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The Diagnosis of Reading in a Second or Foreign Language.
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Reviewed by
Aurora Tsai
Carnegie Mellon University
United States

In *The Diagnosis of Reading in a Second or Foreign Language*, Charles Alderson, Eeva-Leena Haapakangas, Ari Huhta, Lea Nieminen, and Riikka Ullakonoja discuss prominent theories concerning the diagnosis of reading in a second or foreign language (SFL). Until now, the area of diagnosis in SFL reading has received little attention, despite its increasing importance as the number of second language learners continues to grow across the world. As the authors point out, researchers have not yet established a theory of how SFL diagnosis works, which makes it difficult to establish reliable procedures for accurately diagnosing and helping students in need. In this important contribution to reading and diagnostic research, Alderson et al. illustrate the challenges involved in carrying out diagnostic procedures, conceptualize a theory of diagnosis, provide an overview of SFL reading, and highlight important factors to consider in diagnostic assessment. Moreover, they provide detailed examples of tests developed specifically for diagnosis, most of which arise from their most current research projects. Because this book covers a wide variety of SFL reading and diagnostic topics, researchers in applied linguistics, second language acquisition, language assessment, education, and even governmental organizations or military departments would consider it an enormously helpful and enlightening resource on SFL reading.

This book was written by a team of researchers who bring together a variety of research experience, perspectives and key skill areas that enable them to provide readers with a research-informed understanding of reading diagnosis. Charles Alderson is known for his many contributions to second language acquisition in the area of language assessment. Ari Huhta is a lead researcher on language assessment and language policy in Finland, and examines high

stakes language assessments in that country and directs the Diagnostic Language Assessment System for Adult Learners (DIALANG) project, a computerized language assessment system (Huhta, Luoma, Oscarson, Sajavaara, & Teasdale, 2002). Haapakangas, Nieminen, and Ullakonoja working at the University of Jyväskylä in Finland, have extensive experience in the area of second language reading, particularly in domains related to cognition and motivation. All the authors worked together on the Diagnosing Reading and Writing in a Second or Foreign Language (DIALUKI) project for four years, and this book largely incorporates the findings of their study. The goal of the DIALUKI project was to investigate the reading skills of Finnish English as a Second Language (ESL) students, and Russian heritage second language learners of Finnish. Alderson et al. describe relevant parts of this project as they apply to each chapter of the book and also touch upon relevant diagnostic aspects of DIALANG, Diagnostic English Language Needs Assessment (DELNA), and Diagnostic English Language Tracking Assessment (DELTA). They received funding from various organizations, such as the Academy of Finland, the University of Jyväskylä, and the UK Economic and Social Research Council, in order to carry out this study.

The book is divided into ten chapters. The first chapter introduces the concept of diagnosis and points out the limited research and conceptualization of diagnosis in the field of language testing. It then summarizes the general contents of each chapter, allowing the reader to find areas related to their specific interests. In Chapter 2, Alderson et al. discuss the common procedures and processes of diagnosis across a range of professions. Their discussion is based on interviews conducted with ten informants, whose jobs vary from car mechanic, medical doctor, to primary school teacher. By making comparisons between the diagnostic procedures in each profession, researchers hypothesize important universal principles of diagnosis. Alderson et al. then apply these findings in Chapter 3, where they discuss hypothetical features of a SFL diagnostic assessment, informed by literature on SFL testing. The second half of Chapter 3 introduces the diagnostic potential of dynamic assessment and tests converted to assessment tests based on cognitive diagnostic models. Dynamic Assessment is based on Vygotsky's (1978) socio-cultural theory and the notion of the zone of proximal development (see Lantolf & Poehner, 2007). It goes beyond traditional assessments by identifying a learner's level of potential development when provided with guidance from a more capable peer. It can also provide an "intervention" plan to advise learners what steps can be taken to help them improve to the next level. In an alternative approach to developing diagnostic tests, statistical Cognitive Diagnostic Models have been used to retroactively convert high-stakes assessments like the TOEFL iBT or MELAB into diagnostic tests (see Lee & Sawaki, 2009). Alderson et al. warn that these types of diagnostic tests are limited because they are based on tests that are not designed to be diagnostic in the first place. Partly as a solution to this limitation, they describe four other tests specifically designed for diagnosis within the DIALANG, DELNA, DELTA, and DIALUKI projects.

Chapter 4 reviews the theoretical constructs of SFL reading, its underlying components, and levels of processing. After describing lower and higher level reading processes, Alderson et al. describe how the DIALANG, DELNA, DELTA, and DIALUKI projects have incorporated reading component sub-skills in their diagnostic analyses. Chapter 5 focuses on how linguistic knowledge, namely vocabulary and grammar, plays a role in reading comprehension. While vocabulary generally seems to account for more variance in reading comprehension, the authors caution that this can also be attributed to the length of reading passages and the type of questions.

Chapter 6 discusses the cognitive factors that affect reading, focusing on phonological awareness, working memory, speed of lexical access, and word recognition. They explain how DIALUKI explored the role of these factors in the learners' first language (L1), second language (SL), and foreign language (FL) reading skills and present interesting results. For example, they found that cognitive skills accounted for considerably more variance in FL reading than L1 reading scores and that the best predictor of FL reading for all age groups was phonological awareness, followed by lexical access speed.

Chapter 7 introduces important background factors to consider for SFL learners' success with reading, such as age, parents' background, socioeconomic status, and motivation. The majority of this chapter focuses on motivation, explaining how motivational factors such as self-concept, anxiety, motivational intensity and self-regulation were related to SFL reading performance in the DIALUKI project. In Chapter 8, Alderson et al. discuss the different levels of feedback in Hattie and Timperley's (2007) feedback model, emphasizing the importance of clarifying learner goals, current knowledge, and what the learner should do next. Chapter 9 goes into the practical application of diagnosis in the language classroom. Alderson et al. point out the challenges teachers face when making diagnoses, such as limited understanding of what reading involves, difficulty in getting to know their students, and pressure to keep all students reading the same level texts, despite large individual differences. The authors also introduce several techniques for carrying out diagnostic assessments, such as group dynamic assessment in which teachers give students pre-planned prompts in order from less to more explicit. This systematic procedure allows the teacher to narrow down where exactly the learners have trouble and record the source of the error. Finally, Alderson et al. describe techniques teachers can use to obtain diagnostic information about their students. These techniques include having students keep a reading journal, prepare a literacy portfolio, and engage in regular self-assessment. Perhaps most importantly, teachers can initiate conversations about reading with their students, as it helps students understand ways to better self-regulate and strengthen their reading.

In the final chapter, Chapter 10, Alderson et al. summarize important take-home messages from each chapter and conclude with their final thoughts about what the whole diagnostic process should consist of, its challenges, and suggestions for future research. Their final thoughts include the importance of having diagnostically competent teachers and of developing a systematic set of procedures for diagnosing SFL reading that are similar to diagnosing L1 reading problems. A challenge for the future is to develop a common understanding of what constructs are important for SFL reading and how to operationalize them, and even more importantly, to encourage action based on the diagnosis. In future research, Alderson et al. state that reading fluency measures, reading aloud, and new classroom technologies would be interesting areas to investigate as potential diagnostic tools.

As a researcher interested in psycholinguistics and second language acquisition, I found that Chapter 6 provided a particularly helpful overview of the cognitive skills involved in L1, FL, and SL reading. After Alderson et al. address areas such as decoding, phonological awareness, working memory, and speed of lexical access, they also describe the traditional tasks used to measure these skills, which is particularly helpful for researchers interested in pursuing this area of study. The authors also present their own findings from the DIALUKI project, among Finnish students learning English as a Foreign Language (EFL) and Russian heritage students learning

Finnish as a second language. For Finnish students reading in their L1, cognitive factors seemed to play less of a role in their overall reading abilities, suggesting that many of the lower-level reading skills that depend on these cognitive mechanisms were already automatized to a strong degree in their L1. Interestingly, for the Russian heritage students reading in their L1 Russian or their SL Finnish, cognitive factors such as working memory and phonological awareness played a much stronger role in their overall reading abilities. This finding was interesting because it suggests that 'shallow' orthographies, such as Finnish, may require fewer cognitive resources for reading than languages of 'deeper' orthographies, such as Russian. Alderson et al. also present which cognitive factors differed significantly between poor and strong readers of EFL at different age levels. In doing so, they show that cognitive tests such as the backward digit span, rapidly presented words, and word list reading have strong potential for EFL reading diagnosis. Moreover, this study can be replicated in other language contexts in order to find out if the same cognitive tests can be used for diagnosis in languages other than English.

People interested in the future of diagnostic test design would find Chapter 3 tremendously valuable. In this chapter, Alderson et al. not only describe the hypothetical features of an ideal diagnostic test, but also provide numerous examples from existing research. One relatively new research area with exciting potential for reading diagnosis is dynamic assessment. The hallmark of dynamic assessment is in the way it provides scaffolded assistance to learners when they encounter difficulty. The computerized version of dynamic assessment keeps track of how much assistance is given to learners before they are able to answer an item correctly. With this type of interventionist approach, we can discover what areas of reading learners struggle with, and also observe how much they can improve with this kind of mediated help. Importantly, the authors note, dynamic assessment can help us avoid underestimating students' abilities and can reveal problems in language skills that are difficult to observe with other types of assessment. Another research-based assessment with exciting potential is DIALANG, which is an online assessment available in 14 European languages and specifically developed for diagnostic purposes. Language program administrators sometimes hesitate in deciding which diagnostic test would be at the appropriate "level" for learners with past SFL experience. However, DIALANG seems to solve this dilemma by having learners take a Vocabulary Size Placement test and perform a self-assessment first. These tests approximate users' proficiency according to the Common European Framework of Reference (CEFR), and determine an appropriate level of diagnostic test for the learner. Learners also have the option of obtaining immediate feedback on their reading sub-skills after each question, or getting total score results at the end of the test. Unfortunately, DIALANG has limited ability to give individualized advice to learners, but it does provide general advice for activities learners could work on in order to reach the next CEFR level. Dynamic assessment and DIALANG are only two of the diagnostic assessments that Alderson et al. discuss in this chapter, but both seem to have exciting potential influence on how we might design future diagnostic assessments.

While Alderson et al. cover many important topics on SFL reading diagnosis, this book is not for people interested in the more specific aspects of assessment design. In other words, it is not an instruction manual for how to develop items on a diagnostic test. While they provide interesting examples from the DIALUKI, DIALANG, DELNA, and other projects throughout the book, Alderson et al. do not claim that these are perfect diagnostic tests. The authors also do not reveal specific information about how test items were constructed and what the reading sub-skills were

associated with each question. While this type of information would be useful, it would be difficult to create such a guide without a great deal more research on SFL reading diagnosis.

Overall, this book arms its readers with a clear understanding of the challenges involved in SFL reading diagnosis, the theoretical underpinnings of how SLF reading works, and what components a diagnostic assessment needs to include. Alderson et al. clarify important considerations for the design of SFL reading diagnosis and discuss the significant challenges faced in both creating and implementing these assessments. Although they do not go so far as to provide specific guidelines for developing diagnostic test questions, the authors clarify important factors for teachers and researchers to consider when carrying out diagnoses of SLF reading.

References

- Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77, 81–112.
- Huhta, A., Luoma, S., Oscarson, M., Sajavaara, K., & Teasdale, A. (2002). DIALANG, A diagnostic language assessment system for adult learners. In *Common European Framework of Reference for Languages: Learning, Teaching, Assessment. Case Studies* (Vol. s. 130–144). Common European Framework of Reference for Languages: Learning, Teaching, Assessment. Case Studies.
- Lantolf, J. P., & Poehner, M. E. (2007). Dynamic assessment of L2 development: Bringing the past into the future. *Journal of Applied Linguistics and Professional Practice*, 1, 49–72.
- Lee, Y.-W., & Sawaki, Y. (2009). Cognitive diagnosis approaches to language assessment: An overview. *Language Assessment Quarterly*, 6, 172–189.
doi:10.1080/15434300902985108
- Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

About the Reviewer

Aurora Tsai is currently a Ph.D. student in Second Language Acquisition at Carnegie Mellon University. Her research focuses on cross-linguistic differences in second language reading, specializing in English and Japanese. She is also interested in vocabulary learning and language assessment. E-mail: aurorat@andrew.cmu.edu