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Content and Time Determination of Education for Initial Reading and Writing Course in Croatian Language

Ante Bežen and Vesna Budinski Faculty of Teacher Education, University of Zagreb

Abstract

The educational methodical act in the initial reading and writing course is a process comprised of substantial and timely related segments of teaching. The methodical act (Bežen, 2008) shows the correlation between the attendant who learns, the subject that he is learning and its educational purpose, the teacher who organizes learning and leads to act's purpose, timeline and system of methodical implementation through which the act is achieved. Content, lesson, and learning are realized through language activities (language reception and language production). "Language reception includes understanding of speaking (listening), understanding of written text (reading), and understanding of language, gesture and mime (watching). Language production includes sound formation (speaking), written formation and movement formation (making gestures)" (Jelaska, 2007, p. 34). The methodical act of initial reading and writing in the Republic of Croatia is realized through the time dimension of one school year. In Slovenia, initial reading and writing is realized throughout the first educational cycle that includes two school years.

The research was conducted in June 2012 on a convenience sample of teachers (mentors and advisors) N=354. The Chi-square test was used to check if there was a difference between the percentage of teachers who think that a suitable time dimension of teaching initial reading and writing is one school year in comparison to those who think that two school years are more suitable. A significant statistical difference in the frequency of teaching pupils in different teaching situations was proven by Friedman's test. Wilcoxon's tests have shown in which direction the differences between the pairs of teaching situations are developing. Friedman's and Wilcoxon's tests checked differences in the frequency of usage of methodical processes.

Key words: initial reading and writing; methodical act; time frame of teaching

Theoretical Framework

Teaching initial reading and writing is defined by the content which pupils learn and the optimal time frame for teaching. "For successful teaching of Croatian/Mother tongue at an early age it is imperative to select and organize educational content. Educational content is transferred into the teaching programme i.e. curriculum of the mother sciences of Croatian language teaching methodology" (Bežen, 2011, p. 31). Mother sciences for teaching initial reading and writing, for the subject Croatian language, are linked with the mental processes necessary for learning to read and write, understanding sound-letter transfer, the structure of language elements, graphic language symbols, motor skills and the function of writing, cognitive processes in the neural system and optimal developmental phases for learning particular content. Bežen (2011) gives an overview of mother sciences for Croatian language teaching methodology that are included in the subject Croatian language. For initial reading and writing the following mother sciences are applied: psychology (children's, developmental, educational), linguistics (psycholinguistics), grapheme studies (typography), theory of art (graphics), philosophy of man (neural sciences, osteology, ophthalmology, otorhinolaryngology, pulmonology), speech pathology (language-sound-speech disorders, hearing disorders). It is important to mention that the structure of mother sciences is not the same in the scientific and methodical systematization. "That stems from the need for authentic content of mother sciences to be transformed for teaching purposes according to the needs of the teaching subject (didactic transfer). In that process, theories within mother sciences and teaching methodology theories carry an important role" (Bežen, 2011, p. 31).

The interdisciplinary area of teaching initial reading and writing is especially important as through acquiring the skill of reading and writing we indirectly influence the cognitive, emotional and social development of a pupil. Teaching initial reading and writing enriches the previously acquired skills (speaking, listening, observing, signing language), which refer to everyday communication, learning to read and write and a meaningful use of spoken and written language. Signing refers to nonverbal communication, i.e. gestures, mime and body language. Jelaska (2007) places signing into language skills which belong to language production, and signing implies formation by movement. Initial reading and writing within teaching in school leads to more language possibilities since with writing, i.e. noting information and experiences (orthographically correct) a pupil can save the message. The acquisition of the writing skill enables a pupil to transfer oral into written language, i.e., through writing the content and information are transferred while the distance between message recipient and message sender is overcome. By exposing pupils to methodical patterns of different functional styles of the Croatian language, they acquire the vocabulary (lexical) corpus which will provide them with the possibility to express

 $^{^{1}}$ All the quotes in the paper are translations of the Croatian original made for the purpose of this paper.

themselves in various communication situations. "Children not only create their own vocabulary selection provided by the environment, but also a selection of meanings which meet their needs and degree of intellectual development" (Stančić and Ljubešić, 1994, p. 268).

Successful teaching of reading and writing is based on phonological awareness, i.e. the ability to analyze and synthesize, isolate and link sounds which make up a word. Phonemic awareness provides an insight into the sound structure of language, which is the ability to hear sounds within a word and in writing being able to transfer sound to letter (graphical formation of a sign). Initial reading and writing are interlinked and supported in the active process of creating sense (meaning) of the read or written text. Erdeljac (2009) refers to understanding the spoken and understanding the read as *modalities of language processing* (architecture of lexical processing) which should be appreciated throughout the process of knowledge and skill transfer in initial reading and writing by means of concrete structuring and realization of the methodical act. The methodical tools for teaching initial reading and writing must support the processing of spoken into written language giving preference to the communicative model as the most appropriate model for the first grade.

The unit on learning capital letters can be structured according to the teaching stages and the following contexts: introductory motivation (verbal, lexical, phonetic), reading a set capital or lower case letter (observing graphic images of letters and the global image of shorter words containing the letter), sound - letter transfer (writing upper and lower capital letters and lower case letters, learning to correctly write a letter). The listening perception and listening differentiation are key parts of the listening process, while acoustic data are content which is dealt with in the listening process. Those elements also make up the content of the teaching context introductory motivation within the unit on learning capital and lower case letters. At the same time, those elements make up the content of the teaching context introductory motivation within the lesson learning upper and lower case letters. "Listening recognition is the last level of the listening process which will lead to defining what has been heard. At that level, words and expressions obtain their full meaning" (Kuvač, 2007, p. 61). During this teaching phase, as part of the listening process, pupils observe acoustic data, sonority, manner and place of articulation of sounds in sequence. It is possible to articulate the following context, the *sound to letter transfer*, through a series of teaching situations: observing the capital and lower case letter (graphic analysis), drawing and making letters from materials and tracing letters in a textured foundation, and writing the lower and upper case letter and word with the set letter. "Considering that the spoken language precedes the written language (in the phylogenetic and ontogenetic sense), learning to read can be seen as learning of visual forms which in a regular way match words which already exist as part of the spoken vocabulary. What is actually being learned can be referred to as rules for grapheme-phoneme ordering according to which the letter form is transferred into the (sound) form, which the listening analysis

of the spoken word produces. With this type of interpretation, reading creates a link with the mental lexicon through sound forms. Such a proposition is known as the phonological recoding hypothesis" (Erdeljac, 2009, p. 102).

The rules of grapheme-phoneme agreement and learning visual make up parts of teaching contexts such as sound to letter transfer, formation of letters from various materials, demonstration and writing of letters, practicing letter writing. In the practice of writing stage advantage should be given to independent thought and writing of words, syllables and sentences, and copying syllables and shorter words. Dictations are not recommended in the first grade since that activity demands the skill of the listening process with the capability of memorizing content and correct writing. "For successful realization of a dictation the listening processing is necessary, the transformation sound>phoneme>grapheme, the capability of retention of language content in the working memory, sight and motor coherence, correct spatial setting of what is being written, respecting the rules of writing, etc. However, it is not realistic to expect that a child in the first grade will be very successful in dictation. In order for a child to become successful in dictation writing it must develop and be able to link the previously described subskills" (Kuvač, 2007, p. 63). The same author states that dictation can serve as an exercise which integrates hearing, sight, and motor skills but only after the subskills have been sufficiently developed. Considering that this occurs only after the first grade, it is not appropriate to expose children to dictation writing during writing practice in grade one. Different forms of writing such as copying, writing according to a description or independent short writing are good writing practice.

With respect to the above mentioned an appropriate time frame for acquiring initial reading and writing could be extended to two school years. In that way the act of methodical teaching could include a series of practical activities which would lead to a gradual methodical realization and quality acquisition of reading and writing. Gradual teaching with frequent language interaction would enable pupils to acquire security and self-confidence in using the language.

Research Methodology

Research Aim

The aim of the research was to establish opinions of teacher mentors and teacher advisors (referred to in the text as *teachers*) about the content and time definition for the teaching of initial reading and writing of the Croatian language.

Research Problems

1. Establish whether there is a difference in the percentage of teachers who think that an appropriate time frame for teaching initial reading and writing is one school year (the first grade of primary school) and those who think that two school years (the first and the second grade of primary school) are necessary. Differences will also be compared with respect to teachers' work experience in teaching and the teachers' professional qualifications.

- 2. Establish whether there is a difference in the frequency of teaching pupils in the contexts of motivation, letter sound transfer, formation of letters from various materials, demonstration and writing of letters, and practice of letter writing while teaching initial reading and writing. Differences will also be compared with respect to the years of teaching experience and the teachers' professional qualifications.
- 3. Establish whether there is a difference in the frequency of use of teaching activities such as copying letters, copying syllables and shorter words, independent thinking up and writing of syllables and sentences, and dictation. Differences will also be compared with respect to the years of teaching experience and teachers' professional qualifications.

Hypotheses

- 1. Teachers, regardless of the years of experience in teaching and their professional qualification, think that the appropriate time frame for teaching initial reading and writing is two years (first and second grade of primary school).
- 2. Teachers, regardless of their years of experience in teaching and their professional qualification, use the activity forming letters from materials the least.
- 3. Teachers, regardless of their years of experience in teaching and their professional qualification, most frequently use the following teaching methods for practicing writing: copying rows of letters and copying syllables and short words.

Variables

Dependent: time dimension of teaching initial reading and writing, frequency of teaching pupils in teaching situations, frequency of application of teaching strategies. Independent: years of working experience in teaching, participants' professional qualifications.

Sample

The research was conducted on a convenience sample, made up of 354 teachers having the professional qualification of teacher mentor and teacher advisor (N=354) in the Republic of Croatia. The sample consisted of 171 teachers with a higher education degree and 171 with a professional qualification. From the analysis conducted with respect to teachers' professional qualification, due to a small number (N=12), teacher mentors and advisors with the title master and doctor of science were excluded. With respect to the years of working experience in teaching, there were 233 participants with more than 21 years of experience and 131 participants with up to 20 years of teaching experience.

Data Collection

The research was conducted in June 2012, during a national conference for teacher mentors and advisors organized by the Education and Teacher Training Agency. Professional development programmes are frequently organized for that population,

and their role is important in the professional development of teachers in the Republic of Croatia. Teacher mentors and teacher advisors answered three questions in a specially designed questionnaire. In the first question they gave their opinion on the time frame for teaching successful initial reading and writing. In the second question they marked on a Likert type scale (1-not at all; 2-rarely; 3-sometimes; 4-often), the frequency of teaching pupils in motivational teaching, sound-letter transfer, making letters from various materials, demonstrations and writing letters and letter writing practice. In the third question they marked the frequency of use of methodical strategies such as copying rows of letters, copying syllables and short words, independent thinking and writing letters, syllables, sentences, and finally dictation. In order to calculate statistical parameters and tests the statistical package for data analysis SPSS 13 (2006) was used. The Kolmogorov-Smirnov test was used prior to the statistical analysis in order to determine the normality of distribution which determined the further course of analysis (non-parametric). In testing differences on dependent groups the Wilcoxon test for two measurements and the Friedman test in case of more than two measurements were used. For testing differences between two independent samples the Mann Whitney U test was applied, while the Chi-square tested differences in frequencies.

Results and Interpretation

1. Related to the first problem the Chi-square test showed a statistically significant difference (χ^2 =29.39; df=1; p<0.01) in the percentage of teachers who think that the appropriate time allotment for teaching initial reading and writing is one school year (first year of primary school) and those who believe that it is two school years (the first and second grade of primary school). The majority of participants in the sample thought that one school year is adequate (64.4%). The results are shown in Table 1.

Table 1. Results of the Chi-square test for estimating an appropriate time frame for teaching initial reading and writing

Time dimension	N=35	54	Danilta of the Chi carrey to the	
Time dimension	on Frequency Percentage		Results of the Chi-square test	
One school year	228	64.4%	χ²=29.39; df=1; p<0.01	
Two school years	126	35.6%		

The offered possibility for selecting a timeframe for teaching initial reading and writing over a course of two years is only hypothetical. The outcome of teachers' selection of that possibility (35.6%) is an incentive for initiating a discussion on the optimal timeframe for initial reading and writing in lower grades of primary school.

The Chi-square test shows that there are no statistically significant differences (χ^2 =0.02; df=1; p>0.01) in the percentage of teachers who think that the appropriate timeframe for teaching initial reading and writing is one school year, i.e. two school years with respect to their teaching experience. About two thirds of the participants from both groups (64.9% and 64.1%) think that one school year, or the first grade, is sufficient. The results are presented in Table 2.

Table 2. Results of the Chi-square test for estimating an appropriate time frame for teaching initial reading and writing depending on the teachers' years of teaching

	N=354				
Years of teaching experience	One sch	ool year	Two school years		Results of the Chi-square test
experience	Frequency	Percentage	Frequency	Percentage	Cili-square test
Up to 20	85	64.9%	46	35.1%	,2 0.02, df 1, m> 0.01
21 years and more	143	64.1%	80	35.9%	χ^2 =0.02; df=1; p>0.01

The Chi square test shows that there are no statistically significant differences (χ^2 =0.11; df=1; p>0.01) in the percentage of teachers who think that the appropriate time frame for teaching initial reading and writing is one school year, first grade, depending on the teachers' professional qualification. Approximately two thirds of the participants from both groups (63.2% and 64.9%) think that one school year, the first grade, is sufficient for teaching initial reading and writing. The results are given in Table 3.

Table 3. Results of the Chi-square test for estimating the appropriate time frame for teaching initial reading and writing depending on the professional qualification of the teacher

	N=342				Results of the Chi-square test
Professional gualification	One school year Two school years				
qualification	Frequency	Percentage	Frequency	Percentage	tile Cili-square test
Undergraduate	108	63.2%	63	36.8%	2 0 11. df 1. m > 0 01
Graduate	111	64.9%	60	35.1%	χ^2 =0.11; df=1; p>0.01

The first hypothesis was not confirmed, i.e. statistically significantly larger number of teachers find that for teaching initial reading and writing a time frame of one school year is sufficient.

2. Using a test for large dependent samples, the second problem examined whether there is a difference in the frequency of teaching pupils in the following situations: motivation, sound-letter transfer, making letters from various materials, demonstration and writing of letters and letter writing practice.

Prior to deciding on the type of analysis, the distribution of all results of the measured variables was tested, and because of the distributions which deviate from a normal distribution (Table 4) nonparametric statistics were applied.

Table 4. Results of the Kolmogorov-Smirnov test for the estimate of the normality of distribution of the measured variables

Variable	Kolmogorov-Smirnov Z	
Motivation	9.95; p<0.01,	
Sound-letter transfer	9.71; p<0.01	
Creating letters from various materials	5.88; p<0.01	
Demonstration and letter writing	9.98; p<0.01	
Letter writing practice	10.07; p<0.01	

The Friedman test for examining differences among groups showed that there is a statistically significant difference in the frequency of teaching pupils in different situations

(χ^2 =821.94; df=4; p<0.01), and in order to see among which pairs there is a significant difference, separate Wilcoxon tests were applied. The results are shown in Table 5.

Table 5. Results of the Wilcoxon test for testing differences in the use of particular teaching contexts

Pairs of variables	Results of the Wilcoxon test (*statistically significant differences)
Motivation – Sound-letter transfer	Z = 4.14; p<0.01*
Motivation – Creating letters from various materials	Z = 14.47; p<0.01*
Motivation – Demonstration and letter writing	Z = 0.64; p>0.01
Motivation – Letter writing practice	Z = 1.66; p>0.01
Sound-letter transfer – Creating letters from various materials	Z = 13.94; p<0.01*
Sound-letter transfer – Demonstration and letter writing	Z = 4.32; p<0.01*
Sound-letter transfer – Letter writing practice	Z = 4.61; p<0.01*
Creating letters from various materials – Demonstration and letter writing	Z = 14.62; p<0.01*
Creating letters from various materials – Letter writing practice	Z = 14.52; p<0.01*
Demonstration and letter writing – Letter writing practice	Z = 2.63; p>0.01

It is evident from the results in Table 5 that there is a significant difference in the following pairs of variables: motivation – sound-letter transfer, motivation – making letters from different materials, sound-letter transfer – making letters from various materials, sound-letter transfer – demonstration and letter writing, sound-letter transfer – letter writing practice, making letters from various materials – letter writing practice.

In order to define the direction in which the differences are going, mean ranks of particular variables are given in Table 6.

Table 6. Mean ranks of the Friedman test of the measured variables

Variable	Mean rank
Motivation	3.37
Sound-letter transfer	3.21
Creating letters from various materials	1.62
Demonstration and letter writing	3.37
Letter writing practice	3.43

It is evident that teachers teach pupils in contexts of motivation more frequently than through sound-letter transfer or making letters from different materials. Sound-letter transfer occurs more frequently than making letters from different materials, but less

frequently than demonstration and letter writing, and letter writing practice. Teachers use making letters from different materials less frequently than demonstration and letter writing, and letter writing practice.

It can be concluded that motivation, demonstration and letter writing, and practicing letter writing are teaching contexts in which teachers most frequently teach initial reading and writing. The frequency of teaching pupils in those contexts is not statistically significant; however, all of the mentioned contexts are statistically more significantly present than sound-letter transfer. Statistically significantly, the least used context that teachers use for teaching is making letters from different materials.

In order to test whether there are differences in the opinion about the importance of teaching pupils in particular teaching contexts depending on the teachers' work experience the Mann Whitney U tests for testing differences between two independent groups for each variable were applied. The results are given in Table 7.

Table 7. Results of the Mann Whitney U tests for teaching pupils in particular teaching contexts depending
on the teacher's years of work experience

	Mean	Results of the test	
Variable	Up to 20yrs of work experience	21 or more yrs of work experience	(* statistically significant differences)
Motivation	171.56	180.99	Z=-2.20; p<0.05*
Sound-letter transfer	173.43	179.89	Z=-1.10; p>0.01
Creating letters from various materials	161.05	187.16	Z=-2.61; p<0.01*
Demonstration and letter writing	175.41	178.73	Z=-0.69; p>0.01
Letter writing practice	177.94	177.24	Z=-0.23; p>0.01

The results show that there is a statistically significant difference only for motivation and making letters from different materials, where teachers with more work experience use them more than teachers with less experience.

In order to establish whether there is a difference in teaching pupils in particular teaching contexts depending on the teachers' professional qualifications, the Mann Whitney U tests for establishing differences between two independent groups for each variable is used. The results are given in Table 8.

Table 8. Results of the Mann Whitney U tests in teaching pupils in particular teaching contexts depending on the teacher's education

Variable	Mean	rank	To at we seed to
Variable	Undergrad.	Graduate	Test results
Motivation	171.03	171.51	Z=-0.23; p>0.01
Sound –letter transfer	171.50	171.50	Z=-0.00; p>0.01
Creating letters from various materials	172.81	170.19	Z=-0.28; p>0.01
Demonstration and letter writing	170.98	172.02	Z=-0.22; p>0.01
Letter writing practice	170.01	172.99	Z=-1.01; p>0.01

The results in Table 8 indicate that there are no statistically significant differences in teaching pupils in particular teaching contexts depending on the professional qualifications of the teachers.

The second hypothesis, i.e. that teachers use the teaching context creating letters from different materials the least was confirmed.

3. Tests for large dependent samples were used to check for differences in the frequency of using methods such as copying rows of letters, copying syllables and shorter words, independent thinking and writing of words, syllables and sentences and dictation writing. Prior to deciding on the type of analysis, the significance of the distribution of results of the measured variables was tested. The distribution deviated from a normal one (Table 9), therefore nonparametric statistics was used.

Table 9. Results of the Kolmogorov-Smirnov test for the estimate of the normality of distribution of the measured variables

Variable	Kolmogorov-Smirnov Z
Copying rows of letters	7.69; p<0.01,
Copying syllables and shorter words	7.79; p<0.01
Independent thinking up and writing syllables and sentences	6.68; p<0.01
Writing dictations	5.04; p<0.01

The Friedman test for testing differences between groups established that there is a statistically significant difference in the frequency of use of particular methods (χ^2 =76.39; df=3; p<0.01). In order to show the pairs between which there is a significant difference, separate Wilcoxon tests were applied. The results are shown in Table 10.

Table 10. Results of the Wilcoxon test for testing differences in the use of particular teaching methods

Pairs of variables	Results of the Wilcoxon test (* statistically significant differences)
Copying rows of letters – Copying syllables and short words	Z = 1.10; p>0.01
Copying rows of letters – Independent thinking up and writing syllables and sentences	Z = 1.15; p>0.01
Copying rows of letters – Writing dictations	Z = 6.33; p<0.01*
Copying syllables and short words – Independent thinking up and writing syllables and sentences	Z = 2.67; p<0.01*
Copying syllables and short words – Writing dictations	Z = 6.38; p<0.01*
Independent thinking up and writing syllables and sentences – Writing dictations	Z = 4.41; p<0.01*

The results in Table 10 show that there are significant differences in the following pairs of variables: copying rows of letters – dictation writing, copying syllables and shorter words – independent thinking and writing syllables and sentences, copying syllables and shorter words – writing dictations, and independent thinking up and writing syllables and sentences - dictation writing.

In order to see the direction in which the differences are going, mean ranks of particular variables are given in Table 11.

Table 11.	. Mean ranks	of the Friedman	test for the med	asured variables

Variables	Mean rank
Copying rows of letters	2.63
Copying syllables and short words	2.70
Independent thinking up and writing syllables and sentences	2.55
Writing dictations	2.12

The mean ranks show that pupils find themselves more frequently in the context of copying rows of letters than in writing dictations. They write syllables more often independently, think up and write syllables and sentences than writing dictations.

It can be concluded that copying rows of letters and copying syllables and shorter words seem to be the most frequently used methods which according to frequency of use do not differ among each other. Copying syllables and shorter words is used significantly more frequently than thinking up and writing syllables and sentences, and all three methods are statistically significantly more frequently used than writing dictations.

In order to establish whether there is a difference in the frequency of teaching pupils using particular teaching methods depending on the years of work experience of the teachers, the Mann Whitney U tests for testing differences between two independent groups for each variable were applied. The results are given in Table 12.

Table 12. Results of the Mann Whitney U tests in the use of particular teaching methods depending on the teacher's work experience

	Mean rank		Results of the test	
Variable	Up to 20 yrs of experience	21 or more years of experience	(* statistically significant differences)	
Copying rows of letters	191.46	169.30	Z=-2.38; p<0.05*	
Copying syllables and short words	184.79	173.22	Z=-1.27; p>0.01	
Independent thinking up and writing of syllables and sentences	166.55	183.93	Z=-1.79; p>0.01	
Writing dictations	175.79	178.50	Z=-0.27; p>0.01	

The results in Table 12 show that there are statistically significant differences in the variable only in copying rows of letters which is frequently used by teachers with less years of experience than by teachers with more years of teaching experience.

In order to establish a difference in the frequency of use of a particular teaching method depending on the teachers' professional qualification the Mann Whitney U tests for testing differences between two independent groups were applied for each variable. The results are shown in Table 13.

Table 13. Results of the Mann Whitney U tests in the use of particular teaching methods depending on the teacher's professional qualification

Variable	Mean rank		Test results
	Undergraduate	Graduate	restresuits
Copying rows of letters	165.74	177.26	Z=-1.32; p>0.01
Copying syllables and short words	163.81	179.19	Z=-1.78; p>0.01
Independent thinking up and writing syllables and sentences	176.18	166.82	Z=-1.02; p>0.01
Writing dictations	178.35	164.65	Z=-1.42; p>0.01

The results show that there are no statistically significant differences in the use of particular teaching methods with respect to the teachers' professional qualification.

The third hypothesis was confirmed, i.e. teachers most frequently use the methods of copying rows of letters and copying syllables and shorter words for practicing writing.

Conclusion

The research results presented the opinions of teacher mentors and teacher advisors in the Republic of Croatia regarding the time frame for initial reading and writing and the attitude towards the relevant parts of the teaching process.

With the beginning of one's schooling, formal teaching which has as a goal to teach reading and writing is initiated. The teaching of initial reading and writing (Bežen, 2002) should be saturated with primary sensory activities of observing and listening, since observing is a sensory activity, necessary for observing space and spatial relations, analysis and synthesis of elements in the space and area (form and sign). Through observation we learn how to communicate visually, we learn to place letters and the written message into the visual field and in that way visually memorize and use language as a system of signs. Listening is a sensory activity of noticing sounds in space (sound, tone, voice) and analysis and synthesis of sounds. By listening we memorize the sound structure of a language. The mentioned sensory activities are a precondition for acquiring movement (kinesthetic) activities, which are necessary in learning letters, i.e. writing. The sense of motion and position of particular body parts, movement of hands when writing (fingers, fist, forearm, upper arm) are constituent parts of the psychokinesthetic activities in reading and writing. Therefore, initial reading and writing require an optimal time frame which will enable pupils to acquire the mentioned language skills in order to understand speech (listening) and for establishing a visual standpoint (observation).

The research results show that according to the opinions of teacher mentors and teacher advisors the time frame for teaching initial reading and writing is one school year. That was the opinion of 64.4% participants (N=354). Acquiring and learning initial reading and writing and early learning of the mother tongue in primary education should be based on scientific facts. It is especially important to research the scope of language which a child can acquire at a particular age and in particular phases of education (grades). In order to realize quality teaching of initial reading and writing, pupils should be taught in a way which activates their primary and secondary sensory activities, which makes one school year an insufficient time frame. The fact that 35.6% of the teachers expressed the opinion that two school years would be sufficient for teaching initial reading and writing should not be ignored.

Teaching initial reading and writing should be preceded by an introduction to initial reading and writing. This introduction implies practice which encourages phonological awareness or awareness of sounds (listening perception, listening differentiation and listening recognition), global reading, listening for word patterns,

acquiring the skill of active listening and speaking. It is important to include those elements into the methodical act of teaching initial reading and writing as they are a precondition for sound-letter transformation, reading and writing. For practical reasons, the mentioned elements cannot be included in the 175 hours of mother tongue teaching (Croatian language) in the first grade of primary school in Croatia. Initial reading and writing of the Slovene language in Slovenia is learned over the period of two school years. In other educational systems (*Hungarian*, *English*, *Irish and Dutch*) learning of the mother tongue in the first grade is allotted more hours on a weekly and yearly basis. The data are given in Table 14.

Table 14. Weekly and yearly number of hours for teaching the mother tongue in compulsory education in Croatia, Hungary, England, Ireland and the Netherlands (1st grade)

Country	Hours per week	Hours per year	Portion of the mother tongue in the total number of hours
Croatia	5 hours	175 hours	22.7%
Hungary	8.4 hours	296 hours	40%
England	5.4 hours	190 hours	24%
Ireland	3.6 hours	129 hours	20%
Netherlands	Flexible time	Flexible time	Flexible time

It is necessary to differentiate the categories: pupil language (ability to articulate sounds, stress with respect to the standard stress pattern, vocabulary and the ability to articulate smaller and larger speaking units), the acquisition of the grapheme system, initial reading and writing and initial guided writing of written work with encouragement. These categories contain individual characteristics of first grade pupils with respect to their acquisition of language (acquisition and learning of language). The mentioned activities are elements of the methodical tools for learning capital and small letters. The research results show that participants most frequently teach initial reading and writing in the teaching context of motivation and demonstration, and writing of letters. The frequency of teaching pupils in the context of motivation, demonstration and writing letters, and practice of letter writing is not statistically significant, however, the mentioned situations are statistically significantly more present than sound-letter transfer and creating letters from various materials (see Table 6). It is important to give more time to the methodical acts sound-letter transfer and letter identification (visual foundation), the audio and visual analysis of words since they present the foundation of lexical processing.

By making letters from different materials through tactile sensory activities a pupil acquires the graphic structure of letters (analysis and synthesis of graphic elements), and directly acquires the grapheme system of language and is ready for initial formation of written messages. That process is continued on all levels of compulsory education in a well-defined methodical strategy.

The research results show that pupils are more frequently exposed to writing syllables and shorter words than thinking up and writing syllables and sentences

or writing dictations. Teachers, on the other hand, most frequently use strategies in which pupils independently think up and write syllables and sentences, than dictation writing. It is common to write dictations in Croatian schools in the first semester of first grade and in that way test the speed, coordination and writing skill. Dictation writing according to Rosandić (2002) and Kuvač (2007) are not considered appropriate for the first grade of primary school.

This research broaches questions on the segments of content and time frame of teaching initial reading and writing and appropriate creation of complex teaching contexts. Their structure should be based on the results of research in linguistics and psychology.

References

Bežen, A. (2002). Metodički pristup početnom čitanju i pisanju na hrvatskom jeziku. Zagreb: Profil.

Bežen, A. (2008). *Metodika: Znanost o poučavanju nastavnog predmeta*. Zagreb: Učiteljski fakultet Sveučilišta u Zagrebu i Profil.

Bežen, A. (2011). Matične znanosti metodike u ranom poučavanju hrvatskoga/materinskoga jezika. In: A. Bežen and B. Majhut (Eds.), *Redefiniranje tradicije: dječja književnost, suvremena komunikacija, jezici i dijete* (pps. 31-52). Zagreb: Učiteljski fakultet Sveučilišta u Zagrebu i ECNSI.

Erdeljac, V. (2009). Mentalni leksikon: Modeli i činjenice. Zagreb: Ibis grafika.

Jelaska, Z. (2007). Pojedinac i jezik. In: L. Cvikić (Ed.), *Drugi jezik hrvatski* (pp. 34-39). Zagreb: Profil.

European Encyclopedia on National Education Systems (United Kingdom – England; Finland; Ireland; Hungary; Netherland) /online/. Retrieved on 7th September 2012 from: https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Main_Page

Kuvač, J. (2007). Uloga vrtića u razvoju jezičnih sposobnosti i predvještina. In: L. Cvikić (Ed.), *Drugi jezik hrvatski* (pp. 60-63). Zagreb: Profil.

Rosandić, D. (2002). Od slova do teksta i metateksta. Zagreb: Profil.

Stančić, V., Ljubešić, M. (1994). Jezik, govor, spoznaja. Zagreb: Hrvatska sveučilišna naklada.

Ante Bežen

Faculty of Teacher Education, University of Zagreb Savska cesta 77, 10 000 Zagreb, Croatia ante.bezen@ufzg.hr

Vesna Budinski

Faculty of Teacher Education, University of Zagreb Savska cesta 77, 10 000 Zagreb, Croatia vesna.budinski@ufzg.hr

Sadržajno i vremensko određenje pouke u nastavi početnog čitanja i pisanja na hrvatskom jeziku

Sažetak

Odgojno-obrazovno metodički čin u nastavi početnog čitanja i pisanja proces je koji se sastoji od sadržajno i vremenski određenih i povezanih segmenata pouke. Bitno je određen suodnosom polaznika koji uči, sadržaja koji polaznik uči i njegove odgojno-obrazovne svrhe, poučavatelja koji organizira poučavanje te vodi do svrhe čina, vremena trajanja čina i sustava metodičke provedbe kojim se čin ostvaruje (Bežen, 2008). Sadržaj, pouka i učenje ostvaruju se jezičnim djelatnostima u međudjelovanju. Jezične djelatnosti podrazumijevaju jezično primanje i jezičnu proizvodnju. "Primanje uključuje razumijevanje govora (slušanje), razumijevanje pisanoga teksta (čitanje), razumijevanje jezika, geste i mimike (gledanje). Proizvodnja uključuje zvučno oblikovanje (govorenje), pismovno oblikovanje (pisanje), pokretno oblikovanje (znakovanje)" (Jelaska, 2007, str. 34). Metodički čin početnog čitanja i pisanja ostvaruje se, u Republici Hrvatskoj, u vremenskoj dimenziji od jedne školske godine. Početno čitanje i pisanje slovenskoga jezika u Sloveniji uči se u prvom obrazovnom ciklusu, a vremenski obuhvaća dvije školske godine.

Istraživanje je provedeno u lipnju 2012. godine na prigodnom uzorku učitelja u zvanju mentora i savjetnika (N=354). Hi kvadrat testom provjerilo se postoji li razlika u postotku učitelja koji misle da je prikladna vremenska dimenzija poučavanja početnog čitanja i pisanja jedna školska godina i onih koji misle da su to dvije školske godine. Postoji statistički značajna razlika u učestalosti poučavanja učenika u nastavnim situacijama, a dokazana je Friedmanovim testom. Wilcoxonovi su testovi pokazali u kojem smjeru idu razlike među pojedinim parovima nastavnih situacija. Istim su se testovima provjerile razlike u učestalosti primjene metodičkih postupaka.

Ključne riječi: metodički čin; početno čitanje i pisanje; vremenska dimenzija pouke