



Reading skills among students with intellectual disabilities



Christoph Ratz*, Wolfgang Lenhard

The University of Würzburg, Germany

ARTICLE INFO

Article history:

Received 13 August 2012

Received in revised form 22 January 2013

Accepted 27 January 2013

Available online 15 March 2013

Keywords:

Intellectual disabilities

Reading

Writing

ABSTRACT

Students with intellectual disabilities (ID) display an extremely wide variety of skills in the field of literacy, and the ability to read and write are central learning aims in the education of students with ID. It is vital to gain detailed knowledge on the literacy skills of students with ID in order to plan instruction, create learning environments, implement educational policies or funding models and specify future fields of research. However, there has been little research into the prevalence and variation of their reading skills. The present study assessed the reading stages of 1629 school-aged students with ID regardless of aetiology (age 6–21) in Bavaria, one of the largest regions in Germany within a randomly chosen and representative sample. Teachers described the reading and writing stages of their students in a questionnaire following the developmental model of Frith. Results indicate that 29.3% do not read at all, 6.8% read at a logographic stage, 31.9% at an alphabetic and 32% at an orthographic level. Writing achievements are lower on average. We analyze and discuss the determinants of literacy in this sample with regard to the sociocultural background of students with ID and draw conclusions for teaching and school policies.

© 2013 Elsevier Ltd. All rights reserved.

1. Introduction

Although literacy as an aim in education for students with intellectual disabilities (ID) is non-optional, imponderable questions are related to this subject such as ‘How many students with ID learn to read and write?’ and ‘How well do they read and write?’. Initially, when educational efforts were beginning to be made for these students, literacy was not on the agenda, it was considered too challenging for them (Katims, 2000). Over the last decades more and more brief reports were published and some studies were also conducted describing prevalences in small-scale research (Katims, 2001; Koch, 2008). Broader studies, however, giving reliable and representative answers are still missing.

And still, even the published studies report simplistically on the proportion of students who read and write, and the description is not theoretically framed: To date it is unclear, which developmental stage they attain or how many students read or write at all. The research question of this paper is linked to the developmental model of reading (Frith, 1985) and the three stages for reading which she has described, the logographic, alphabetic and orthographic stages (Table 1). This model is the most common one and therefore may serve well for international discussion.

Frith’s model comprises three stages of reading and writing development. The first stage, “logographic”, is primarily visually, rather than analytically, oriented. Words are learned by rote memory and any visual cue to a word is used and more or less associated with the graphic representation of the word as in well-known logos of large companies. The second stage, “alphabetic”, is much more analytical. During this stage, the phonemes and graphemes are identified in a word element by element so that the children learn to sound out words. The alphabetic stage is often called the

* Corresponding author. Tel.: +49 9313184851.

E-mail address: christoph.ratz@uni-wuerzburg.de (C. Ratz).

Table 1

The six-step model of reading and writing acquisition (Frith, 1985, 311) (original formatting).

Step	Reading		Writing
1a	Logographic ₁	→	(Symbolic)
1b	Logographic ₂		Logographic ₂
2a	Logographic ₃	←	Alphabetic ₁
2b	Alphabetic ₂		Alphabetic ₂
3a	Orthographic ₁	→	Alphabetic ₃
3b	Orthographic ₂		Orthographic ₂

'phonological route' (e.g. Roch & Jarrold, 2008). The third and final stage in Frith's model is the "orthographic" stage, where readers have learnt to analyze words from larger units. Letter groupings and word structure become more important for increasingly fluid reading, and therefore it is called the 'visual route'. Table 1 shows the bidirectional relationship between reading and writing.

Frith's model has been subject to discussion. The alphabetic stage represents the core of reading, the allocation of phonemes and graphemes. The role of the logographic stage for this achievement is still under discussion. Masonheimer, Drum, and Ehri (1984) have described the logographic stage as "environmental print"; their research is concerned with the question whether extensive experience with this stage evolves into context-free word reading skills. They showed that children reading on a logographic level had difficulties without cues on the context, especially when logos were not offered. In this case their logographic reading performance dropped dramatically. They argued that extracting information from environmental print is not nearly as complicated, as decoding and interpreting graphemes. Ehri and Wilce (1985) compared prereaders, novices and veterans in kindergarten age and showed that novices and veterans differ substantially from prereaders as they use phonetic cues rather than visual cues. Phonetic cue processing therefore seemed a more important learning mechanism than processing sight words. Alongside this discussion and in response to the German sample of this study it should also be taken into account that the orthography of the German language is far more shallow than the English language. German students spend far less time in the logographic stage as English or American students (Seymour, Aro, & Erskine, 2003).

1.1. Prevalence of reading and writing amongst students with ID

Studies on the reading and writing achievements of students with ID have been sparse and not representative. Present studies tend to focus on reading instruction rather than on prevalences (i.e. Baylis & Snowling, 2012; Browder, Courtade-Little, Wakeman & Rickelman, 2006; Browder, Gibbs, Ahlgrim-Delzell, Mraz, & Flowers, 2009; Goetz, Hulme, Brigstocke, Carroll, Nasir, & Snowling, 2008). Katims (2001) examined a sample of 132 students in Texas and found 22% of them showing the full criteria of "minimal literacy". Byrne, Buckley, MacDonald, and Bird (1995) found an extremely broad variety of reading abilities in 24 students with Down's syndrome, and mention that as many as half of students with DS read at least 50 words (Buckley, Bird, & Byrne, 1996). Koch (2008) also reports extreme differences between two schools for students with ID in Germany. In one school 42% of the students were found to be reading at an alphabetical level, in the other only 7% read at the same stage. Due to the high variation in the reported data within the studies, an overall picture of the reading and writing abilities of students with ID is still missing. Neither the range nor the distribution of reading skills is visible, and different diagnoses for ID have not been taken into account in these studies.

1.2. Methodological issues in the assessment of reading and writing of students with ID

A possible reason for the lack of empirical data may be due to the methodological difficulties, associated with this research question. Assessing skills of students with ID is a difficult task. Intelligence and language range from virtually normal to severe disabilities, and many of the students cannot express themselves. Some of them may take part in standardized test routines, but it is hardly possible to describe a border beneath which students cannot take part in a reliable way. This foggy line is the first methodological problem; the second is the broad heterogeneity of students with ID, combined with all sorts of other variables influencing their learning and development, such as extremely varied sociocultural family backgrounds or further medical diagnoses (Dworschak, Kannevischer, Ratz, & Wagner, 2012).

Individual and qualitative methods could help to solve this problem, but they are extremely laborious and not suitable for creating large samples. On the other hand, teachers of special education often have a high level of diagnostic skills and are used to applying standardized tests and interpreting the results from psychometric testing. They may serve as a more reliable source of information than teachers of regular schools. They work with their students all day and in very small groups, and because of multiple communication problems they know far more about the private life and details of the skills of their students than regular teachers do. All of them are trained in conducting intelligence tests and have mostly assessed the intelligence of their students themselves. In Germany, special education teachers are required to hold a university degree and they are familiar with theories of learning to read and write as referred to in this study.

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات