Lees- en spellingvaardigheden van brugklasses

Schijf, G.M.

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Summary

The Brugklasproject investigated language processing in Dutch as a first and English as a second language of about 700 unselected children in the first year of secondary school in The Netherlands. Different dimensions of reading were tested: oral reading of rather regular indigenous Dutch words, English loan words and English words, silent reading of sentences and comprehensive reading. Also the spelling capacities of Dutch and English words was explored. In addition the predictors of the reading and spelling measures were investigated and compared to each other at the level of background factors and cognitive subskills, with the objective to discover how differences in reading and spelling profiles that we come across in education, can be explained.

Large differences were found in the performance of the population. Students in the lowest educational levels often turned out to be two years or more behind in word reading fluency and in spelling. The different types of reading and also the spelling measures were compared to oral word reading fluency as measured with the Dutch One Minute Test, that consists of Dutch indigenous words. In The Netherlands this test is used to detect children with reading problems. We measured positive correlations between all Dutch and English reading and spelling measures. On average poor oral readers of Dutch words have significantly more problems in reading English loan words and English words, and also in Dutch and English spelling. But we also found variability: about 30% of the poor readers of Dutch words are not poor in reading English loan words. More than 40% are not poor in English word reading and in Dutch and English spelling. Even more variability was found in silent text reading and comprehensive reading: more than 50% of the poor oral word readers is not poor in these two important language activities.

The first conclusion is that fluent oral word reading is not the only and most important aspect of literacy in secondary education. In everyday life and also in education it’s the fluency of silent text reading and text comprehension that really matters. Prob-
lems in fluent oral word reading are not always accompanied by problems in these activities. The second conclusion is that although in general the findings support the hypothesis of cross-linguistic universality of reading ability and underlying deficits related to poor reading, because there seems to be an overall transfer from reading and spelling problems in Dutch to reading and spelling problems in English as a second language, still a substantial number of poor Dutch readers escapes this transfer. Probably as a result of a better developed English receptive vocabulary.

The different profiles of reading and spelling problems can be explained from background factors and underlying cognitive subskills. For all types of reading, save comprehensive reading, phonological decoding is the most powerful predictor after controlling for background factors. It’s the key process in word reading fluency and in spelling performance. Naming speed explains additional variance, although not in silent and comprehensive reading, and not in English reading. Although the concept of orthographic competence still isn’t quite clear, the measures we took explain a small, separate amount of variance in oral reading of Dutch indigenous words and are of increasing significance in reading irregular loan words, in silent reading, and in spelling. Although phonological processing deficits are considered to be the core problem of poor readers, there was a subgroup of poor readers with a better orthographic knowledge that performed better in all types of reading and spelling in both languages.

In a follow-up investigation we studied the development of three subgroups with problems in word reading fluency, receptive vocabulary or both, compared to a control group. The subgroup ‘language impaired’ exists of slow readers who also have a limited receptive vocabulary. This in contrast with the dyslexic subgroup, existing of slow readers with a normal receptive vocabulary. The third subgroup we called ‘hyperlexic’. The children in this group are normal reading students with a limited receptive vocabulary. The control group has normal capacities in both language aspects.
Summary

A difference in the results of language impaired and dyslexic students is that the first subgroup demonstrated more growth in orthographic knowledge than the dyslexic group did. At the end of the school year their performance in Dutch and English orthographic knowledge does not differ anymore from the overall better performing hyperlexic students. This better response to instruction may be a signal that the reading problems of the language impaired group are primarily caused by background factors. However, more research on orthographic development in connection to the different profiles is needed.

Orthographic knowledge within the dyslexic subgroup does make a difference. In the combined results of Dutch and English reading and spelling dyslexic students with poor orthographic knowledge did not show any growth in the first year of secondary school as compared to the other students in the follow-up-investigation, while dyslexic students with normal orthographic knowledge developed much better. At the end of the year their performance ended up close to the mean of the total follow-up group. In the language impaired group the performance of the orthographic poor and not poor children in Dutch and English also differed, but the development in both sub-groups did not. Though more research is needed, language impairment and dyslexia seem to be somewhat separable profiles. It is however problematic to classify students with a different language background. Their performance in oral word reading is overall no different from native Dutch students, but on average they do have a limited vocabulary. So it’s likely that they will be classified as language impaired sooner than dyslexic. Additional measures of language decoding automaticity may help to make a correct classification in these cases.

The word reading fluency of hyperlexic children is better than their linguistic understanding, in the Brugklasproject measured by a receptive vocabulary test. They do not have more reading experience than language impaired and dyslexic students and many of them have a different language background. Not only in word reading fluency but also in spelling Dutch words this subgroup continued to perform at the same level as the control group. In reading and spelling English words however they performed less well, probably as a result of their reduced receptive vocabulary.
Problems in oral word reading are a handicap for success in the educational and social career, but compensation of this problem is possible in many ways and we already see that happen in the first class of secondary education, in students who were subjects of this research project. Many poor oral readers know how to spell words without too many mistakes, are able to read silently and understand texts at an acceptable level and develop reasonably well in English as a second language. Their chances in life may not be so bad after all.