

Narrator (00:00)

Welcome to the CLD Research Briefs podcast, where we highlight impactful research in the field of learning disabilities. Today, we're speaking with Dr. Hyojong Sohn about her award-winning dissertation on measuring teacher practices using observational tools. Dr. Sohn's work explores how we assess instructional quality, especially for students with disabilities, and what those measurements actually tell us.

We began by asking Dr. Sohn for a quick overview of her study and what led her to this important work.

Dr. Hyojong Sohn (00:33)

My dissertation study is part of a larger professional development study. And during my doctoral program, I worked as a research assistant on an IES-funded study titled Project Coordinate. The PI was Dr. Mary Brownell at the University of and the co-PI was Dr. Amber Benedict at Arizona State University. And as part of our goals, we wanted to examine changes in teachers' instruction.

However, though existing observation protocols could effectively capture instructional practice across different tiers. To address this, we adopted an observation protocol called POISED, Pre-Service Observation Instrument for Special Education. And this was actually developed by a research team from the University of Florida and Boston University. And our research team were...

revised it to measure teachers use of explicit instruction and evidence-based practice. As a former special education teacher, I was particularly interested in the nature of instructional practice for teaching students with disabilities. I also minored in quantitative research evaluation measurements, so I have been naturally curious about exploring the psychometric properties of our revised protocol.

Narrator (01:57)

With her background in both classroom teaching and measurement science, Dr. Sohn was uniquely positioned to explore how we observe and measure effective teaching in a

classroom. So what did she discover? Dr. Sohn examined what contributes to teachers observation scores and found some insightful results.

Dr. Hyojong Sohn (02:15)

A significant portion of the variance like 14 % to 27 % was linked to teachers, which is a good sign that our tool is effectively capturing differences in teacher proficiency. We also found that tier scores did a better job of distinguishing special education teachers' performance than general education teachers, which is an unexpected but still valuable insight. I looked at six key factors, which are

teachers, items, domains, raters, tiers, and reading subdomains. I wanted to see how much each of these contributed to the overall score variance using generalizability theory.

Narrator (03:00)

These findings remind us that even objective tools are influenced by who's teaching, who's observing, and the classroom context. We then asked Dr. Sohn about the broader significance of her findings.

Dr. Hyojong Sohn (03:12)

Teachers generally need more support in strengthening certain components of explicit instruction, such as modeling, compared to classroom management. Teachers' score may vary depending on instructional context, such as tiers or content areas. So what I concluded is that teacher educators should consider these different points when designing professional development programs.

Because the data for my dissertation study was collected during the COVID-19 pandemic, you are not able to collect student outcome data. As a result, I couldn't examine the impact of teacher scores on student outcomes. So, future study is needed to assess predictive validated evidence.

Narrator (03:58)

Her work suggests professional learning needs to be tailored not just to teacher skill, but also to where and how instruction happens. We asked if there's anything else Dr. Sohn hopes listeners take away from her study.

Dr. Hyojong Sohn (04:12)

My dissertation study contributes to expanding on findings from previous observance studies of voice by establishing the distinct properties of three domains, explicit instruction, responsiveness to student learning, and classroom management. I am currently working on integrating AI-powered techniques into the tiered tool. my goal is to leverage machine learning technology to quantify

teachers use of instructional practices and provide teachers and administrators with real-time insights to enhance instructional effectiveness.

Narrator (04:51)

Looking ahead, Dr. Sohn hopes to bring artificial intelligence into teacher development, making instructional feedback more immediate and actionable. We wrapped up by asking Dr. Sohn if she could share why she values being a part of CLD, the Council for Learning Disabilities.

Dr. Hyojong Sohn (05:07)

Absolutely,

I love CLD and CLD definitely offers incredible learning and networking opportunities for researchers. So if I share my experience, ~ well, last year, by attending the featured sessions delivered by Dr. Fuchs, I gained valuable insights on the transport between reading comprehension and word problem solving. I also was able to connect with other researchers at Cal Tech LA.

through CLD, which led to an invitation to present at their doctor's seminar. And also, this podcast interview is also priceless opportunity for me to share my research. So, I highly encourage researchers to join CLD.

Narrator (05:52)

Whether you're early in your career or an experienced scholar, CLD is a welcoming space to grow and connect with professionals and experts in the learning disabilities field. Thank you to Dr. Hyojong Sohn for sharing her insights with us today. For more information and an infographic summarizing her study, visit the CLD website.