Prof. Dr. Renate Valtin emerit. Humboldt University, Berlin (renate.valtin/at/t-online.de)

Dyslexia - a useful concept?

Paper presented at the ILA conference Boston July 10, 2016

It is generally agreed that...

- Reading is a key competence for success in school and in life.
- Reading problems are a serious obstacle, compared with difficulties in mathematic and science and need special attention.
- PIRLS and PISA have demonstrated that the number of students reading below or at competence level 1 varies considerably between countries.
- Struggling literacy learners show low motivation, low self-concepts, high anxiety and low engagement in school.
- In sum: Reading problems are a real problem.

But: Is it useful to make a distinction between

- Dyslexia Legasthenie (a medical, aetiological concept of specific reading impairment in children of normal intelligence, due to genetic or neuropsychological deficits). Legasthenie is recognized in Bavaria as an incurable illness.
- and "normal" reading difficulties in children with below average intelligence?

Topics of this presentation

- Arguments are discussed and newer empirical data (e.g. an analysis of PIRLS data - Germany) presented to show that such a differentiation is not justified and in many cases even harmful for the child.
- An theoretical framework is presented for diagnosing and remediation of individual difficulties.

Arguments against a differentiation

- We face a number of different definitions of dyslexia. It is unclear what groups of poor readers are to be subsumed under this concept.
- There is no agreed operational definition.
 Prevalence rates vary between 3 and 11%.
- Whether or not a child is diagnosed as dyslexic is arbitrary.

not useful for diagnosis.

- Empirical studies show that dyslexic children and other poor readers have the same difficulties in reading and spelling.
- The diagnosis is unreliable: If different intelligence-tests and different reading and spelling tests (or combinations of reading and spelling tests) are used the same child may be diagnosed sometimes as dyslexic and sometimes as poor reader.
- "Dyslexia" is best thought of as a continuum, not a distinct category, and there are no clear cut-off points.
- My personal solution: I use "Legasthenie" in a descriptive manner, referring to all students struggling with reading, spelling and writing.

The concept of dyslexia is **not useful for therapy**.

- Dyslexic children and other poor readers profit from the same remedial trainings.
- Success of remediation is not connected to IQ.
- In Germany it was assumed that the reading (and spelling) problems are related to cognitive deficits in visual, auditory and visual-motor functions as well as in spatial orientation problems. However, the empirical data do not support these assumptions (Valtin, 1979, 1989a).
- A training in these functions has shown no therapeutical value because no transfer on reading and spelling performance occurred.

Is dyslexia an (incurable) illness?

- No. Dyslexia can be "cured" by adequate educational intervention.
- If dyslexia were an illness with genetic causes it should be rather equally distributed among German Länder and social classes.
- However: the rate of "dyslexics" varies from 1.3% in Saxony to 7.2% in Hamburg (analysis of PIRLS data).
- Dyslexia is social class dependent: 43% of dyslexics and 41 % of the other poor readers were from low SES. Only 7% of dyslexics and other poor readers were from high social class (compared to 30% of children with the highest reading competence level).

No difference between dyslexics and other poor readers

- Dyslexia correlates with the same factors as other poor reading achievement:
- Migration factors: More than half of the children with dyslexia and other reading problems had at least one foreign born parent, and did not (or not only) speak German in the family (PIRLS 2011).
- Reading socialisation in the family: PIRLS index of early experience with oral and written language, PIRLS index of home educational resource, parents as literacy role models, index of parents' attitudes toward reading, number of parents reading to their children

Arguments against dyslexia

- German teachers do not feel responsible for the failure of the pupils (According to PIRLS: Bavaria: 37%, Thüringen: 10%)
- Dyslexic children in Bavaria develop a fatalistic view ("Dyslexia comes from the Lord, from God". "I will stay like this, nothing can be done")
- Children develop fantasies and anxieties ("I believe that I have mushrooms in my brain")

The concept of dyslexia may be detrimental

Dyslexic children receive a wide range of "alternative" therapeutic interventions that are not successful for training reading:

Training of auditory perception, High tone training, Tomatis, Ordnungs schwellentraining, Training des dynamischen Sehens, Farbfolien und farbige Brillengläser, Training der Blicksteuerung, des beidäugigen Sehens, Prismen brille, Training der Händigkeit, der Ohrdominanz, hemisphärenspezifisches Training, Edu-Kinestetik, Lateraltraining,Psychomotorisches Training, taktil kinästhetische Methode, Cranio-Sacral-Therapie, Davis-Methode, Neurolinguistisches Programmieren, Ritalin und andere Medikamente, Homöopathie, Bachblüten.

A cynical argument: If children are "resistant" against such therapies this is a proof for dyslexia.

The "usefulness" of dyslexia

We should be aware however, that the medical concept is useful for certain groups:

For parents and teachers to relieve them from their responsibility

•For parents in Germany because "dyslexic" children with a medical diagnosis have the right for privileges in schools (no grades, remedial education, special support in written examinations) (In the differentiated German school system it is important to receive good grades in order to get the permission to visit an academic school after grade 4)

For medical doctors, some psychologists and dyslexia therapists as a professional strategy to recruiting clients and to participate in a profitable market. A small scale examination by the European Agency for Development in Special Needs Education

- 5 countries recognized dyslexia as a medical condition requiring a medical diagnosis (Estonia, France, Italy, Latvia, Sweden)
- and 17 did not
- The European Agency states that member countries do not present an agreed viewpoint on the concept of dyslexia but the approach taken by all countries was "to carefully identify individual learners' needs and make provisions for those needs, rather than categorize needs based on definitions."

Theoretical framework: a cognitive developmental model for diagnosing and remediation of individual difficulties

Reading problems (included dyslexia) are a result of a cumulative process of the interaction between many factors (individual characteristics of the child, family and school factors).

- Regarding individual characteristics: Reading and spelling difficulties are seen in a cognitive developmental perspective: the acquisition of reading, writing and spelling is seen as a sequence of characteristic strategies for dealing with written language, reflecting cognitive clarity, growing cognitive and linguistic insights into the relationship between spoken and written language and the specific orthography.
- Due to a variety of reasons children with reading and spelling problems stay longer on earlier stages of this sequential model, develop false strategies and ineffective learning habits together with emotional and motivational problems, often resulting in a vicious circle.

Consequences for remediation

- Continuous assessment of level of reading/spelling and individual problems (knowledge of grapheme-phoneme correspondence rules, decoding, automatic word recognition, text fluency, vocabulary, comprehension strategies..)
- Precise match between the child`s learning level and the instruction
- Diagnosis of (false) learning strategies and correction
- Development of self esteem and motivation

FIT- Frankfurter Integrative Therapie (Naegele) (s. Reading Teacher, Vol. 55, 2001)

- diagnosis from continous observation, evaluation and treatment
- precise match between the phase of reading/spelling development, the learning strategies of the child and the instruction
- development of self esteem and motivation (for instance by play, games, conversation and use of edutainment)
- focus on the child`s strengths rather than his/her deficits
- involvement of parents and teachers.

Conclusion: Countries should make provisions:

- for preventing reading problems (family literacy programs, high quality preschool education (language competence), effective instruction in the early grades, early diagnosis of weaknesses in the reading process
- and <u>supporting struggling readers</u>:
- Adequate methods: "especially in languages with complex orthographies, systematic teaching of phonics should continue throughout the primary level. Additionally, systematic teaching of comprehension strategies – several strategies instead of just two or three – and metacognitive skills should continue throughout the lower secondary level"(Eurydice)
- Availability of specialized support by reading specialists
- Individual or small-group intensive and targeted interventions

Thank you for your attention!

Some references in English:

Downing, J. & Valtin, R. (1984) (Eds.), Language Awareness and Learning to Read New York: Springer.

Valtin, R. (1979). Dyslexia: Deficit in reading or deficit in research? Reading Research Quarterly, 14, 201-221.

- Valtin, R. (1989), Dyslexia in the German Language. In: Aaron, P.G./Joshi, M.R. (Eds.): Reading and writing disorders in different orthographic systems, Boston/London: Dordrecht, 119-135
- Valtin, R. & Naegele, I.M. (2001). Correcting reading and spelling difficulties a balanced model for remedial education. *The Reading Teacher*, Vol. 55, No. 1, Sept. 2001, pp. 36-45

German publications:

- Naegele, I. & Valtin, R. (2003) (Hrsg.). LRS Legasthenie in den Klassen 1-10. Handbuch der Lese-Rechtschreib-Schwierigkeiten. Band 1: Grundlagen und Grundsätze der Lese-Rechtschreib-Förderung, Weinheim: Beltz, 6. vollständig überarbeitete Auflage.
- Valtin, R. (2006). Der medizinische Ansatz der Legasthenie und seine Problematik. In B. Hofmann & A. Sasse (Hrsg.). Legasthenie. Lese-Rechtschreibstörungen oder Lese-Rechtschreibschwierigkeiten? Theoretische Konzepte und praktische Erfahrungen mit Förderprogrammen. Berlin: Deutsche Gesellschaft für Lesen und Schreiben, Beiträge 5, S. 44-58. (Dieser Band ist als download erhältlich: <u>http://www.dgls.de/download/category/11-ganze-baende.html</u>)