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An analysis of the legibility of cursive handwriting of prospective primary school teachers

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Abstract

The purpose of this study is to analyze the cursive handwriting of prospective primary school teachers from the perspective of legibility. The study is a descriptive one with its aim to portray the existing state of affairs, making use of qualitative methods. The research involves 130 prospective primary school teachers. They were asked to copy a text given by the researchers, using cursive handwriting. The cursive handwriting of prospective teachers was analyzed using the “Cursive Handwriting Assessment Form” provided by Erdoğan (2010). The study revealed that the cursive handwriting of prospective primary school teachers was adequately legible, yet not without problems regarding certain issues.

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1. Introduction

Writing is a most important skill for individuals, allowing them to express themselves effectively, and to communicate efficiently with others. According to Akyol (2007), writing entails the ability to use motor skills to generate the symbols and signs, which in turn generate our thoughts. To Güneş (2007), on the other hand, writing is the expression of the information in the brain, in the written form. That is why it is crucial for students to understand, and reflect in their brains, what they listen to or read.

Writing is the hardest to master language skill. Writing is at best a complex process requiring the coordination of many cognitive skills such as planning, combining, transforming, and reviewing (Benjamin, 2005; Canady, 2008; García and Fidalgo, 2008). Writing is not a skill we are born with, but one developed solely through education (Duran and Akyol, 2010). The primary school education is crucial for a child learning and improving writing. The activities to be carried out in this period should focus on instilling the habit of writing and a positive attitude towards writing, in addition to teaching the child how –in the mechanical sense– to write (Erdoğan, 2010). That is why students should be made to develop fast, legible, functional, and aesthetically pleasing writing skills, from the first grade on.

In Turkey, the students attending the first grade are taught how to write using cursive handwriting. Cursive handwriting is a form of writing characterized by connections between letters to form syllables, and connections between syllables to form words. When using cursive handwriting, the student is made to establish connections at all

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times. This forces the student to think about all the details of writing (Güneş, 2006). The research indicates that cursive handwriting contributes to cognitive development of the student, and helps to improve his/her attention related skills. Cursive handwriting not only allows one to write with speed, but also makes it easier to recognize words, and is in line with the body and muscle development of students (MEB, 2010).

Legibility is a most important measure in determining whether the students have developed adequate cursive handwriting skills. Legibility is based on criteria such as accurate writing of letters in compatible sizes, with acceptable connections between letters, as well as forming correct extensions of letters, adjusting for correct pitch and spaces between words, and strict observation of the line of letters (Akyol, 2007; Tseng and Chow, 2000). Various pieces of research (Yıldız and Ateş, 2007; Akt., Yıldız, Yıldırım and Ateş, 2009) had revealed that the handwriting of the majority of students was not legible enough. Education plays a vital part in helping the students to develop legible writing skills. According to Akyol (2007), the most important cause of legibility problems is the lack of adequate and systematic training. A typical example in this respect is the failure of the teachers to write on the blackboard, using correct cursive handwriting. For teachers to be able to provide quality education to students, using cursive handwriting, they should, in the first place, be able to write legibly, and act as models for their students. The studies so far indicate that the cursive handwriting of teachers leaves much to be desired. The research by Yıldız, Yıldırım, and Ateş (2009) shows that the pitch of the handwriting of almost half of teachers was insufficient, and that their handwriting was mediocre with respect to spacing, size, shape, and observation of line. In the light of these findings, the level of legibility of the cursive handwriting by prospective teachers, who will in the near future begin teaching children, gains ever more import for them to be able to instill in children the skill to write cursive handwriting as required. Hence, the objective of this study; to analyze the legibility of cursive handwriting by prospective primary school teachers.

2. Method

2. 1. Research model

In this study aiming to analyze the cursive handwriting of prospective primary school teachers with a view to legibility, the descriptive model was employed for the objective was to reflect the state of affairs as is. The qualitative research method was employed in collecting, analyzing, and interpreting the data gathered in the research.

2. 2. Area of Research

The research group contains 130 prospective teachers, senior year students at the Departments of Primary School Teaching at Hacettepe University and Karadeniz Technical University. The research group was selected using a directed sampling method, namely accessible state sampling. The research group included 68 prospective teachers from Hacettepe University, and 62 from Karadeniz Technical University. 78 of the prospective teachers are female, and 52 are male.

2. 3. Data Collection Tool

In the research, the legibility section of the Cursive Handwriting Assessment Form prepared by Erdoğan (2010) was used to assess the legibility of cursive handwriting of prospective teachers. The said section of the cursive handwriting assessment form comprises seven criteria: “writing letters correctly”, “size of letters”, “pitch”, “connections between letters”, “extensions of letters”, “observation of lines”, and “spacing between words”. The criteria are to be graded on a three point scale: “poor (1)”, “average (2)”, and “good (3)”. Cronbach’s Alpha reliability coefficient for the form used in the research is determined as .87.

2. 4. Collection and Analysis of Data

First of all, the researchers selected a text to use in determining the legibility level of cursive handwriting by prospective teachers. The text was then read to prospective teachers at a suitable tone and speed, and the subjects were requested to put it on paper using cursive handwriting. The texts written by the prospective teachers were then collected, and cursive handwritings of subjects were graded by two researchers under the light of the criteria in the form. In order to determine their consistency, the reliability coefficient among the graders was also calculated, and found to be .88. This shows that grading by both researchers was highly consistent with that of the other. The

research also indicates the frequency and percentage of the prospective teachers with respect to the grades they had received on the assessment form.

3. Findings and Comments

In this section, the findings regarding the legibility level of the cursive handwriting by prospective primary school teachers are described. The frequency and percentage regarding correctness of the letters in the cursive handwriting of prospective primary school teachers are shown in Table 1.

Table 1. Frequency and percentage regarding correctness of letters in the cursive handwriting of prospective primary school teachers

	Poor (1)		Average (2)		Good (3)	
	f	%	f	%	f	%
Writing Letters Correctly	35	26.92	51	39.23	44	33.84

According to the data in Table 1, it was seen that 33.84% of prospective primary school teachers write letters of cursive handwriting correctly. On the other hand, 26.92% were found to write cursive handwriting letters incorrectly. An in-depth analysis of the texts produced by prospective teachers shows that problems with letters “f, g, ğ, h, j, l, r, s, y” are more frequent than others.

Frequency and percentage regarding the letter size in the cursive handwriting of prospective primary school teachers are shown in Table 2.

Table 2. Frequency and percentage regarding the letter size in the cursive handwriting of prospective primary school teachers

	Poor (1)		Average (2)		Good (3)	
	f	%	f	%	f	%
Size of Letters	12	9.23	41	31.53	77	59.23

Upper and lower case letters should be reflected on lines in different sizes. According to Table 2, 59.23% of cursive handwriting of prospective teachers was found to meet this criterion with success.

Frequency and percentage regarding the pitch of cursive handwriting of prospective primary school teachers are shown in Table 3.

Table 3. Frequency and percentage regarding the pitch of cursive handwriting of prospective primary school teachers

	Poor (1)		Average (2)		Good (3)	
	f	%	f	%	f	%
Pitch	61	46.92	54	41.53	15	11.53

Cursive handwriting, characterized by connections between letters, should also have a pitch. This pitch should be maintained consistently through the whole text. An analysis of Table 3 shows that the cursive handwriting of prospective primary school teachers is insufficient in terms of pitch. In the review of texts produced, it was observed that the subjects produced connected words, which, however, were not pitched.

Frequency and percentage regarding the inter-letter connections in the cursive handwriting of prospective primary school teachers are shown in Table 4.

Table 4. Frequency and percentage regarding the inter-letter connections in the cursive handwriting of prospective primary school teachers

	Poor (1)		Average (2)		Good (3)	
	f	%	f	%	f	%
Inter-Letter Connections	20	15.38	37	28.46	73	56.15

Connections between letters are crucial in cursive handwriting. What prospective teachers will be required to teach their students in the first place is writing and connecting letters. According to data in Table 4, it is possible to argue that prospective primary school teachers do not face substantial problems in terms of connections between letters when writing cursive handwriting. The problems in this respect are more frequent in connecting letter “r” with the letter to follow.

Frequency and percentage regarding the extensions of letters in cursive handwriting of prospective primary school teachers are shown in Table 5.

Table 5. Frequency and percentage regarding the extensions of letters in cursive handwriting of prospective primary school teachers

	Poor (1)		Average (2)		Good (3)	
	f	%	f	%	f	%
Extensions of Letters	7	5.38	58	44.61	65	50

Care should be devoted to upper and lower extensions of letters in cursive handwriting. It is evident in the data presented in Table 5 that prospective primary school teachers are generally careful with respect to extensions of letters. An in-depth analysis of the texts produced by subjects reveal that upper extensions of letters “f, h, l”, and lower extensions of letters “j, y” may be considered problematic.

Frequency and percentage regarding the observation of lines in cursive handwriting of prospective primary school teachers are shown in Table 6.

Table 6. Frequency and percentage regarding the observation of lines in cursive handwriting of prospective primary school teachers

	Poor (1)		Average (2)		Good (3)	
	f	%	f	%	f	%
Observation of Lines	11	8.46	40	30.76	79	60.76

When the data in Table 6 were examined, it was seen that prospective primary school teachers generally observe lines when using cursive handwriting. In the texts produced it was observed that the subjects devote attention to have the letters touch the guideline in the bottom.

Frequency and percentage regarding the spacing between words in cursive handwriting of prospective primary school teachers are shown in Table 7.

Table 7. Frequency and percentage regarding the spacing between words in cursive handwriting of prospective primary school teachers

	Poor (1)		Average (2)		Good (3)	
	f	%	f	%	f	%
Spacing Between Words	28	21.53	38	29.23	64	49.23

Spacing between words is an important criterion within the framework of cursive handwriting. A review of the cursive handwriting of prospective primary school teachers reveals that 49.23% of the subjects meet this criterion at a sufficient level.

4. Conclusion and Recommendations

The purpose of this study is to analyze cursive handwriting of prospective primary school teachers with a view to legibility. The findings of the study show that the cursive handwritings of prospective primary school teachers are sufficiently legible. Yet issues in certain areas are not non-existent.

An in-depth analysis of prospective teachers reveals that they have problems in writing letters “f, g, ğ, h, j, l, r, s, y” correctly. It is very important to write letters correctly in cursive handwriting. The teachers who will be responsible with teaching the students this form of writing need to know how to write all letters correctly.

The cursive handwritings of prospective primary school teachers who participate in the study were found to be sufficient in terms of “size of letters”, “inter-letter connections”, “extensions of letters”, “observation of lines”, and “spacing between words”. However, it was also found that the subjects do not devote adequate care in the upper extensions of letters “f, h, l” and the lower extensions of letters “j, y”, and that they had the most frequent problems when connecting letter “r” with the one to follow it. In addition, the cursive handwriting of prospective primary school teachers was found to have much room for improvement in terms of pitch.

In the light of the results of this study, the following recommendations would be in order with respect to the training of teachers in terms of education on cursive handwriting, as well as with respect to future research:

1. Prospective teachers should be provided guidance in courses where cursive handwriting is taught, on correct practices regarding the letters they fail to write correctly.
2. In courses where cursive handwriting is taught, emphasis on the pitch of the writing should be underlined, and the prospective teachers should be offered chance to practice.
3. Similar studies may be carried out with larger samples of prospective teachers.
4. Cursive handwriting of primary school teachers may be analyzed.

References

- Akyol, H. (2011). *Türkçe ilkokuma yazma öğretimi*. Ankara: PegemA Yayıncılık.
- Benjamin, A. (2005). *Writing in the content areas*, second edition, eye on education, New York.
- Canady, C. E. (2008). *Effects of models, writing frames, and sentence combining on second grade writing quality*, doctoral of dissertation, University of Virginia.
- Duran, E. and Akyol, H. (2010). Bitişik eğik yazı öğretimi çalışmalarının çeşitli değişkenler açısından incelenmesi. *Türk Eğitim Bilimleri Dergisi*, 8 (4), 817-838.
- Erdoğan, T. (2010). *Ana dili öğretimiyle birlikte başlayan yabancı dil öğretiminin ilköğretim birinci sınıf öğrencilerinin temel dil becerilerine etkisi*. Unpublished PhD Dissertation, Hacettepe Üniversitesi, Ankara.
- García, J. N. and Fidalgo, R. (2008). *Orchestration of writing processes and writing products: a comparison of sixth-grade students with and without learning disabilities*, *Learning Disabilities: A Contemporary Journal*, 6(2), 77-98.
- Güneş, F. (2006). Niçin Bitişik Eğik Yazı. *Bilim ve Aklın Aydınlığında Eğitim Dergisi*, 71, 17-19.
- MEB. (2010). *İlköğretim Türkçe Öğretim Programı ve Kılavuzu (1-5. Sınıflar)*. Ankara: Devlet Kitapları Müdürlüğü Basım Evi.
- Tseng, M. H. & Chow, S. M. K. (2000). Perceptual-motor function of school-age children with slow handwriting speed. *The American Journal of Occupational Therapy*, 54 (1), 83–88.
- Yıldız, M., Yıldırım, K. and Ateş, S. (2009). Sınıf Öğretmenlerinin Sınıf Tahtasına Yazdıkları Yazıların Okunaklılık Bakımından Öğrencilere Model Olmadaki Uygunluğu. *Uluslararası İnsan Bilimleri Dergisi*, 6 (2), 75-88.