Reflections on a 40-year Career in Language, Education, and Psychology: An Interview with Richard Sparks

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Abstract
The current paper is an interview with Professor Richard Sparks, who has contributed his teaching, research, and consultancy service to academia and the broader community at large for over 40 years. In this paper, the two guest editors of this special issue (Edward and Hassan) had prepared a list of questions and invited Prof Sparks to answer them in written form. Key issues covered in the interview include some general background information, as well as more in-depth discussions of specific academic issues related to the major themes included in the special issue.

Keywords: Language Education, Individual Differences, Language Aptitude, Foreign Language Learning Disabilities (FLLD), The Linguistic Coding Differences Hypothesis (LCDH)

Richard L. Sparks (Ed.D., University of Cincinnati), is now Professor Emeritus at Mount St. Joseph University in Cincinnati, Ohio, the USA. For over 40 years, Professor Sparks has taught a broad range of courses in reading science, learning disabilities, educational assessment, and research/statistics. His career-long research interests and extensive publications are in the key domains of first (L1) and second language (L2) learning/education, reading ability and reading disabilities (such as dyslexia), individual differences in language learning such as language aptitude and anxiety, and postsecondary foreign language learning.
To learn as much as possible about the academic background of Prof Sparks and dig into the stories behind many of his research projects and influential works, the two guest editors of this special issue (Edward and Hassan) prepared a list of questions and invited Prof Sparks to answer them in written form (partly due to the restrictions of the Covid19 pandemic). The interviewers (E & H) and the interviewee (RS) are identified by their initials, as indicated at the beginning of interview transcripts below. Notes and references provide additional background information. The contents covered in the interview questions range from general topics such as educational background and community service, to more specific issues in individual differences research, especially L1 achievement, language aptitude, and anxiety. Key themes highlighted in the discussions include not just portrayals of career-path developmental trajectories, but also penetrating insights on central and core issues in the broad fields of language, education, and psychology.

Reflections on Your Career Development as an Educator and Researcher

E & H: Many thanks for accepting our invitation for an interview with you. We really appreciate this. Let's begin with your education journey.

1. Can you tell us how you began your career in language education? Where did you do your graduate and postgraduate work?

RS: My graduate work, both Masters and Doctorate, was completed at the University of Cincinnati. (More details can be found in the position paper by Prof Sparks in the same issue.)

2. How did your academic journey begin? Why this field of study?

RS: My interest in learning and reading disabilities began when I was the Education Coordinator at a local Boys Club of America as a 19 year old, undergraduate student. I was intrigued by why young students had such great difficulty learning to read, spell, and write. At the time, I was a Politics and History major (Pre-law), but entered graduate school in Special Education shortly thereafter. After completing my Masters degree, I was a classroom teacher for three years with children who had learning and behavioural problems. (More details can be found in the position paper by Prof Sparks in the same issue.)

3. Who had considerable influence on your early work in teaching and research? Or, is there any 'seminal paper' that had attracted your interest in this field? How did your own research try to build upon it?

RS: In reading and special education, the most influential researcher was Dr. Keith Stanovich. All of his papers were important, but the most interesting one was, *The Right and Wrong Places to Look for the Cognitive Locus of Reading Disability*, published in 1988. That paper inspired our own paper on the locus for L2 learning problems published in the *Modern Language Journal* in 1993. Another one of his early papers that greatly influenced my own work in learning disabilities (LD) [and IDs in L2] was “Discrepancy Definitions of Reading Disability: Has Intelligence Led Us Astray?” published in 1991. That paper influenced my later work on LDs and second languages (L2). His book, *How to Think Straight about Psychology*,...
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was a game changer in how I think about research. Dr. Stanovich’s work on Matthew Effect, print exposure, and myside bias continues to influence me to this day.

In foreign and second languages, there were several papers that we encountered early on that led us to begin researching L2s. In particular, John Carroll’s chapter, “The prediction of success in intensive foreign language training”, in which he presented his model of L2 aptitude based on the four components motivated us to begin our work on aptitude. We realized that Carroll’s components were similar to those for native language learning, which encouraged us to continue our work. (Soon after, we lucked upon a copy of the MLAT, which was a “gold mine” for our research.) Peter Skehan’s seminal paper, “Where does language aptitude come from” (1986), and his book, *Individual differences in second language learning* (1989), which found connections between native (L1) and L2 learning, were inspirational. In addition, Paul Pimsleur’s paper on L2 “underachievers” was important in signalling that a L2 researcher had thought about L2 learning problems from a language-based perspective. Although there were many other papers, including Jim Cummins’ paper, “Linguistic interdependence and the educational development of bilingual children,” these publications were the catalyst for development of our hypothesis and subsequent work in L2.

**Reflections on Research/Thesis Supervision**

4. **Would you share with us your experience working with your research students that you have supervised/advised?**

   RS: N/A My university did not have a doctoral program at the time.

5. **If you suggest 5 seminal works (research papers or books) as an essential reading for newly arrived PhD students who are interested in your area, what are they?**

   RS: There are so many, but I’ll try to choose some important papers or books in addition to those mentioned above.

   **For L2 aptitude:**

   **For individual differences in L1 attainment:**

   **For L1/L2 reading (alphabetic orthographies)**
6. **What are the main pitfalls of research designs in this field that new coming researchers should be aware?**

**RS:** Just yesterday, I delivered a lecture to doctoral students in Reading Science, titled “Truth and Evidence in Reading Research.” I have delivered this lecture for a few years in several venues, but always find something new to add. In this lecture, I teach about the scientific method, the quality control mechanisms in research (peer review, replication, converging evidence), and the different types of philosophies (Correspondence vs. Coherence) for adjudicating truth and knowledge. The main pitfall for many researchers is, no matter their research design, understanding that knowledge in science is not about the researcher. To paraphrase Stanovich: Knowledge in science is depersonalized. It is not the possession of particular individuals. Adherence to a subjective, personalized view of knowledge is what continually leads education [and other fields of study] down the road of fads, gurus, and uncritical acceptance of so-called authorities. You must get yourself out of the way. Stanovich again: The romance is not with the researcher, the romance is with the data and the evidence.

7. **Would you please write some recommendations for the young generation of researchers whose research interest is IDs to succeed in their forthcoming academic journal as a researcher and practitioner?**

**RS:** Other than hard work and persistence, see #6. But, one other point is important. I have completed all of my research studies and publications without any type of federal, state, and private foundation grant monies. All of our studies were funded out of our own pockets or with very small amounts of grant monies from our universities. I understand that some research requires grant funding. But, you don’t always need outside funding if you are resourceful and willing to work hard.

Oh yes, every new researcher should read Dr. Stanovich’s book, *How to Think Straight about Psychology*. The book is in its 12th edition and, in my view, is the single best book on how to conduct research and how to be a researcher. In my talks, I always credit Dr. Stanovich and his book(s) for teaching me how to think.
Reflections on Consultancy/Advisory/ or Industry/Community Work/Service

8. Could you share with us your experience as a consultant, or psychologist? What have learned from those practices? How has this experience influenced your research?

RS: I had a private practice for 40+ years in which I conducted psychoeducational evaluations for children, adolescents, and adults. I have also consulted with schools and other organizations, such as rehabilitation service agencies. For over 12 years, I have served as a Disability Consultant for medical and law boards, reviewing files of individuals who (pursuant to the ADA) have requested accommodations on medical and law board exams. I gained a wealth of experiences in the use of standardized tests, diagnosis of disabilities, and working with families and their children. But, the most important lesson from all of these experiences is the existence of inter- and intra-individual differences among and within children (as young as 5 years old) and in adolescents and adults. These differences are large and stable over time. Individual differences in language in very young children are related to and predictive of their oral and written language achievement as they develop these skills. In L1, individual differences are normal and expected in all facets of development, including oral and written language development. But, I learned that individual differences in language development were either downplayed or ignored by SLA/L2 researchers, a topic that I address in my paper for this issue. I also have a more substantive chapter on this topic in my forthcoming book.

9. Has the current COVID-19 situation brought any changes to or work? And how?

RS: I retired from the university in 2015 and immediately started traveling around the country conducting seminars in reading science for states and school districts. Unfortunately, the lockdowns took me off the road. Fortunately, the situation allowed me to spend more time writing, editing, and analysing data from already completed studies. In addition, I have found new colleagues with whom to collaborate and publish. I also have had more time to read, think, and write about ideas that I have been developing for many years.

Reflection on Foreign Language Learning Disabilities (FLLD) and Language Aptitude

10. Could you share with us your views on 'Foreign language learning disabilities' over the year?

RS: Learning disabilities (LD) has always had a troubled existence. The origins of the problems with the LD concept are: 1) there is not an empirically valid definition for LD on which people in the field agree, and 2) there are not empirically-based diagnostic criteria that distinguish someone with LD from someone who is not LD. Thus, the field has been (and still is) like the old “wild west” in the U.S.--anything goes. Clinicians feel free to use any and all criteria to diagnose LD. To make matters worse, the diagnostic criterion that was used for many years--discrepancy between IQ and achievement as measured by standardized tests--was falsified 20 years ago. DSM-5 (in 2013) caught up with this research and eliminated the use of discrepancy as a criterion for LD diagnosis. Even so, at least in the U.S., the discrepancy criterion is still in use by schools and clinicians with the consequence that many individuals who display no learning problems are classified as LD and others who have significant learning problems are not
classified as LD and receive little or no assistance in learning to read, write, and spell. I should also note that LDs are viewed very differently in the U.S. and elsewhere, e.g., Europe. I tackle this topic in a forthcoming chapter in a book co-edited with Edward on cognitive differences in second language acquisition.

As LD specialists, Leonore and I started in 1989 with the idea that severe difficulties with foreign language (L2) learning would be another type of learning disability. However, our studies soon found (by 1993) that there were no cognitive, L1 achievement, L2 aptitude, or L2 achievement differences between students classified as LD enrolled in L2 courses and low-achieving (non-LD) L2 learners. We found that L2 learning (like all learning) runs along a continuum from very good to very poor learners and there is no empirically validated “cut point” below which an individual can be said to be “disabled” for L2 learning. Those findings were replicated with high school and university students in several studies. Unfortunately, despite our many published studies on this topic, the notion of a FL “disability” became common and universities began to grant course substitutions and waivers for the L2 requirement to students who had been classified as LD. But, in a series of studies at the university level, we found that most students classified as LD who received these waivers met NO criteria for LD diagnosis and, indeed, they had been misdiagnosed. Instead, they were students with average to above average L1 achievement skills. In fact, one of our studies found that only 7% of a large sample of “LD students” met DSM-IV criteria for LD diagnosis (Sparks & Lovett, 2009). Most of these students who had received L2 course waivers had NO history of L1 learning problems prior to enrolling in L2 courses in college and most had passed L2 courses in high school with average or better grades. More importantly, there were no cognitive, academic achievement, and L2 aptitude differences between university students classified as LD who had been granted waivers for L2 courses and LD students who had passed L2 courses and fulfilled the L2 requirement (Sparks, et al., 19999; Sparks, et al., 2003). Long ago, our studies found no evidence for a L2 “disability.” The notion of a L2 “disability” proved to be a way for some students to avoid the challenge of studying a L2.

The aforementioned papers on university students were published in a series of studies in the J. of Learning Disabilities from 1998-2003. A review and summary of the studies can be found in my “myths” paper cited in Question #12 later in the interview.

II. Any further comments on the relationship between language learning disabilities and language aptitude? (Charles Stansfield and Daniel Reed (2004) in their interview with J.B. Carroll have made this following statement. "The MLAT has also been employed extensively in the study of learning disabilities that appear to affect language learning, and in the exploration of the possible existence of a “foreign language learning disability”. They cited your work (Sparks & Javorsky, 2000) as Reference)

RS: My colleagues and I published a paper in 2005 on this topic. The MLAT was not designed to diagnose a “disability” and there are numerous theoretical problems with using an aptitude test for this purpose. (For example, it is inappropriate to use an intelligence test, which is an aptitude measure, to diagnose a reading disability. Likewise, there are conceptual and psychometric
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problems with using an aptitude test such as the MLAT to diagnose a “disability” especially before an individual has had the opportunity to engage in L2 learning.) The evidence on this topic has shown that students classified as LD (a) achieve a wide range of scores on the MLAT, and mostly achieve in the average range; (b) pass foreign language courses despite low scores on the MLAT; (c) withdraw from foreign language courses despite achieving average or above average scores on the MLAT; and (d) receive course substitutions for the foreign language requirement despite achieving average or higher scores on the MLAT. Likewise, individuals who have passed L2 courses with average to above average grades achieved below average scores on the MLAT. These findings suggest that professionals who use a student’s MLAT score to recommend course substitutions/waivers for the L2 requirement misunderstand the meaning of the test (see Carroll); that is, a student’s MLAT score does not reflect whether s/he can learn a foreign language or pass foreign language courses. The paper answers the question posed here.


12. Daniel Reed and Charles Stansfield (2004) suggest that use of the MLAT in the identification of individuals with a FLLD is ethical if adequate safeguards are in place and if relevant professionals approach the task in a discerning way. What is your own take on the relationship between language aptitude and foreign language learning disability now?

RS: To date, there has been no research that has challenged our findings from the studies mentioned earlier. Likewise, researchers have not provided evidence for the notion of a L2 “disability.” Students with disabilities have been shown to achieve a wide range of scores on the MLAT, including average to above average scores. Students without disabilities have been found to achieve below average scores on the MLAT. The evidence has shown that if a student achieves in the average range in his/her oral and written L1 skills, s/he will be able to pass L2 courses.

I’d refer the reader to the following papers that review the extensive evidence on this topic.


With regard to the notion of whether it is “ethical” to use the MLAT to diagnose a FL “disability if “adequate safeguards” are in place, and if “relevant professionals approach the task in a
discerning way,” I’d refer the reader to a special issue on ethics in testing for disability diagnosis published in the journal, *Psychological Injury and Law*. The authors of the papers in that issue describe a myriad of ethical problems exhibited by clinicians where the “safeguards” fail to deal with the problems of misdiagnosis for all types of disabilities (see Introduction by Harrison, 2022). In that issue, Allyson Harrison and I co-authored a paper citing the “seven sins” regularly committed clinicians in testing for disabilities (Harrison & Sparks, 2022). Research has increasingly demonstrated that clinicians make disability diagnoses using flexible and expansive diagnostic criteria, and in some cases, simply ignore research-informed criteria all together. Our paper reviews the most common thinking and reasoning errors as well as clear ethical violations committed by clinicians. The ethical problems described by all of the authors in the issue go well beyond the misuse of a single test, in this case the MLAT, for disability diagnoses.

**Reflection on Language Aptitude and LCDH**

13. **When did you begin to get interested in language aptitude research?**

**RS:** In 1985-86, when we published a small paper of case studies, and again in 1989, when we published our first paper on the LCDH. At first, the papers were not about language aptitude, but instead, were about individual differences in language learning. The work on L2 aptitude evolved gradually over time and was bolstered by an invitation from *Annual Review of Applied Linguistics* to write a paper on the topic. Our 10 year longitudinal study and the data from that investigation fuelled the move to look further into L2 aptitude.

14. **What was the background of the LCDH framework?**

**RS:** The background that informed the LCDH was largely our extensive knowledge about L1 learning and the idea of inter- and intra-individual differences in achievement. The “ah-ha” moment was reading Carroll and Skehan’s papers (mentioned earlier) and realizing that L1 learning and L2 learning shared enormous similarities, e.g., the same components of language. For some, that may seem like a simplistic explanation. But since we were not L2 educators, this was an epiphany.

15. **Over the years, have you changed your mind with any of the core premises of LCDH**

**RS:** Yes, in particular, we realized by 1995 that we were too focused on the phonological (sound and sound-symbol) component of language as the potential source of L2 learning problems and low L2 achievement, at least for US learners. This focus occurred primarily because U.S. students start L2 courses in high school, long after they have acquired literacy in their L1. We found that most high- and low-achieving secondary levels L2 learners exhibited significant differences in the phonological (and syntactic) component of language. Since the primary problems for acquisition of L1 literacy is with word decoding (phonological processing), we assumed there must be a link between L1 and L2 learning. In retrospect, we were correct about this link. But in subsequent studies, we learned that the differences in the language skills of high-, average-, and low-achieving L2 learners ran deeper than just phonological processing. Hopefully, our studies since that time have reflected these changes.
Reflections on Anxiety and L2 Learning

16. What have been some of the biggest challenges the field of IDs face based on your opinion?

RS: Researching the L2 anxiety hypothesis has been fun, but also an enormous challenge. Early on, we recognized that “affective” theories such as anxiety held a special place in the L2 field. However in L1, there are no viable theories which posit that affect (e.g., anxiety) plays a causal role in learning to read, spell, and write and to learn math, etc., so I brought this thinking to our research on L2 anxiety. The easy part of this research, but also the biggest challenge, has been showing that L1 skills and L2 aptitude are confounding (third) variables in theories that claim anxiety is a causal factor for L2 achievement. Our studies have shown that low- and high-anxiety L2 learners in high school exhibit differences in L1 skills as early as 2nd grade, long before they encounter L2 courses in high school. There are negative correlations between L2 anxiety measured in high school and L1 skills as early as 1st grade. Our studies have found that L2 anxiety measured in high school explains growth in L1 skills from 1st-5th grade and from 5th-10th grade even after controlling for students’ verbal ability and L2 aptitude. We have maintained that: a) there is no a priori reason for IDs in the L1 skills of high- and low-anxious learners when they were in elementary school, b) there is no obvious explanation for negative correlations between the FLCAS (FLRAS) administered in high school and L1 skills in 1st grade; and c) L2 anxiety measures should not predict unique variance in L1 skills or L2 aptitude measured prior to engaging in L2 courses. The plausible explanation for these findings is that L2 anxiety instruments are, at least in part, a proxy for students’ language skills, their self-perceptions of their language skills, or both.

In my view, our papers on L2 anxiety from 1994-2018 have convincingly supported our claim. My new papers with a colleague using SEM analyses have yielded similar findings and supported our earlier studies (e.g., see Sparks & Alamer, 2022).

17. As you may acknowledge, there is a gap between research and researchers and practice and practitioners and teachers. How can we fill this perceived gap between researchers?

RS: For some time, we have maintained that the focus on affective variables in language classrooms is a distraction from the real problem of learning language. To fill the gap, here are some recommendations from my latest paper with a colleague (Sparks, R., & Alamer, A. (2022). Long-term impacts of L1 skills on L1 achievement: The mediating role of language L2 aptitude and achievement. Language Teaching Research. https://doi.org/10.1177/13621688221104392 [Published online 7/1/22]

1. Language educators and researchers should consider developing L2 anxiety instruments that measure language anxiety uncontaminated by language ability.

2. We suggest that proponents of anxiety as a potential causal mechanism for L2 learning confront this confounding variable problem if language anxiety is to remain a viable theory for more and less successful language learning.
3. Language researchers shift their attention from IDs in anxiety to IDs in language skills to explain IDs in L2 achievement.

4. Language educators should focus on teaching the language skills necessary to become proficient in a L2, while finding ways to mitigate feelings of anxiety among L2 students.

In making these types of recommendations, I have not implied that anxiety is unimportant, but rather that teachers should focus more on teaching language skills to increase the amount of language learning, which can improve their students’ performance in the language and reduce feelings of anxiety. My recommendation is in line with the evidence showing that IDs in language ability are detected as early as 1st grade and persist across time when students encounter a L2 (e.g., see Sparks & Ganschow, 2007; Sparks & Patton, 2013).

Reflections on L2 Individual Differences Research as a Whole

18. As far as you see, what are the biggest challenges in current research of L2 IDs?

RS: I admit I am not a “big thinker” on these types of issues. What I can do is to use my experience in L1 reading science to make a suggestion because I see similarities between the state of L1 reading research in the 1970s and the current situation in researching IDs in L2. For years, L1 reading research had been somewhat stymied by a large number of IDs that were thought to be related to reading acquisition and reading problems. Since the 1970s, there was progress toward understanding the basic psychological processes that underlie the act of reading. Some explanations were found to be more plausible than others. By the end of the 1990s, so much progress had been made that a leading reading researcher termed this progress the “Grand Synthesis” and described what it meant for the reading field. The synthesis represented how cooperation among different groups of reading researchers in psychology, cognitive science, and neurocognitive fields resulted in a common explanation of the reading process unified by the evidence. Over time, the science of reading” was informed by an evolving evidence base produced by researchers working on different aspects of the reading process. Since then, the unified science of reading has been extended across language and writing systems that explain learning to read and write languages other than English, including both alphabetic and logographic (morpho-syllabic) orthographies. The findings from disparate groups of researchers working on different pieces of the reading puzzle provided converging evidence which has shown that there are universals and operating principles in both word reading/spelling and reading comprehension.

In my view, this type of process would allow the L2 field to solve the puzzle of IDs for L2 acquisition. Some explanations will be found to be more plausible than others to explain L2 acquisition and IDs in language learning and some theories without supportive evidence will be discarded. [Edward and I have a wonderful chapter on this topic in our forthcoming co-edited book on cognitive differences in second language acquisition to be published by De Gruyter]
19. **If you are offered a second chance to commence your career again, is there anything you would have done differently?**

**RS:** Not really. The common link in everything I have done is the notion of individual differences. I became interested early on with how children learn to read and why they don’t. Those interests led me to teaching and tutoring students, and learning how to perform psychoeducational evaluations, which introduced me to the world of standardized tests and the evaluation of IDs in learning. That knowledge propelled me to earn a doctorate, become a professor, and open a private practice. The world of testing individuals on a 1-1 basis using the same tests repeatedly may seem boring to some until they realize that every person from preschool age to adult is different (again, individual differences). For example, if I administer a reading test to two 8-year old children and one scores at the 75th percentile and the other scores at the 25th percentile, there are IDs in the students’ reading skills. The same two children could achieve opposite scores in math, so that the child with 75th percentile reading achieves at the 25th percentile in math, and vice versa. Then, the question is why these two students achieve differently in reading and also in math. How could I not find individual differences fascinating?

In my practice, I evaluated over 4,000 individuals and have reviewed over 1,000 cases for disability boards and other agencies. Each individual and each case was endlessly interesting!

My university position and private practice led to meeting my late colleague, Leonore Ganschow. Our involvement in L2 research was totally serendipitous. Together, we developed the LCDH and conducted numerous studies, including our 10-year longitudinal investigation. Since then, I have been active in IDs research involving L2 aptitude, LDs and L2, L2 reading, and L2 anxiety. I couldn’t imagine a better career.

20. **What’s next in your career and life?**

**RS:** I will continue to publish and collaborate with colleagues for as long as I am able and spend time with my lovely wife and children.

References

**Works referred to in the interview**


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Ethics Declarations

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