first. The child perceives a word as a whole with no starting point. The question is as incomprehensible as the question «What does the picture begin with?» An even more difficult task for a preschool pupil is the phoneme-synthesis, building a word out of phonemes. In order to be able to use phonemes in a synthesis task the child has to understand that they are structure units of speech. In addition, the overloading of memory can hinder synthesis. If the child cannot keep the phonemes in mind, the completion of synthesis is impossible. (Merisuo-Storm, 2002, p. 42; Pressley, 1998, p. 96.)

**Writing in Finnish language**

In Finnish language there is a close correspondence between sounds and letters. Consequently, children need not to learn a specific spelling vocabulary. Instead they learn a spelling strategy that enables them to write
any word needed. However, in Finnish words there are many double consonants and vowels and often a word can be distinguished from another word with the difference between short and long sounds (e.g. kari (rock) – kaari (bow), palo (fire) – pallo (ball), maali (paint) – malli (model)). If a child has difficulties in auditory discrimination this can cause misunderstanding or spelling errors. Furthermore, in Finnish language there are 16 diphthongs (combinations of two vowels in the same syllable) that very commonly occur in words (e.g. suol’ (salt), kieli (language)). (Mäki 2002, p. 12.)

In addition, there is a large number of very long words and compound words that are written as one word (e.g. kesäloma (summer holidays), urheilutapahtuma (sports event), talviurheilutapahtuma (winter sports event), and kevättalviurheilutapahtuma (late winter sports event)). The meaning of a word can change if its parts are written separate (e.g. äidinkieli (mother tongue) – äidin kieli (mother’s tongue), kirkonkello (church bell) – kirkon kello (clock in a church), and isoisä (grandfather) – iso isä (a big father)), and often children have difficulties in writing them correctly.

**Creative writing**

In recent years little has been published about assessing children’s creative writing. More than twenty years ago Heikkilä and Kantola (1983, p. 124 ff.) described an assessment system devised by Yamamoto in the 1960s. In Yamamoto’s system the main criteria of assessment were the individual style and the contents that arouse a reader’s interest. Kantola herself listed the positive features of a fictional text as follows: it is imaginative, illustrative, full of surprises and different ideas, it has an original but clear structure, it has rhythm – and also changes of rhythm – and the language is rich and colourful. The story has different levels, and the writer displays a sensitive and inquiring mind, a personal view, individual writing style, a sense of humour, and he or she is capable of connecting and comparing different ideas. (Heikkilä & Kantola, 1983, p. 157 ff.)

A more recent reflection on the assessment of children’s creative writing is from Nelson, Bahr and Van Meter (2004), who suggest that assessment should begin with consideration of the global organization of the work. The focus of attention should be on the story structure; how the elements are combined, whether the elements create a clear, logical, and interesting story, and how well the text conveys meaning to a reader. One can guide the assessment with e.g. following questions: Does the story make sense? Is it interesting? Has the writer succeeded in meeting his or her intended goals? Did he or she follow the given instructions when composing the story? A next step is to consider the work’s productivity and fluency, discourse structure and maturity, cohesion, and sense of audience. Furthermore, it should be kept in mind that a long story is not necessarily a better story, although the length of the story can be an indication of a composer’s ease of generating text. Many pupils have difficulty starting a story and write only short and simple sentences. (Nelson et al. 2004, p. 379 ff.)

By age of seven years, children generally invent stories with a plot. Their stories have a beginning, characters who have a problem to solve or wrongs to right, and an account of how the characters tried to solve their problems and how they succeeded or failed. Most children are by the time they reach nine years able to represent several characters’ perceptions and feelings in their stories. The structural elements are combined to produce a story structure that is familiar and predictable.

In Western European cultures, the most common story type has characters that strive
towards a goal. The story grammar elements this type includes are (i) setting (time, place, and characters), (ii) problem or conflict that sets events of the story in motion, (iii) character’s feelings in response to the problem, (iv) statement of ideas or plans to address the problem, (v) action taken to solve the problem, (vi) resolution or outcome, and (vii) story closing and ending. (Nelson et al. 2004, p. 379 ff.).

With the questions below one can make decisions about whether a pupil’s story contains certain story grammar elements associated with increasing maturity, making it possible to rate the stories at different levels (Nelson et al. 2004, p. 386 ff.):

Level 1: Isolated description: Has the writer only described isolated people, places and events?

Level 2: Temporal sequence: Has the story only a temporally related sequence of events or actions?

Level 3: Causal sequence: Has the story only events that are causally linked but without planning?

Level 4: Abbreviated episode: Has the story implications of an existing goal?

Level 5: Complete episode: Do the characters state a plan to reach a goal?

Level 6: Complex or multiple episodes: Are there obstacles in the path of reaching a goal? Is there at least one complete episode with multiple plans, attempts, or consequences? Does the story include also shorter episodes or embedded episodes?

Level 7: Interactive episodes: Are there two major characters who have separate goals and who are working at cross purposes? Do their actions influence the actions of the other?

Method

The present study was initiated with three main goals in mind. One purpose was to explore how pupils’ writing skills develop during the first six school years. The second goal was to determine how well a school starter’s skills predict his or her future writing skills. The third goal was to find out if there are differences in the development of girls’ and boys’ writing skills. A further purpose of the study was to identify the most common spelling errors that the pupils made at the end of the first, the second and the sixth school year and to find out how stable their spelling errors were.

This study observed the development of six class-groups of children who entered first grade in four schools in Southern Finland in 1999, when they were six or seven years old, and followed their progress to the end of the sixth grade in 2005. At the beginning of first grade there were 132 pupils in these classes; 73 girls and 59 boys. Five measurements were conducted during this period, and four tests and a creative writing task were used as indicators. The initial test at entry (Poussu-Olli & Merisuo-Storm, 2000) was divided into five sections each of several items; It was used to measure: (i) the pupils’ general level of school readiness, (ii) auditory perception, (iii) visual perception, (iv) mathematical skills, and (v) memory. The items in the general section were aimed at measuring the pupil’s understanding of number, of sentences and of phoneme-grapheme correspondence, his or her ability to continue phrases and lines of patterns, and his or her ability to find synonyms and rhyming words.

As described above, phonological awareness is essential for learning to read and write. This was measured by, for instance, the following items of the initial test: finding rhyme words, building words out of sounds, and segmenting words into syllables, in the
auditory section of the test. The success in tasks that require phonemic awareness is considered the most important prerequisite for learning to read. In the auditory section of the initial test such tasks were, for instance, the identification of the first or last phoneme in a word, and the phoneme synthesis task. An indicator of internal consistency of this initial test is provided by a Cronbach’s alpha score of .88.

The pupils’ spelling skills were measured at the end of first, second and sixth grade. The writing tests for first and second grades (Poussu-Olli & Saarni, 1998; Merisuo-Storm & Poussu-Olli, 2005a) included, apart from writing from dictation tasks, items that measured the pupils’ ability to perceive phoneme-grapheme correspondence, auditory and visual perception, listening comprehension skills, and memory. At the end of the sixth school year the pupils’ spelling skills were measured with a test of writing from dictation (Merisuo-Storm & Poussu-Olli, 2005b). In fourth grade the focus was on pupils’ creative writing skills. They were asked to write a story about someone’s journey to a destination that was very different from where he or she lived.

**Results**

**Spelling**

The results of the study showed that the level of a school starter’s school readiness had a strong effect on his or her spelling skills during the first six study years. This was clearly apparent when the results of the first, the second and the sixth grade test were compared with the results of the initial test. The initial test as a whole was a good predictor of the development of pupils’ spelling skills. There was a strong correlation between performance in the initial test and the marks in the first grade, the second grade, and the sixth grade writing from dictation tests ($r = .60, p = .000; r = .67, p = .000; r = .55, p = .000$).

The auditory section of the initial test was even more significantly related to the development of pupils’ writing skills. According to the results of a stepwise regression analysis, the auditory section of the initial test was the best predictor of the pupil’s spelling skills at the end of first and second grade ($r = .55, p = .000, r^2 = .31; r = .57, p = .000, r^2 = .32$). In combination with the memory section it was still a slightly better predictor ($r = .57, p = .000, r^2 = .35; r = .63, p = .000, r^2 = .43$). Although the best predictor of the results of the spelling test in sixth grade was the memory section of the initial test ($r = .45, p = .000, r^2 = .20$), combining the results of the auditory section strengthened it as a predictor ($r = .52, p = .000, r^2 = .27$). However, as the R Square shows, in sixth grade they accounted only for 27 per cent of the variance.

Within the auditory perception section of the initial test, the item that best predicted the development of spelling skills proved to be the discrimination of sound duration task. It had a significant correlation with the results of the first grade spelling test as well as the results of the second grade spelling test ($r = .67, p = .000; r = .55, p = .000$). When it was combined with the task of remembering letter lists, they predicted the success in these both spelling tests significantly well ($r = .70, p = .000, r^2 = .50; r = .64, p = .000, r^2 = .41$). The best predictors of the success in sixth grade spelling test were the visual word discrimination task and the combining words of sounds task ($r = .72, p = .000, r^2 = .52$). With remembering letter lists task they significantly predicted a pupils spelling skills in sixth grade ($r = .75, p = .000, r^2 = .56$).

Graphemic awareness was mentioned above as one of the important predictors of the development of literacy skills. Almost all pupils who took part in this study (92%) knew as school starters at least nine of the ten
letters that were asked. However, there was one girl who knew only two of them and one boy to whom only three were familiar. His marks in the first grade test were poor and in the second grade test fair. At the same time her marks were of medium level in both the first and the second grade tests. The performance of both these children was poor in every section of the initial test. That they did not know the letters at the beginning of school was probably caused by lack of opportunities to construct knowledge about print prior to school. Evidently the girl had succeeded better in gaining this information during the first two school years. Both children moved to another school before the sixth school year and thus there is no knowledge of their development later on.

Also in the second grade spelling test there were tasks that measured pupils’ auditory and visual perception and memory. According to the results of a stepwise regression analysis, the success in the counting the words of a sentence task in second grade was the best predictor of the spelling skills in sixth grade \( r = .56, p = .000, r^2 = .32 \). When the results of this task and the success in hyphenating words and remembering letter lists were combined, they predicted a pupil’s spelling skills in sixth grade fairly well \( r = .72, p = .000, r^2 = .52 \).

The spelling errors that the pupils made were somewhat different during the first two school years and in the end of the sixth school year. As was mentioned above, in Finnish language double consonants and double vowels are common, and consequently, sound discrimination skills are very important for Finnish pupils. In addition, in Finnish there are numerous words whose meaning alters completely if one of the two consonants or vowels is missing. However, in first and second grade many pupils had difficulties especially with double consonants. In first grade only ten per cent of the pupils made no double consonant errors. It was the most frequently made error –27 per cent of all errors were double consonant errors. As was mentioned above, the discrimination of sound duration task in the initial test correlated significantly with the number of spelling errors in first grade.

Poor sound duration discrimination skills seemed to be slow to improve. Two boys performed, as school starters, particularly poorly in the sound duration task. Out of ten items they did only two correctly. At the end of first grade they both made eight double consonant errors in the writing from dictation task. In addition, they made four and five double vowel errors. At the end of second grade they apparently still experienced great difficulties in sound duration discrimination, making 19 and 20 double consonant errors and 9 and 11 long vowel errors. Another thing that many pupils found difficult was to determine whether they should write a capital letter in the beginning of a word or not. Almost half of the pupils had made a wrong choice at least once. In addition, 37 per cent of the pupils left letters out of words, and 33 per cent of them had put too many letters in some words. In the first class writing from dictation test there were no compound words. However, 20 per cent of the pupils had incorrectly written words together.

In second grade a compound word error was the most common error. Only 14 per cent of the pupils had written all compound words correctly. The item in the initial test that best predicted the development of spelling skills in second grade was, like in first grade, the discrimination of sound duration task. Almost half of the pupils still made double consonant errors and 34 per cent of them had failed in discriminating a long and a short vowel. In addition, almost half of them had left other letters out of words or written extra letters in words.
It was mentioned above that another good predictor of the results of the spelling test in second grade was the memory section of the initial test. Because of difficulties in short term memory 22 per cent of pupils had not been able to keep long enough in mind all the words that were dictated. Consequently, words were missing from their text. Many pupils had not had energy enough to read the text after they had finished writing. For them writing was a task that consumed a lot of energy. Furthermore, many poor spellers are not fluent readers either. For example, dots from letters i, ä and ö, or strokes from letters t were often missing.

In sixth grade most pupils had no difficulties in writing long vowels and double consonants correctly. The pupils who still had problems with double letters generally also made many other errors. Specifically, they left letters off or put incorrect letters in words. In sixth grade the most common error was compound word error. Only 12 per cent of the pupils managed to write them all correctly. Many pupils had still difficulties, as in second grade, in determining whether they should write a capital letter in the beginning of a word or not. Only 31 per cent of them had made no capital letter mistakes.

As mentioned above, one of the items in the initial test that best predicted the success in sixth grade spelling test was the remembering a letter list task. Still in sixth grade some pupils had difficulties in short term memory. Consequently, many words were missing or there were extra words in some pupils’ texts. A strong correlation between these two types of errors (r = .92, p = .000) shows that those pupils who put wrong words in their text also left words out of it. Still in sixth grade 40 per cent of the pupils had left dots or strokes out of several letters.

When comparing the girls’ and the boys’ success in writing from dictation tests during the first six school years, one can see that in first and second grade the girls made significantly less spelling errors than the boys (t = –2.83, p = .005; t = –3.10, p = .002). In first grade there were 0–20 errors in the girls’ papers and 0–34 errors in the boys’ papers. In second grade the girls had made 0–89 errors and the boys 0–76 errors; although the pupil who had made the greatest amount of errors was a girl, the girls made them on average less than the boys. In the sixth grade spelling test the difference in the success of the two genders was less marked (t = 2.26, p = .025). However, some pupils had made lots of errors. The girls had made 1–112 errors and the boys 0–231. Three pupils, one girl and two boys, had made more than one hundred errors.

There appears to have been little catch-up in writing from dictation tests during the six years by weaker pupils. The results of the first grade writing test correlated significantly (r = .64, p = .000) with the results of the second grade writing test. The children who started school with poor school readiness made, after two school years, more spelling errors than those who entered school with excellent skills. Spelling errors more common to them than to the others included, for instance, capital letter errors, long vowel errors and compound word errors. Although the correlation between the first and the sixth grade tests was not as significant (r = .38, p = .000) as between the first and the second grade tests, the correlation between the second and the sixth grade tests was significant (r = .71, p = .000). Those pupils who made many errors in second grade appeared to have made the greatest number of them still in sixth grade.

In order to be able to compare the development of the children with the poorest and the best school readiness, the pupils were divided into four groups of approximately the same size according to their aggregated scores of the initial test. The highest quartile consist-
ed of the pupils who achieved the best scores (approximately 25% of the pupils) and the lowest quartile of the pupils who had the lowest scores (approximately 25% of the pupils) in the initial test. The rest of the pupils (approximately 50%) fell into the middle quartiles.

According to the results of a Tukey-test the pupils in different initial-test quartiles continued to score differently in spelling tests in first, in second and in sixth grade. In first grade the difference was significant between all quartiles. The marks varied from 10 (no errors) to 4 (many errors). The mean of the marks of the pupils in the lowest quartile was 6.9, in the middle quartile 8.1, and in highest quartile 8.8. In second grade the difference of the means was still more significant. The means were 6.2 (the lowest quartile), 8.0 (the middle quartile), and 9.1 (the highest quartile).

In sixth grade the marks of the pupils in the lowest quartile were still significantly poorer than the marks of the pupils in the other quartiles, but the difference of the marks of the pupils in the middle quartile and the highest quartile was not any more significant. In sixth grade the mean of the lowest quartile was 6.2, of the middle quartile 7.8, and of the highest quartile 8.2.

The results may have been somewhat effected by the loss in the number of the pupils. Only a few pupils had moved out of the classes during the first two school years, but in sixth grade the number of the pupils in all quartiles had decreased notably. In the end of the sixth school year only 60 per cent of the pupils were the same as in the beginning of the first school year. However, it seems that the level of a school starter’s skills predict considerable well his or her spelling skills still in sixth grade.

Creative writing
The pupils’ creative writing skills were measured in fourth grade. They were asked to write a story about someone’s journey to a destination that was very different from where he or she lived. The instructions given for the task were as follows: The writer should invent the title of the story himself or herself. The main character of the story could be the writer himself or herself, another person, an animal, or an imaginary character. The destination of the journey could be either an existing location or an imaginary place. The inhabitants there spoke a foreign language. Moreover, the writers were encouraged to use colourful and rich language, and invent interesting and amusing events. The pupils wrote the stories in school and the time for the task was not limited.

There were 138 stories altogether. When assessing them, the criteria that were used were their individuality, eventfulness, story structure, rich and colourful language, and fluency of narration. Attention was also paid to the fashion in which the author sketched the difference between home and the new place and described the characters of the story, and whether the author had shown original thinking, displayed sense of humour or made clever remarks. Each of these features was scored from 2 to 0. For instance, assessing the description of the story character(s): 0 = no description, 1 = description of the persons’ physical appearance or personality, and 2 = description of both of the qualities of the persons. When describing the new place the author could sketch the environment of the place or describe the different language spoken there. Score 2 was given if both were found in the text. The other criteria were assessed from 2 to 0 according to the quality or the degree of the aspect assessed.

The stories that the pupils created represented six genres of literature. The most popular genres were travelogues, adventure stories, and fairytales. In addition, there were stories that represented science fiction and
fantasy, and stories that proved to be the main character’s dreams. The boys’ favourite genres were adventure (37%) and science fiction (28%). The girls’ stories were in most cases travelogues (33%) or fairytales (29%). The destination of the journey was far more often a fictitious place than an existing foreign country.

However, in this aspect the boys’ and the girls’ stories were different: 40 per cent of the girls and only 21 per cent of the boys took their main characters to an existing place. The themes of the pupils’ stories included a search for something, an escape from somewhere, a rescue of someone, or holidaymaking. In the boys’ stories there was often a lot of action and 28 per cent of their stories included also violence. The girls had written more often happy, positive and peaceful stories. However, more than a quarter of their stories (27%) included also exciting events.

The girls’ stories more often scored very good or excellent marks on the assessed criteria (44%) than the boys (28%). Although the boys wrote more stories that happened in a fictitious place than the girls, their stories did not include individual ideas as often as the girls’ stories ($t = 3.27$, $p = .001$). The girls also more often used colourful language than the boys. In addition, 16 per cent of the girls and only six per cent of the boys had made philosophical comments about the events of their stories.

As was mentioned above, the attention was also paid to the fashion in which the author described the characters of the story. The description was most often limited in information of his or her physical appearance. However, in 21 per cent of the stories composed by the girls there was also information of the characters’ personality but only 10 per cent of the boys gave this kind of information. In 60 per cent of the boys’ and 53 per cent of the girls’ stories there was no description of the characters.

It was already mentioned that, a long story is not necessarily a better story than a short story but the length of the story can be an indication of a composer’s ease of generating text. The length of the stories varied from less than one page to eight pages and the boys’ stories were significantly shorter than the girls’ stories ($t = -4.56$, $p = .000$). Only four boys had written a story that had more than two pages and 77 per cent of their stories were only one or two pages long. In contrast, 41 per cent of girls’ stories were over three pages long. However, sometimes the length of a girl’s story was a result of repeated thoughts and empty verbiage.

All pupils had a good knowledge of story structure. In 43 per cent of the papers the beginning of the story was the traditional «Once upon a time». Most of the stories had a conventional ending: the main character returned home. However, in 23 per cent of the stories he or she remained in the new place and lived there happily ever after. Although the titles of the stories often (33%) referred to a journey to a particular location, e.g. «A Journey to the Moon», «A Journey to XXL», and «A Journey to China», some pupils used more imaginative titles such as: «A Creeping Mouse and a Sitting Dragon», «The Earthworm that vanished», «Puffy Jumps to Spain», and «A Fatal Mistake». The fourth grade pupils seldom included humour in their stories. It could be found only in seven boys’ and five girls’ stories.

The pupils’ success in the creative writing test in fourth grade was related to their success in spelling tasks during the first six school years. There was a fairly strong correlation between the marks of story writing and the marks of spelling tasks in first grade ($r = .40$, $p = .000$), in second grade ($r = .49$, $p = .000$), and in sixth grade ($r = .50$, $p = .000$). This could be anticipated, because for skilled spellers composing a story is easier than for those who have to struggle in constructing words.
As was mentioned earlier, handwriting requires adequate visual-motor coordination. If letter formation is difficult, a pupil has to concentrate on the physical task of writing. As a result, less capacity is left for spelling and formulation of syntax and content. This was obvious when reading pupils’ stories and spelling tasks. Many pupils who did poorly in story composing or spelling also had obvious difficulties in handwriting. They were clumsy writers who produced untidy and messy text.

**Discussion**

Good spelling skills are an important tool for creative writing, communication, and learning across the range of school subjects. The results of this study show that a school starters’ initial skills are a good predictor of the development of his or her future writing skills. The pupils’ success in writing from dictation tasks seemed to alter very little during the six school years.

Those pupils who had poor marks in the first grade writing test very often had poor marks also in the sixth grade writing test. Therefore, the school readiness of each school starter should be evaluated and teachers should start to focus attention on poorly developed skills as early as possible. At the beginning of first grade it is especially important to improve pupils’ auditory perception skills. A considerable time should be used, for instance, for exercises in sound duration listening.

A pupil’s linguistic development is the basis for learning to write but memorizing skills are needed as well. Poor writers often experience difficulties of the short-term working memory. When writing from dictation, pupils have to keep the text in mind for the duration of the time required for putting it on paper. Therefore pupils’ memory should also be trained. In addition, the pupils observed here had difficulties with compound words even in sixth grade. This suggests that it is important to devote sufficient teaching time to distinguishing compound words. Pupils should understand that the meaning of a phrase changes if the words are written as one word or as separate words.

The results of the study showed that the boys were not as competent spellers as the girls in first and second grade. The girls succeeded also in the fourth grade creative writing task better than the boys. The stories that the girls composed in fourth grade were longer, had more colourful language and included more often individual ideas. However, in the sixth grade spelling task the difference in the success of the two genders was less marked. In fourth grade the pupils took also part in another research. It focused on their reading and writing attitudes and attitudes towards language learning (Merisuo-Storm, 2006).

The results of this study showed that the girls’ writing attitudes were significantly better than the boys’ attitudes (t = −6.61, p = .000). The boys were significantly more reluctant writers than the girls and they did not write as often as the girls did. Consequently, their writing skills did not develop as well as the girls’ skills. The results support the idea that writing without a purpose did not interest the boys. Many of them had already found out that writing requires great efforts, and they did not start writing without a good purpose. The results suggest that the pupils’ interest should be a key factor in the selection of writing exercises. To interest boys the writing task should have a meaningful purpose or a communicative function.

As was stated above, the first years in school are an important phase of life for each child. What he or she experiences then has a long-lasting effect on his or her attitudes towards school. If a pupil during the first school years has positive experiences when
learning to write it will motivate him or her to develop his or her skills and to use writing for wide range of purposes later on.

**Aknowlegement**

The author is grateful for comments on a draft of this article to Patrick Kinsella of Dublin City University.

**Literature**


European Conference on Educational Research

**Theme: From Teaching to Learning?**

Main Conference 10–12 September

Post Graduate and New Researchers’ Pre-Conference 8–9 september

All contributions on topics relevant to educational research are welcome!

For more information see http://www.ped.gu.se/ecer2008