

## LITERACY TEACHING TO STUDENTS SOCIALISED IN DIFFERENT VISUAL CULTURES

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### Abstract

In recent years the Hungarian educational system has witnessed an increase in the number of students mostly coming from the Middle East. Their future largely depends on how well they can adapt to the Hungarian educational process, which ensures their successful social integration. The paper is centred around a multiple case study which examined the development of Hungarian literacy skills of children aged 6 to 9 in the light of whether they knew or had learnt to read and write in their native language. The target group students' language had a right-to-left writing system, as opposed to Hungarian which is written from left to right. The results of the study are used to demonstrate the characteristics of Hungarian literacy teaching involving students socialised in right-to-left visual culture.

**Keywords:** literacy development, visual socialization, script direction, sensomotoric skills, migrant pupils

### INTRODUCTION

In recent years the Hungarian educational system has witnessed an increase in the number of students with immigrant backgrounds. The statistical distribution of migrant students in schools shows that from small towns to Budapest practically every school has students who do not use Hungarian as their first language (Kincses, 2015: 8). However, their number is relatively low in proportion to the Hungarian population and compared to European demographic average.

The population of Hungary is less than 10 million (9 764 000) of which 172 600 persons are non-Hungarians, that is 1,8 % of Hungary's total population. There are 1 493 609 persons in the Hungarian Public Education system of which 15 656 children and students are foreign. These data are useful for orientation among the numbers of the different groups, but unfortunately they are not fully reliable since the definitions of the different groups are not always consistent with too many undefined variables.

The students arriving to Hungary mostly come from the Middle East or Africa. Their first language differs typologically from the Hungarian language, since a large number of students' first language has a right-to-left writing system, as opposed to Hungarian which is written from left to right. The other characteristic of the group is that although the students typically had not received any literacy skill development prior to starting schooling in Hungary, the visual culture, they were accustomed to having a significant impact on their spatial perception.

The key of their future lies in the capability of entering the educational process, which will enable their successful social and labor market integration later on. In other words integration into public education fundamentally determines the immigrant children's future social integration. The social integration of immigrants is an important

social challenge which needs to be addressed by all host countries. In migration research social integration is considered successful if the immigrant person can find a job and is no longer dependent on social welfare. Actions and aids facilitating labour market integration vary by country showing smaller or larger similarities but the de goal is the same (Bodolai–Kováts, 2013; Faludy–Schmidt, 2013; Favell, 2001; Joppke, 2007a, 2007b; Simon, 2005). In order to ensure their successful labour market integration in the future, immigrant children need to obtain professional qualification in the educational system. Participation and integration in the educational system means that the children attend classes appropriate to their age in a public education institution. So, successful integration in public education can be regarded as a short-term goal for children (Schmidt, 2017).

Linguistic integration is the basis for both school and wider social inclusion. Language integration takes place on multiple scenes at a time, meaning that the child is exposed to constant linguistic exposure for years, until he or she reaches from the most basic communication situations to the diverse use of language in everyday life. In addition to this learning process, the child must learn and use a wide range of vocabulary and language forms used in school in order to successfully complete the course and begin the next school year. Successful school performance requires, in addition to knowledge of language elements, high level of organization of literacy skills. According to this, the learner must be able to read and write in Hungarian and to use the required writing direction.

According to Baker (Baker, 2011: 12) the predicted time of language integration into public education takes 5-8 years to achieve such level that the students can easily follow the intructions in classes as well as read and write in the required subject specific manner. Within this period a high level of everyday use of the language is expected after 2-3 years, while the acquisition of the medium of teaching can take up to eight years. Due to the length of the process students often do not face the challenges of linguistic integration as a child in primary school but at an advanced age. If we look only at the predicted time for the language acquisition, that practically excludes to reach a high enough level of linguistic integration because the student has to leave school sooner than it could be completed.

In the study I present a multiple case study that is carried out on literacy building for students socialised in different visual cultures. First, I introduce the relevant literature, then I describe the methodological aspects of the research and its results, and finally I present some of the conclusions.

### **Theoretical framework**

Based on the results of Hungarian and international research, two essential elements are highlighted in the progress in school (Baker, 2011, Cummins, 2004, Windle – Miller, 2012). On the one hand, students need to master the language of the host country - in our case Hungarian - and on the other hand, they must be able to read and write in Hungarian. The reading and writing skills of migrant children entering the lower grades coincide with the period of acquisition of the Hungarian language while in most of the cases they do not have prior experience in school (Schmidt, 2014).

Research results show that the development of literacy is accompanied by cumulative and hierarchically organised processes. The specific skills complement and support each other in mobilising literacy-related operational skills and content. The term operational skill refers to the procedural knowledge of writing and reading, while content means the knowledge and application of lexical and grammatical elements in word or text level operation. Due to the hierarchical organisation of skills,

certain elements of the skill repertoire cannot develop or become stuck at one point due to the absence of other prior skills. In the development of literary skills, two basic levels of processing can be distinguished: word-based and text-based. It is clear that the development of textual skills requires the prior existence of word level skills (Lesaux et al., 2006). The basis of the word skills is the ability to recognise words, which requires high level in decoding and spelling. Fast and accurate word recognition skills are the key to achieving satisfactory reading comprehension (Lesaux et al., 2006).

The instinctive interiorisation of the location of written information and based on this the automatisisation of the spatial orientation play an important role in the development of literacy skills. The appearance and directions within the plane (above, below, left, right, to the left, to the right) are universal. However, the direction of the visual representation and the decoding of the given information from right to left or from left to right are culturally determined. Moreover, it is possible that there are two additional directions in space (above and below) in the decoding process which are also embedded in the visual culture. Reading is basically a decoding skill in which written information is transformed into language structures (Gósy, 2005: 362). The reading process consists of two main parts: the first part is the decoding itself, that is, the segmentation of the word, the second part is the identification of the meaning of the segmented word, which may be preceded by the recognition of morphological structures. The first part of the process can be divided into two units, which are of particular importance for people who are socialised in different visual backgrounds. Within this phase the reader has to adjust his eye movement to the writing direction of the text and that requires a high degree of automatisisation in the procedural process of the decoding. The reader identifies the Hungarian written text, then there is a quick movement from left to right, this is the so-called saccade, followed by a pause which is the fixation. In addition to these two movements, the reader occasionally engages in regressive eye movement, which is caused by the lack of experience in reading, the complexity of the text or simply by fatigue (Gósy, 2005: 363).

In addition to reading, writing is also the key element to developing literacy skills. Compared to the reading process - of which we have a great deal of information - the writing process is generally a less researched area (Crystal, 2003: 266, Gósy, 2005: 362, Csépe et al, 2008, Pléh – Lukács, 2014). Lengyel writes in detail about the anatomy of the ontogenesis of Hungarian writing, that is, the stages in acquisition, learning and development of writing. He lists the prerequisite skills of learning to write within that the auditory-articulative, optical-visual, and motoric skills must have a certain degree of autonomy (Lengyel, 1999: 180-181). The definition of writing as a psycholinguistic process is found by Crystal's, according to which "there must be a design phase in which thoughts are organised and a lexical / grammatical outline is produced" (Crystal, 2003: 267). Then the motoric activity begins when the planned content is written down by taking into account the language accuracy and spelling rules. The main obstacle to the examination of writing is that it is not clear what is happening during the design and the motoric phase, how they are related to each other and what type of control mechanisms are used through the redesign. It is highly probable that different psycholinguistic processes occur during writing than reading. Although the procedure of the writing process is still not fully discovered, the prerequisite skills needed for it are outlined by pedagogical observations. The literacy skills are based on the development of the hand dominance and the existence of cerebral dominance that is closely related to speech perception. The proper coordination of the hands and the fingers in accordance with the muscles which control

them is necessary. It is essential that the retention of the visual memory reaches a certain level through which writing units can be set. Another cornerstone of writing is the ability to discriminate, which helps differentiate between sounds. The written, as well as the oral language is built on distinctive features that have no independent meaning.

### **Methodology**

The research examines the performance of children socialised in different visual contexts with special emphasis on the affects of students' literacy skills in Hungarian if their language has a right-to-left writing system, as opposed to Hungarian which is written from left to right. In addition, there is a particular mechanism observed in the acquisition of literacy skills by those children who have not yet attended school, that is the students who had no literacy skills in their first language when they started school in Hungary. Presumably the visual culture they were accustomed to had a significant impact on their spatial perception.

The paper is centred around a multiple case study conducted among children aged six to nine coming from the Middle-East (Duff, 2008: 31, Yin, 2014: 56). Immigrant primary school students typically learn to read and write parallel to learning the Hungarian language, therefore they do not necessarily have prior literacy skills and competences. However, literacy skills are crucial in linguistic integration and should start with literacy teaching. For the purposes of this presentation, literacy teaching means the teaching of the Hungarian alphabet as well as basic reading and writing skills.

The children involved in the research belonged to the two groups mentioned above: one group had already learned to read and write before coming to Hungary; the other group did not yet have literacy skills. Both groups were divided into two subgroups a) who studied for one year in Hungarian public education b) who had been studying for more than one year. Each group contained 8 students. There were also two Hungarian monolingual control groups included in the study where the students bear the same characteristics as the immigrant children in the other groups.

When choosing the children the following demographic datas were taken into consideration: the country of origin, age, the time spent in Hungarian school and the time spent in school in their country of origin. The students were chosen from five schools in Budapest where they do not receive special Hungarian assistance, only 1-2 hours a week Hungarian as a foreign language supplementary classes. These classes mainly focus on the subject matter vocabulary and the students do not receive any special development activities serving literacy building purposes.

The data collection was based on classroom observations when the children were engaged with writing exercises. The peculiarities of the writing direction were analysed on the basis of writing activities in notebooks, workbooks and worksheets.

### **Results**

The results of the study are used to demonstrate the characteristics of Hungarian literacy teaching involving students with different visual backgrounds.

Both of the groups shows similar characteristics in their performance. The most spectacular is misorientation in writing direction, that is, writing from right to left instead of left to right in the Latin alphabet. Another leading feature is misspelling, which is centered around the misuse of visually similar letters such as *d - b*, *p - b*, *sz - zs*.

In addition to the above mentioned features in the case of the group with prior schooling experience and literacy skills,, in this spatial misorientation appeared. In

such cases, the learner starts writing on the wrong side of the line, which is associated with the mirror effect when the reader should read the text backwards, that is, the spelling makes sense by decoding it backwards.

Another type of misorientation in writing direction is the reversed writing, in this case the reader would not perceive any traces of the reversion in the writing direction. The difference occurs throughout the writing process. The student measures the space needed for writing and then writes the items backwards. The reversed writing could appear at words, sentences word by word or whole sentences. This procedure requires tremendous energy because such writing is not adapted to the pronunciation of textual units, but to segments of words through a reverse processing mechanism.

Besides the spatial misorientation, the lack of script organisers in sentences such as capital letters, space between words and punctuation was also found. This phenomenon makes the texts difficult to read and could cause great misunderstanding since the meaning could be lost through the segmentation process.

Among the subgroups it was noticeable that the students who had spent longer period of time in public education in Hungary produced less of the misuse and misorientation that was described above.

At the Hungarian monolingual control groups none of the mentioned phenomena was observed. In the case of one student, the misuse of visually similar letters was seen, which was most probably due to his individual underdevelopment in the prerequisite skills and not due to the visual culture he was socialised in.

## Conclusions

Based on the analysed data and the findings, I produce recommendations in the following two areas which would substantially enhance the integration of children and young people into public education at an early stage.

The first area proposed by the study is a specific supplementary method, the use of complex language proficiency tests for determining the development directions for students at the time of admission to school. The complex language proficiency (placement) testing provides a fair picture of the language skills of the student admitted to the school and based on that can set the direction of development. The complex test collects information about the student's previous school experience, first language background and the language skills and schooling of the parents and other family members. All these factors influence the student's attitude to school as a social institution as well as the family's intellectual and financial means of motivating them. The different parts and process of complex language proficiency testing make up a system of levels based on the taxonomy of Colin Baker, American researcher of bilingual education. Baker built his system on the stages and output levels of the path travelled by US immigrants (mainly speaking Spanish as a first language) moving from a monolingual world to a bilingual one (Baker 2011). After adapting Baker's system to the Hungarian educational system, six output levels were identified (Schmidt 2014a), based on the taxonomy teachers could easily choose the appropriate development path for the student.

The other area which significantly influences effective participation in class is the development level of literacy skills. The first-language level of literacy skills, which can be determined by a complex language proficiency test, is a good indicator of how much energy will be needed from the students and the teachers during the development. By definition, as we saw earlier in the paper, literacy teaching is the teaching of reading and writing skills to people unfamiliar with the Latin alphabet and/or fully illiterate people. It usually incorporates basic arithmetic skills as well, primarily focusing on

figures and finger counting. The output of the learning process is literacy which means that the student is capable of using the above mentioned skills efficiently (Majzik 1998). Highly developed literacy skills latently contributes to the students' learning performance, so literacy teaching plays an important part in their development programme. At Hungarian as a second language classes literacy teaching is integrated in the syllabus to help students learn the Hungarian phonemes and letters, as well as to acquire and deepen the operational knowledge required for the literacy skills. The theoretical background, methodology and teaching techniques of literacy teaching and literacy skills are strongly related to the theory and practice of alphabetisation. That is the teaching of the alphabet related to a specific language, as well as the teaching of the procedure of reading and writing therefore it could be defined as the preparatory phase of literacy teaching and literacy skills development. The study presents the development of the prerequisite literacy skills needed for the the alphabetisation and the acquisition of literacy skills.

The visual socialisation resulting in the writing direction essentially determines the perception of written text and consequently the way in which information is taken up. The advanced development of the prerequisite literacy skills is necessary for children to be able to successfully meet the challenges of mastering their literacy skills after entering the school system. It also gives the opportunity to children with different visual backgrounds to navigate through the left to right visual space associated with the Latin alphabet. The interdependent nature of the tasks, on the one hand follows and imitates the natural evolution of prerequisite skills and, on the other hand it directly develops and reinforces the links between the directions and the language structures in relation to the linguistic content. Thus, in the case of children with visual experiences about writing, particular emphasis should be put on assessing and developing their sensomotoric skills and spatial orientation skills in the preparatory stage before teaching reading and writing.

In the case of children growing up in different visual cultures, the fact that their first language is written from right to left – as opposed to Hungarian from left to right – plays a special role in the development of literacy skills. Regardless that the children have not yet learned to read and write at all the visual environment and the features of the accustomed visual reality significantly influence the spatial perception. Therefore special emphasis should be put on testing and developing senso-motoric abilities during the pre-literacy phase (Gyarmathy, 2007: 90-92). The spatial orientation and building sequences are of particular importance in the development of creating spatial and temporal sequences, the direction of eye movement and fine motoric movement.

In the Hungarian language specific spatial orientation skill development, the focus must be on the fact that the processing of the written information goes from left to right and from top down. These two directions should be emphasised in the development tasks: at the beginning, only work on exercises that practice these two directions should be done. If the application of the left-right and top-down directions become automatic, then the opposite two directions - right-to-left and bottom-up - could be the subject of separate exercises. If all the directions are consolidated and used autonomously, the different directions may appear within the same worksheets. The sequences organised in this order should improve the perception of directions and result in the right eye movement as well as in the development of fine motoric skills.

We need to highlight the necessity of literacy teaching for students whose first language is a non-Latin script language and/or have right-to-left writing system. The empirical study was motivated by the hope of practical use.

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