Working Smarter: Using Universal Design for Learning to Spiral Curriculum in Small Special Education Preparation Programs

AUTHORS
Jennifer D. Walker
Marla J. Lohmann
Kathleen A. Boothe
Ruby L. Owiny

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ABSTRACT
Although small teacher education preparation programs (STEPP) may struggle to implement robust program design frameworks compared to their larger preparation program peers, a collaborative design can help smaller programs with resource limitations. This collaboration can facilitate the design of effective and efficient teacher preparation programs (TPP) with a spiraled curriculum. Through scaffolding in TPPs, a spiral of support is defined as the process of learning continuous threads of information, gradually building to content mastery. These scaffolded components include case studies, role playing/modeling/feedback, and mentoring within the UDL framework. The use of case studies throughout a TPP provides a "continuum" of learning to prepare teachers to develop knowledge, skills, and practical experience within a diverse K-12 student population. Given a spiral of instruction to include role-play, modeling, feedback, and mentorship, preservice teachers can also engage in real world teaching and learning that go beyond the constraints of a classroom.

KEYWORDS
Higher education, small programs, special education, teacher preparation

Drs. Mullins and Mendez end the academic year frustrated with the design of their special education teacher preparation program. As the only two special education teacher educators in the College of Education, they realize they have limited capacity to revamp the program. Further, with limited resources, they do not have the ability to add faculty or make large purchases. They know their pre- and in-service teachers need more support, but it often feels impossible to meet all of their needs and goals within the program. Given these challenges, Drs. Mullins and Mendez begin brainstorming ways to support their future educators in a way that taps into already available, or easy to access resources, while also utilizing best practices.

To prepare special educators who are knowledgeable, resilient, effective, and capable, it is imperative that initial teacher preparation training and ongoing support are in place (Belknap & Taymans, 2015; Bishop et al., 2010). Therefore, special education teacher educators are challenged to develop models of instruction that support resiliency and knowledge. However, small teacher education preparation programs (STEPP) may struggle to implement robust program design frameworks compared to their larger preparation program peers. Fewer faculty, fewer specialized course offerings, less course delivery flexibility, and community expectations require different strategies, insights, and ideas to maximize learning. Through a collaborative design, this paper will demonstrate how smaller programs with resource limitations can design effective and efficient teacher preparation programs (TPP) through a spiral of curriculum. A spiral of support is defined as the process of learning

continuous threads of information, gradually building to content mastery. In addition, building TPPs through a Universal Design for Learning (UDL) lens realistically supports the requirements and resilience needed by qualified special educators. Using UDL as an instructional framework addresses a range of teaching and learning challenges and the design of inclusive learning environments can meet a wider range of students' needs. Further, UDL can be leveraged as a way to ensure instruction is accessible by creating a spiral of supports that allows smaller programs to get the biggest "bang for their buck" with limited faculty and resources.

Universal Design for Learning in Higher Education

Given that teacher satisfaction with preservice teacher training can be predictive of early-career attrition (DeAngelis et al., 2013), it is imperative that TPPs are designed with quality instruction. One such way to ensure that instruction is designed to meet all learners is through the UDL framework. The UDL framework is based on three principles: (a) multiple means of representation, (b) multiple means of engagement, and (c) multiple means of action and expression (CAST, 2018). Multiple means of representation occur in the recognition network of the brain and focuses on the experience of learning (Rose & Strangman, 2007). The affective network of the brain is used when faculty find ways to involve students in their learning, also known as multiple means of engagement. Finally, multiple means of action and expression occur in the strategic networks of the brain and focus on how students demonstrate their knowledge. Much of the research on UDL in higher education focuses on how instructors use these principles in the college classroom.

Multiple Means of Representation

Multiple means of representation can be achieved in TPPs in many ways. Providing lessons using multiple formats is one such way. Friedman & Friedman (2013) found that using social media in both face-to-face and online classes has been an effective way to represent material. Additionally, faculty can offer both a recorded lecture as well as interactive activities as a way to meet this UDL principle (Simonds & Brock, 2014). In small programs, this can be as simple as recording small clips of class lectures and then posting them for the class to review at a later time or date. Finally, Boothe et al. (2018) suggest that faculty provide a copy of PowerPoint presentations to students, and offer both a digital and hard copy of textbooks.

Research also supports the use of highlighting critical information as an effective way to represent content. As faculty in small programs, we know resources are limited and instructors do not always have time to take notes for students. Students can be responsible for creating summaries of lectures and then posting them for their classmates (Gradel & Edson, 2010). One easy way to encourage this collaboration is for instructors to create one semester long shared document and invite students to collaborate on note taking. Alternatively, students can highlight key information with graphic organizers or use a checklist to identify core concepts (Scott et al., 2015).

Multiple Means of Engagement

There are several ways for TPPs to incorporate UDL's multiple means of engagement into the classroom. Research supports the use of scaffolding, student collaboration, alternative accessible content, easily accessible faculty, multiple modes of lectures, frequent assessment, examples or guides to assignments, real-world examples, and aligning assignments with course objectives (Boothe et al., 2018). Whether you teach face to face or virtually, collaboration is an important component of learning. One way to do this is to utilize cooperative learning strategies such as the "Ask 3" method where students will ask three classmates a question before asking the instructor (Gradel & Edson, 2010). This method extends opportunities for engagement for all students while reducing the impact on the instructor. Case studies are another way instructors in TPPs can address multiple UDL principles. Specifically, case studies can provide an alternative way to provide students with content knowledge (e.g., stories, videos, data, etc.), explore multiple answer pathways (e.g., student recommendations, eligibility determinations, etc.), and connect with other learners (e.g., mock meetings, discussions by roles, etc.). Further, using the same case studies throughout a TPP program, promotes student engagement and investment in learning, addressing multiple means of engagement.

Research on engagement also notes the importance of faculty accessibility, especially for instructors teaching online. Marks et al. (2016) found that students prefer their instructors hold regularly scheduled office hours and want them to be accessible through email. When it comes to being accessible, Rao et al. (2014) suggest that faculty set consistent office hours for at least two days. In a study conducted by Lohmann et al. (2018), phone calls and text messages were the main ways online students engaged with the instructor. For instructors who do not want to share their personal phone number, a messaging application can be used. To support instructors in TPPs, it is important to set parameters around when calls and texts will be forwarded to instructors from

those services. Students should also be informed about the turnaround at which they can expect a return call or email, which could be once or twice a day. Engaging students can also be achieved by reaching out to students individually during the first week of class and, if teaching online, hosting virtual meetings weekly (Boothe et al., 2018; Lohmann et al., 2018). All of these strategies support student engagement in TPPs, which is critically important since there are clear links between student engagement and retention (Hattie & Anderman, 2013).

Multiple Means of Action and Expression

Multiple means of action and expression can be achieved in efficient ways in TPPs to streamline instruction, improve student learning, and address the needs of diverse learners. Boothe et al. (2018) identified several themes in the literature focused on the best ways to incorporate this UDL principle in the college classroom. These themes include: (a) obtaining accessible technology, (b) clarifying assignment expectations, (c) offering flexible opportunities and choice to demonstrate content knowledge, (d) providing opportunities to practice skills with proper support, and (e) using conceptual mapping tools. Smith (2012) found that when clarifying assignment expectations, it is best to provide examples from previous students' work. Rao and colleagues (2014) suggest the importance of having a specific day and time that all assignments/activities are due. This UDL principle can also be met by providing a rubric or guide for students to view the assignment (Rao et al., 2014; Smith, 2012).

Providing choice in assignments is another effective way to meet the needs of students and meet the action and expression principle. One way to accomplish this is to set an assignment objective and allow students to choose the way in which they want to respond, such as writing an essay or creating a podcast (Tobin, 2014). This can be easily accomplished in any sized program with assignment choice boards and rubrics that outline assignment objectives. In fact, choice boards can remain consistent across courses, while only altering the outcomes. One such choice board prompt might be "In a manner of your choosing (written paper, video presentation, infographic, or comic strip, etc.), answer the following questions..." Smith (2012) offers additional options for demonstrating content knowledge, which includes: (a) using graphic organizers to plan assignments, (b) creating a web-based or digital project, and (c) using speech to text applications. When students participate in live discussions, instructors can allow students to participate verbally or in written format (Vu & Faddle, 2013). In a small research study conducted by Boothe and colleagues (2020), respondents were highly satisfied with how a choice-based assessment allowed them to demonstrate knowledge of the content.

It is recommended that teachers implement UDL in small chunks so as to not overwhelm themselves, and this is no different for faculty in small programs (Novak, 2016). Tobin and Behling (2018) recommend starting UDL implementation small by selecting one change to implement in the classroom at a time. The UDL framework supports small programs by creating a foundation of strategies, assignments, supports, resources, and materials that can be used repeatedly.

While Drs. Mullins and Mendez are both experts on UDL and implement several strategies across the UDL guidelines, their individual course content is often disjointed and misaligned with program goals. They decide to analyze their program and begin their discussions by bringing their course syllabi together to determine where and when students are learning key concepts. They outline a desired progression of skills and concepts, building in complexity as students move through the program. These discussions lead to the development of critical course outcomes or assessments throughout the entire program. Eventually, Drs. Mullins and Mendez are ready to decide how to teach the content through a UDL lens. They are ready for a smarter, not harder workload!

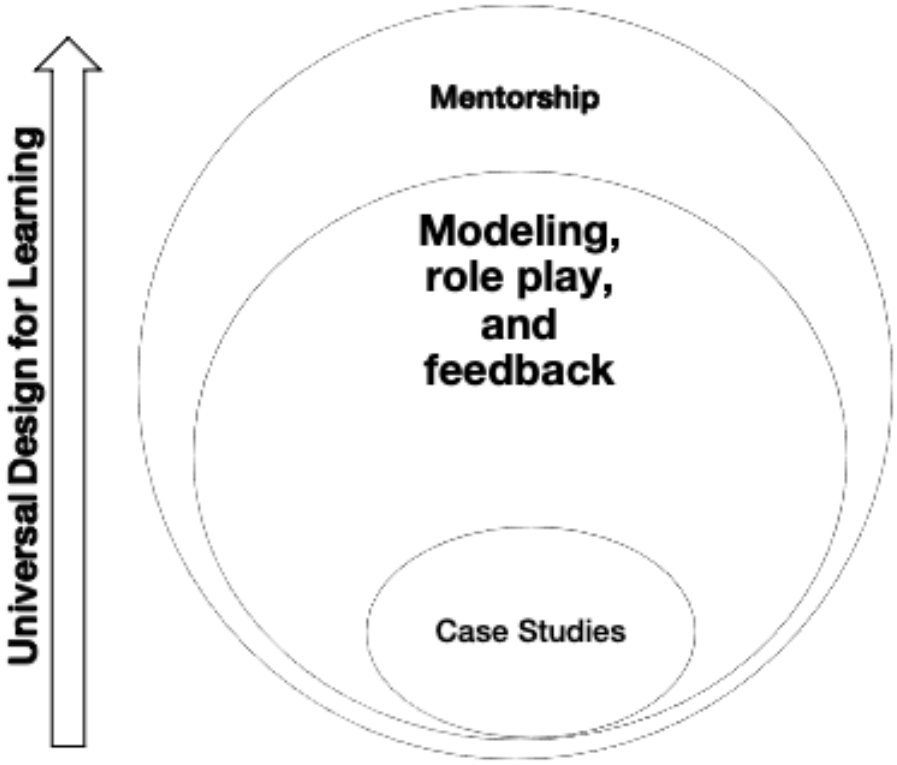
Spiral of Supports

Utilizing the UDL framework, STEPP can create a spiral of support for their pre- and in-service teachers. A visual of such support can be referenced in Figure 1. This spiral builds over time and starts with case studies. After students become more familiar with understanding and mastering course content in the case studies, they engage in modeling and role-play and receive feedback on their performance. Finally, teacher candidates take what they have learned through the case studies and engage in field placements or internships with a mentor. This spiral of support for pre- and in-service teachers includes the aforementioned three strategies, as well as opportunities to expand upon these strategies through the lens of UDL.

Case Studies

One way to support authentic learning is to use a situated learning approach (Snape & Fox-Turnbull, 2013). Case studies can help future educators understand and problem solve through situations that occur in the classroom. These scenarios present information about students, classrooms, or school interactions and require future teachers to engage in problem solving and decision making. Using case studies with preservice teachers helps them to better appreciate and understand the

FIGURE 1: Spiral of Learning



classroom environment while cultivating motivation (Ching, 2011). Although case studies may be presented through paper or digital platforms, video case studies can also prove to be an effective way to promote learning. Utilizing video case studies also increases the development of problem-solving strategies (Shin et al., 2019).

As a starting point, a case study manual is one way to bring cohesiveness to a TPP. This manual can be used throughout a program and each instructor can designate which case studies, or parts of case studies, are in each course. This manual can include hypothetical students at various levels in their academic careers, with a range of disabilities, along with corresponding test documents, meeting notes, or anecdotal information. A sample overview of the potential documents, grades, and disability categories are presented in Figure 2. The testing data and Individualized Education Program(IEPs) can be tailored to state or local document formats to provide students with a realistic experience. This crosswalk of cases, grade levels, disabilities, courses, and outcomes can be developed as a starting place for the case study manual. While this is a large undertaking to complete all at once, these case studies can be built slowly over time, until they are complete. Instructors can write these studies themselves based on fictitious students, or pre- and in-service teachers can write case studies as part of their coursework assignments early in the TPP. Not every program may need every case listed in Figure 2 since some programs may only focus on a subset of licensure requirements. It should be noted, however, that once these cases are complete, they would be used repeatedly throughout the TPP, with the exception of minor adjustments or updates.

Case Studies and UDL

It is important to remember that embedding the UDL framework is a process and can be done over time. From a UDL perspective, the case study manual can be built out to support more learners by embedding the following instructional tools and strategies. Ideally, these ideas should be built in as case studies are written, but given the limited resources and individualization of small programs, it would also be reasonable to add one or two new ideas each semester, building the studies over time.

Engagement. If the document is a living document, teacher candidates can select case study student names at the start of each semester or names can be selected based on current events or popular actors, musicians, or historical figures. Utilizing local formats from surrounding school districts will prompt relevance and authenticity. Students will also see value because it may be a document they will eventually need to be familiar with. Cases can be used for discussion or role-play, and enhancing collaboration and community building within the classroom. If the same cases are used throughout the program, students will know the expectations and will not feel threatened by the material since it will build over time with complexity and expectations.

Representation. Cases should include both narratives and charts to display testing information and any other applicable information. The manual can also include a glossary or acronym bank to help students decipher terms. Students can help create this resource as they explore the case studies. This provides opportunities to identify critical vocabulary and big ideas. If cases are connected through the coursework and brought to students' attention, they will naturally tap into prior knowledge and make connections. Finally, free and easily accessible video clips can be added to each

case study to enhance understanding. For example, a case study on "Student KL" who has been found eligible for a specific learning disability (SLD) might be paired with a video clip that shows "Student KL" participating in a reading program. While the video is certainly not the individual in the case study, the clip can provide additional information about how a student who is struggling with reading might learn when provided direct instruction. Admittedly, this might be time consuming for faculty to find and match with case studies, but this is also where pre- and in-service teachers may be able to help by engaging in an assignment that asks them to find video examples of specific students (e.g., an elementary aged student who refuses to follow directions).

Action and Expression. As students interact with case studies, they can be given options for engagement with the material. This may include solving problems in the case studies by creating storyboards, videos, or comic strips. Students should be made aware that cases could be solved in multiple ways, with more than one right answer. When discussing elements of the special education eligibility process or components of an IEP, instructors can provide concept maps or outlines to help students organize information. This could also be expanded into eligibility or IEP checklists students develop or utilize when engaging in case study review.

Drs. Mullins and Mendez realize that while they both use case studies in their courses to teach content, when they compare their cases, the content either overlaps or is missing key concepts. They decide to collaborate and share their case studies to create one document that can be used throughout their program. They deliberately focus on student populations that are applicable to their TPP and keep the case studies broad enough to be used across multiple classes. Once they have a few case studies written, they designate which parts of each case will be used by each course, scaffolding and building content mastery throughout the program with the corresponding content of the case studies. They base these decisions on their earlier conversations about scaffolding and program goals. Finally, they decide to set goals for the future so they can continue building upon their case studies.

FIGURE 2: Case Study Overview

Case Information Examples (select one or several)

- ☐ Student background (social history)
- ☐ Student background (academic history)
- ☐ IQ testing documentation
- ☐ Educational testing documentation
- ☐ Teacher reports
- ☐ Student report cards
- ☐ Classroom tests (formative or summative)
- ☐ Classroom work samples
- ☐ State or national norm-based tests
- ☐ IEPs
- ☐ Parent concerns
- ☐ Functional Behavior Assessments (FBA)/ Behavior Intervention Plans (BIP)
- ☐ Extended School Year documentation
- ☐ Related services documentation (speech, occupational therapy, etc.)
- ☐ Transition plans
- ☐ Video clips (free and accessible)

Grade Levels (select one or several for a continuum)

- ☐ Preschool
- ☐ Lower elementary (K-2)
- ☐ Upper elementary (3-5)
- ☐ Middle school
- ☐ High school (9-10)
- ☐ High school (11-12)
- ☐ Transitional years

Disabilities (select one)

- ☐ Specific learning disability (SLD)
- ☐ Other health impairment (OHI)
- ☐ Autism spectrum disorder (ASD)
- ☐ Emotional/ behavioral disability
- ☐ Speech or language impairment
- ☐ Visual impairment, including blindness
- ☐ Deafness
- ☐ Hearing impairment
- ☐ Deaf-blindness
- ☐ Intellectual disability
- ☐ Traumatic brain injury
- ☐ Multiple disabilities

Modeling, Role Play, and Feedback

Building upon the aforementioned case studies, teacher candidates can expand upon their knowledge through a process that includes modeling, role-play, and feedback. Although there are many facets of preparation for TPPs, this is an additional way to scaffold skills and provide active learning experiences. Active learning and practicing skills required for classroom instruction is vital

for preparing teacher candidates (Barker, 2012) and consequently, ensuring fidelity of interventions (Cash et al., 2022). In TPPs, modeling occurs when teacher educators demonstrate effective teaching tools (Moore & Bell, 2019). When students observe teacher educators modeling skills, it increases their knowledge and confidence in using those strategies in their own practice (Zipke et al., 2019).

One way to provide active learning is through the use of role-plays (Kilgour et al., 2015). Role-plays offer teacher candidates the opportunity to practice skills and receive feedback from instructors and classmates. The use of role-plays increases student engagement in learning (Stevens, 2015) and supports teacher candidates in mastering skills such as classroom instruction (Gregory & Masters, 2012), behavior management (Sawyer et al., 2017), and communication with families and colleagues (Gartmeier et al., 2015). These role plays can be conducted either in-person or via virtual reality tools, such as Teach Live (Dieker et al., 2017). Since students will have opportunities to repeatedly hear about each case study throughout various courses, they will be familiar with the case study students and case study team players. This knowledge can be used as a springboard for role-playing scenarios, such as eligibility meetings, IEP meetings, Functional Behavior Assessment/Behavior Intervention Plan (FBA/BIP) meetings, phone calls to parents or guardians, Manifestation Determination Reviews, and parent/teacher conferences.

The role-play process should start with modeling the behaviors or processes. This modeling should be completed by the instructor and include all required steps, demonstrated in an accurate manner. This provides pre- and in-service teachers with a positive model of expectations. After modeling, pre- and in-service teachers should engage in role-play. This role-play can be organized in a number of ways, some of which will be expanded upon in the UDL section in the following paragraphs. Individuals can be assigned roles as outlined in the case studies (e.g., parents, administrators, general education teachers, advocates, etc.) and an assigned outcome (e.g., decide eligibility, determine IEP placement, review data, etc.) for discussion.

When teacher candidates are provided the opportunity to practice skills, it is vital that they receive specific feedback. Research supports the use of feedback, as long as it is done in a timely manner (Robinson & Wizer, 2016; Schelly et al., 2011). Constructive feedback can focus on knowledge of processes, laws, and policies, as well as how students interacted with other members of the case study team. This specific praise can help reinforce students' understanding of the course content and students' ability to engage in a professional manner within a team. This feedback enhances students' fidelity in implementing evidence-based practices (EBPs; Cash et al., 2022; Schles & Robertson, 2019). In addition, when teacher candidates are provided with quality feedback on their performance, they learn to provide specific feedback to their students (Cash et al., 2022), an evidence-based practice that promotes desired behaviors by praising students for exhibiting those behaviors (Markelz et al., 2022). Quality feedback must be specific and personalized to the student and their work (Ellis & Barnes, 2020) and can be delivered through multiple means, to include pictorial representations, written, verbal, or a combination of several modalities.

Modeling, Role Play, Feedback, and UDL

Universal Design for Learning principles can be utilized to enhance and expand upon role-playing in TPPs. While there may be some overlap between the principles, each suggestion can also stand alone as a way to reach more future teacher educators. Much like case studies, it is best practice to start with the UDL framework, but additions and expansion over time are also reasonable.

Engagement. Pre- and in-service teachers can be engaged in the role-playing process by allowing for as much choice as possible with their case study roles. Depending on the goals or desired outcome of the role-play, students might be able to choose which person they would like to role-play from the case studies. Students can choose to add information to the scenarios, providing more depth or context to their decision-making. Behavior specific feedback should be embedded in all feedback, however, it can be expanded to include notations about effort, improvement, and strategies for future role-plays or real-life scenarios. Further, students can also complete self-assessments or reflections through checklists for specific behaviors or templates for reflection on the outcome of the process. This might also include adherence to laws and/or regulations and special education content knowledge. A sample checklist for self-reflection of an IEP role-play is shown in Figure 3. Although the provided example may need to be altered depending on the case studies and desired outcomes, it presents a sample overview that could be used in the role-playing process. For STEPP, these self-reflection and feedback forms can be created by students as a demonstration of content mastery and then utilized throughout the entire TPP.

Representation. To further enhance the modeling and role-play experience, instructors can provide students with visuals such as color-coded or visual keys, indicating each participant's role. Another option might include using videos that depict the desired outcomes

FIGURE 3: Sample IEP Role-Play and Self-Reflection Activity

Directions: Take on the role as assigned below and meet the desired outcomes. During the meeting, advocate for your position, the student, and the outcome.

Step 1: As you move through the role-play, place a checkmark next to each component covered during the meeting. While some prompts suggest passive participation, it is your responsibility to meet the meeting objectives and you are limited by the checklist.

Step 2: At the conclusion of the role-play, complete the reflection at the end of the checklist.

Case Study

Case Study: Student Polly O. My Role: Parent of Polly O.

Desired Outcome: Work collaboratively with the school team to create a new IEP for Polly O. based on your knowledge of her case study.

1. Sign in to the meeting_____
2. Ask for all team member's names and roles_____
3. Ask for an agenda for the meeting_____
4. Make sure the following are discussed during the beginning of the meeting:
    a. Present level_____
    b. Goals_____
        i. Are goals measurable? _____
        ii. Is there a description of how goals will be measured? _____
    c. Related services_____
    d. Accommodations/ Modifications_____
5. Ask to add your parent concerns to the present level_____
6. Ask team to explain placement decision_____
7. Check for a start and end date for services_____

Reflection: Respond to all or some of the following prompts.

1. In what ways did you advocate for your student?
2. In retrospect, what do you wish you had done differently?
3. How did each person's role in this role-play impact how you interacted with the team?
4. Do you believe the team listened and honored your contributions? If yes, how so? If no, why do you think they weren't?
5. How did what happened in this meeting connect to what you know about laws, policies, processes, and course content?

and correct processes of each participant in a situation similar to the familiar case study students. The instructor can use videos, in addition to their own modeling. For those who may need additional modeling or prompting, sentence or phrase starters can be provided to guide individuals through a case study role-play. For example, students in an IEP role-play may receive starters for each step, such as "Welcome to today's meeting, our agenda is as follows…" and "Now, let's discuss the goals. Starting with the first one…" Again, for STEPP, students can also generate these as a way to demonstrate understanding of content and processes or a whole class discussion can be used to develop these starters for the course.

Action and Expression. To support students with navigating case studies through role-play, providing both digital and paper copies to students will support how students can manipulate the information and materials. This might also include color-coding or separate folders for different types of information (e.g., law information, list of acronyms). If possible, role-plays can run simultaneously in the classroom and upon conclusion, groups can share the different ways a situation can be addressed or a problem solved. This allows participants to see multiple examples and solutions (i.e., multiple means of representation).

Since STEPP may not have access to avatars or simulators, outside guests can be invited in to engage in modeling or role-play as one of the case study participants. Guests might include parents, an administrator, or even another instructor who might be assuming a role as a teacher or school psychologist. To support the process, pre- and in-service teachers should receive differentiated feedback. Once role-plays are complete, instructors can assign self-reflection on roles and outcomes of the scenario and students can list questions about where they want feedback. For example, students can be asked, "What specific feedback do you need from me or your peers about your role-playing or about your scenario decisions?" These responses can be answered as a whole group through a problem solving process.

After designing case studies to support their students, Drs. Mullins and Mendez know they need more than just a one-dimensional case study. Dr. Mullins shares that modeling, role-play, and feedback have worked well in her Introduction to Special Education course and could be used to extend the case studies. After brainstorming, they identify specific case studies and scenarios that can be role-played by students. They create a list of skills their students will need to master, as it aligns with their TPP. Knowing that students must be familiar with the case studies first, they select courses in the middle and towards the end of their program and create a plan for modeling the identified skills across their courses. Finally, they discuss options and opportunities to provide feedback with self-reflection and assessment checklists and tools. They create these together so it is consistent across the TPP.

Mentorship

Another aspect of effective teacher preparation is the use of mentorship to support teacher candidate growth and development. Mentoring is used to help preservice teachers learn the skills and instructional behaviors needed for teaching success (Hobson et al., 2012). Previous research indicates that teachers use their field experiences and the guidance received in those experiences in their own future classrooms (Bullock, 2009). When teacher candidates receive mentorship through university-based supervision, they learn effective lesson planning skills, instructional techniques, and have increased confidence in their teaching abilities (Vumilia & Semali, 2016). Because of this, mentorship in fieldwork is fundamental.

However, in smaller programs, the ability to reach every student, in every setting, can be daunting. The role-play scenarios instructors observe and support might provide some solace about future teachers' aptitudes, but mentorship and supervision remain an important component of teacher success in the field. One way to address the problem of mentorship and supervision is through video feedback. Although bug in ear technologies are effective (Schaefer & Ottley, 2018), they may not be feasible for small programs. However, most individuals have cell phones, tablets, or laptops that can record or connect to live video meetings throughout the school day. Given that most universities have a memorandum of understanding (MOU) with local partner schools, video recording or video streaming should be a permissible practice. If not, this can be added to an MOU for field supervision. Additionally, a variety of programs currently exist to support feedback during fieldwork, but not all programs may be able to afford these options. A simple live video chat or video meeting can also work well if a small program cannot afford a video service or travel expenses to go to each teacher candidate's site. Videos can be streamed live and recorded for discussion. Candidates can be put in small groups to watch and discuss teaching strategies with a mentor, who may be an instructor or a principal, administrator, or veteran teacher from the community. These mentor meetings can be scheduled regularly to review teaching videos and discuss how to best support the teacher candidates.

Mentorship and UDL

The mentorship of teacher candidates fits well within the UDL framework. Effective mentorship offers multiple means of engagement, representation, and

FIGURE 4: Sample Lesson Plan

Lesson Plan with Prompts (Excerpt)

Lesson Plan Topic: Investigating Moon Phases

Lesson Component	Verbal Prompt	Additional Notes
Opening/ Hook	"Remember last week when we recorded our moon phases based on our readings?"	Continue recapping previous material and activities. Show video of phases on the screen as a review.
Opening/ Objectives	"Today we are going to create our own models so we can show we understand moon phases. Our goal is to create every phase using materials I will provide. Once you have created a phase, you will record it on your group lab sheet, then you will keep moving through all the phases, creating them with materials and recording them."	Show students the group lab sheet. Model how to fill in one phase's square by drawing how the materials were used to make each phase.
Directions	"Listen to my instructions first. Once I tell you to "move," please get into your science groups and have a seat at your group science table. Okay, move."	Be sure to follow up with behavior specific praise about what students are doing that align with expectations.
Directions	"Now that you are in your science groups, I am going to pass out the materials and explain the rules for using each of them. You will be receiving a flashlight, an inflatable globe, and a small white balloon."	Give students rules for using materials, especially the flashlight.

action and expression. While the ways in which pre- and in-service teachers are mentored may vary, UDL can still support these efforts.

Engagement. To further support students and provide mentorship, teacher candidates can be put in pairs or trios for mentorship support. If the instructor or mentor creates a positive and safe space for candidates to share videos or streams, everyone can benefit from the mentor's feedback. Another option that can expand upon video interactions is a running dialogue between a candidate and a mentor on a working document. Mentors can provide specific prompts, asking individuals where and how they need support and engage in a running and ongoing journaling dialogue. Finally, candidates can be supported with coping skills and strategies with a resource bank of options to reduce daily classroom stressors. Mentors can model ways to handle specific stressors and provide a list of scaffolded options for students. These options can be housed on a learning management system (LMS) or any other shared document. The list might include meditative videos for relaxation, websites that list positive choices for taming stress, directions for breathing exercises, and even evidence-based articles that explain best ways to reduce frustration, stress, or anxiety.

Representation. During feedback with future educators, mentors can provide direct support for strategies or unfamiliar practices by embedding resources in their in-person or online discussions. This will ensure that future educators have access to not only the need to make a change, but also know how the change is defined, what is involved in making that change, and what that change would look like in the classroom. In addition, these explanatory resources can be presented through modeling, videos, text, or other representations. Although the following level of generalization may not be feasible for every program, one way to support local school systems and provide supported opportunities to generalize might be a paid long-term position in local schools. If a candidate demonstrates excellence in understanding case studies and role-play, perhaps they could pair with a local school and accept an "apprentice" position where supervision and mentorship are still occurring while they move into a full-time teaching position. This would require careful planning with local school divisions and extensive mentorship from the teacher preparation program, but it could provide generalization opportunities and fill open positions in local schools.

> Incorporating these components will help faculty meet the need of producing well-prepared and effective special educators who are ready to face the real world of teaching students with disabilities.

Action and Expression. As previously noted, the role of mentor can be expanded to include a variety of individuals from the university or the community, to include adjunct instructors, administrators, or veteran teachers. When possible, multiple mentors can be assigned to groups of teacher candidates to provide different approaches to feedback and information and differentiation in modeling. When teacher candidate videos are used, mentors can use think-alouds as a way to explain how a problem could have been solved or a lesson improved. For teacher candidates who may have struggled through case studies or role-playing, prompts and checklists can be provided to them through lessons or classroom procedures. An excerpt of a prompted lesson plan is provided in Figure 4.

Now that Drs. Mullins and Mendez have a spiral of support in their program with case studies, modeling, role play, and feedback, they begin to set their sights on providing mentorship to their future educators. Given that their school partnerships cover a large geographical area and they have limited opportunities to travel to field sites, Drs. Mullins and Mendez explore ways to provide mentorship in unconventional, yet effective ways. They begin to brainstorm options that include video recordings, a larger pool of mentors, and small group mentorship. They decide to use a video platform as a trial run, while simultaneously recruiting a larger pool of volunteer mentors.

The challenges in a small teacher preparation program can sometimes feel daunting for Drs. Mullins and Mendez, yet, their initial frustrations have subsided with careful planning. Creating foundational case studies that can be utilized as a springboard for every class in the program brings cohesiveness to the program, alleviating redundancy and addressing missing concepts. These case studies, in addition to the role-play, modeling, and feedback, provide the perfect catalyst to fieldwork and mentorship. Drs. Mullins and Mendez feel confident that the practices they are implementing are effective, and now, resource friendly for supporting the needs of all teacher candidates.

Conclusion

Instructors working in small programs face many challenges due to high course loads, fewer resources, and administra-

ABOUT THE AUTHOR

Jennifer D. Walker

Jennifer D. Walker, PhD, is an Associate Professor and Program Director of Special Education at the University of Mary Washington in Fredericksburg, Virginia. Her research interests include teacher preparation, classroom management, and Positive Behavior Interventions and Supports. She enjoys working with pre- and in-service teachers in the field through professional development, volunteering, and mentorship.

Marla J. Lohmann

Marla J. Lohmann, PhD, is an Associate Professor of Special Education at Colorado Christian University, where she teaches both special education alternative certification and master's degree students in fully online programs. Dr. Lohmann is an active member of the Council for Exceptional Children Teacher Education Division (TED) and is currently the Chair of the TED Early Childhood SIG and the Secretary for Colorado TED. Dr. Lohmann's research focuses on effective online teacher preparation, assistive technology, preschool classroom management, and supporting diverse learning needs in the private school classroom.

Kathleen A. Boothe

Kathleen A. Boothe, PhD, is an Associate Professor of Special Education at Southeastern Oklahoma State University in Durant, OK. She currently teaches fully online to pre- and in-service teachers in a small special education program of two faculty members. Her current research focuses on integrating the Universal Design for Learning framework into the online learning environment and best practices in online teaching.

Ruby L. Owiny

Ruby L. Owiny, PhD, is an Assistant Professor at Minnesota State University, Mankato. She is actively involved in the Teacher Education Division of the Council for Exceptional Children, having recently served as President. Her research focuses on inclusion for students with disabilities through the lens of UDL, evidence-based practices, high-leverage practices, and co-teaching. Ruby is also a consultant who enjoys engaging with in-service teachers through professional development and coaching.

tive duties. By utilizing UDL, faculty in STEPP are demonstrating to teacher candidates how to "practice what they preach" while freeing up time to focus on other key components of their job. The UDL framework can be used to assist in spiraling curriculum for special education candidates by incorporating three key components: case studies, modeling/role-plays/feedback, and mentoring. Incorporating these components will help faculty meet the need of producing well-prepared and effective special educators who are ready to face the real world of teaching students with disabilities.

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