CIDDL Research and Practice Brief 8: Preparing Preservice Teachers to be UDL Designers

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OUR COLLECTIVE WHY 🙿

Dear stakeholder,

Thank you for engaging with the Center for Innovation, Design, and Digital Learning (CIDDL). The work that you are about to access is supported with funding from the Office of Special Education Programs at the U.S. Department of Education.

The CIDDL Center is striving to impact the use of educational technologies into preparation programs, including special education, early intervention, and related services personnel preparation and leadership personnel preparation programs that prepare professionals serving students with disabilities.

CIDDL Research and Practice Briefs

CIDDL Research and Practice Briefs is a series of reports on research and practices regarding the innovative use of technology in special education, early childhood, related services personnel preparation and leadership personnel preparation programs as well as K-12 educational settings. For each brief, an expert or practitioner in the field is invited to discuss their research and practices. In addition, experts and practitioners will share their insights into opportunities and challenges about applying their research and practices to professional preparation programs.

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Guest Expert: Dr. Eric Moore

Dr. Eric Moore is the Director of Learning Technology at the Kennedy Krieger Institute. A co-founder and facilitator for the UDLHE Network, he also chaired the inaugural UDLHE DigiCon in 2019. His massive open online course (MOOC), *Implementing UDL on Canvas*, can now be accessed through Novak Education's *Online By Design*. Additionally, he co-authored with Jodie Black on *UDL Navigators in Higher Education: A Field Guide,* which is available from CAST Professional Publishing.

Topic: Preparing Preservice Teachers to be UDL Designers

Why does this matter to teacher preparation?

Teacher preparation programs seek to develop skilled educators who can meet the needs of all students in the classroom. Universal Design for Learning (UDL) is a framework that guides the process of instructional design. However, potential barriers exist that result in either preservice teachers not acquiring UDL instructional design skills or abandoning UDL processes once in the classroom. This brief will support higher education faculty in reflecting on how to address those barriers to ensure that preservice teachers carry forth their learning into their classrooms.

What will you learn from this Brief?

In this brief, Dr. Eric Moore considers the barriers to developing and maintaining UDL practice for preservice educators. He discusses the

impact that generational teaching has for both faculty and preservice teachers, recognizing that educators fall into patterns of teaching how they were taught. Dr. Moore shares strategies for unlearning and creating a "seismic shift" by providing experiences for preservice educators that pair explicit modeling of UDL processes with reflection. Referencing Ajzen's Theory of Planned Behavior (TPB), Dr. Moore explains the role that efficacy, attitudes, and social context have on educators' classroom practices, such as inclusion and technology use. The need to intentionally plan and support technology integration in the classroom is discussed as it relates to student success. Last, Dr. Moore addresses the barrier of maintaining UDL practice once preservice teachers shift to their own classrooms, highlighting the importance of finding a community of shared values to support long-term UDL practice.

Context

The *Higher Education Opportunity Act* (HEOA) states teacher preparation programs should be preparing preservice teachers to "understand...the effective use of technology, instructional techniques, and strategies consistent with the principles of Universal Design for Learning (UDL)". Additionally, the HEOA describes the role of the UDL designed classroom to "enable kindergarten through grade 12 students to develop learning skills to succeed in higher education and to enter the workforce."

Higher education faculty need to identify ways to design their own instruction based on UDL guidelines to serve as a model in their teacher preparation courses. Moore and Bell (2019) describe four types of instructor modeling, including **implicit, explicit, explicit with reflection,** and **explicit with connection to theory**. Preservice educators are most likely to carry over instructional practices from their own learning when the three components of explicit modeling, reflection, and connection to theory occur.

While preservice educators may receive instruction on inclusive instruction, there is a question as to how well that carries over once the educator is in the classroom. According to Ajzen's TPB (1985), attitudes

toward a behavior can predict the person's intention to perform that behavior. This becomes relevant for higher education faculty in preparing preservice teachers to consider not just knowledge, but attitudes towards UDL and inclusion for their future students. Moore addresses attitudes through a process of unlearning by creating opportunities for preservice educators to experience UDL with explicit modeling and reflection.

Moore et al. (2018) discuss the different stages of implementation for schools. For a preservice teacher employed at a school where UDL implementation is not occurring past the individual level, the social context (Ajzen, 1985) creates a barrier to continued implementation. Teachers may need to align with communities, such as professional learning networks (PLNs), inside or outside of their school, to provide the support needed to continue the work of designing instruction with the UDL framework.

Key Insights

Faculty in teacher preparation need to not only design their own instruction with UDL in mind but be able to point out the instructional components that support UDL principles. This provides opportunities for their students to reflect on what UDL-based instruction will look like in their future classrooms, regardless of grade or content level.

> *Eric Moore: "*"*...it is critically important for faculty to not only model best practices of UDL...but to be very **explicit in their modeling**... So, for example, there's implicit modeling, where I might just be doing the work of designing and delivering instruction using UDL, and I never mentioned it to anybody. It's just there, you know, and that's a fine method of instruction for K 12 teachers to teach their learners, but when you're teaching teachers, it's **simply not enough**.*

Eric Moore: "...They might see me as an effective teacher, but never stop and reflect on what it was that made that teaching effective, and therefore it's difficult for them to replicate it in their own practice."

*Eric Moore: "...explicit modeling with transfer is **critically important** if we want to develop pre-service teachers who will later do the practice of UDL."*

Technology allows for flexibility in instructional planning by providing choices in accessing instructional materials, engaging in activities, and demonstrating understanding. When technology is included, it is essential that teachers plan to model that technology for students as well as provide scaffolds and support. With support in place, students have an additional resource in their educational toolkit. Without modeling and support, however, students may know about a technology but will not know how to make decisions regarding its use in their own learning when they are on their own.

Eric Moore: "So it's really about the degree to which the pedagogy is interfaced with the technology that we have to use the technology with purpose, and students need instruction and support and its use in order for it to be effective. When it's done right, it is very powerful."

While individuals exiting teacher preparation programs are prepared to implement UDL, a lack of a support system at the school level may cause that teacher to abandon UDL instructional processes. Preservice teachers need to be prepared for how to address a lack of support in their social context, and seek out communities of practice and support that align with their teaching.

Eric Moore: "...we might prepare teachers through our program to really have strong attitudes and skills and resources to be inclusive educators, and then they go into a classroom setting, in a school setting, in which the principals and their fellow teachers really just

don't have those attitudes ...they don't have supports...As early teachers, they don't feel like they can push back on that system, and they just get washed in with that social context."

Eric Moore: "Sometimes that means being connected to a community that's outside your immediate school community... here I have a pool of people who can charge me up,... who can support me and that gives me the strength to continue the work."

Resources

In his interview, Dr. Moore shared resources that may be of interest:
- [UDL Online Course Assessment Tool](#) (Darla Benton Kearney)
- [UDLHE (Higher Education) Special Interest Group](#) (UDL-IRN SIG)
- [UDL on Campus (CAST)](#): UDL In Higher Education
- [Online by Design](#) (Novak Education)
- [Read&Write](#) (Text Help)

Link to Video

This Research and Practice Brief can be viewed on video online at [tinyurl.com/4w79cep3](#)

Suggested Readings

Ajzen I. (1985) From Intentions to Actions: A Theory of Planned Behavior. In: Kuhl J., Beckmann J. (eds) Action Control. SSSP Springer Series in Social Psychology. Springer, Berlin, Heidelberg. https://doi.org/10.1007/978-3-642-69746-3_2

Black, J., & Moore, E. J. (2019). *UDL navigators in higher education: A field guide*. CAST Professional Publishing.

CAST. (2018). Universal Design for Learning Guidelines version 2.2.
    http://udlguidelines.cast.org

Moore, E. J. & Bell, S. M (2019). Is instructor (faculty) modeling an
    effective practice for teacher education? Insights and supports for
    new research, *Action in Teacher Education*, 41(4), 325-343, DOI:
    10.1080/01626620.2019.1622474

Moore, E. J., Smith, F. G., Hollingshead, A., & Wojcik, B. (2018). Voices
    From the Field: Implementing and Scaling-Up Universal Design for

    Learning in Teacher Preparation Programs. Journal of Special
    Education Technology, 33(1), 40–53.
    https://doi.org/10.1177/0162643417732293

Meyer, A., Rose, D. H., & Gordon, D. T. (2014). *Universal design for
    learning: Theory and practice.* CAST Professional Publishing.

Transcription of Interview

Transcription of the interview can be found at
https://ciddl.org/brief-8-interview-transcript/

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