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# Translating High-leverage Practices to Remote Environments: Tips for Teacher Educators

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## Abstract

Given the global pandemic, educators at all levels have had to transition their teaching practices to remote environments. Teacher education faculty have had to consider not only how to shift their own teaching, but also how to prepare teacher candidates for their future teaching roles which may include instruction in a range of modalities (face-to-face, remote-synchronous, remote-asynchronous, hybrid). In this article, we propose that high-leverage practices (HLPs) can serve as a solid foundation for teacher preparation regardless of modality and offer five tips for how teacher educators can prepare candidates to use HLPs across modalities. A vignette which highlights two HLPs (i.e., establishing a consistent, organized, and respectful learning environment; and using strategies to promote active student engagement) is included to illustrate implementation of the tips.

## Keywords

high-leverage practices, remote instruction, teacher education

The transition to remote instruction due to the global pandemic required teachers to reexamine their instructional practices and routines, and in some cases, learn new ones overnight (Marshall et al., 2020). New teaching and learning modalities included an array of both real-time online instruction (i.e., synchronous learning) as well as asynchronous approaches, where students engaged in the learning process on their own time or at their own pace. Pedagogical approaches that were effective in face-to-face environments suddenly seemed inapplicable, even in synchronous, virtual classrooms. Indeed, applying these approaches to asynchronous environments seemed even more unsuitable when the transition to remote learning first occurred.

Inservice teachers were not the only educators caught off-guard. Teacher candidates and college faculty, particularly those engaged in clinical/field work, were also impacted. As novices, many teacher candidates were still in the acquisition and/or fluency stages of learning pedagogical knowledge and skills. Suddenly, attempting to generalize these “traditional face-to-face” skills in a different modality posed an entirely new challenge. This shift required faculty to reexamine their own instruction and determine how to best prepare candidates to generalize pedagogical knowledge and skills learned for one modality (i.e., face-to-face) to another (i.e., remote). The importance of this shift for

current and future preparation has been emphasized in the recent literature. For example, Darling-Hammond and Hyler (2020) highlight the critical importance for “... both incoming and current educators to learn how to engage productively in distance learning as well as blended and hybrid learning models. This will likely require rethinking of teacher education curricula in some programs” (p. 459).

## Effective Teaching Across Modalities

Translating effective teaching practices to remote environments must be considered if quality instruction and student learning are to continue. During the pandemic, despite some early successes (e.g., Tremmel et al., 2020), most teachers had little meaningful training on how to deliver instruction remotely and relied on asking their peers or searching online (Marshall et al., 2020). Although it is easy to become engrossed with trying the newest education technology tools or trendy web-based applications, it is important that teachers learn to approach these instructional decisions with a more discerning eye using an evidence-based mindset. This is especially important in teacher preparation. Faculty can equip candidates with a strategic approach to technology selection with the goal of delivering engaging, well-designed instruction that leads to student learning.

To date, given the limited research on online learn-

ing for students with disabilities, there is no rationale to abandon preparation that highlights pedagogical approaches traditionally emphasized in face-to-face learning environments (Greer et al., 2014). This notion was recently supported by Dr. Anita Archer (2020). In a webinar for inservice teachers, Dr. Archer encouraged teachers to continue using best practices when shifting instruction to remote environments, noting that “good teaching is good teaching,” regardless of the modality. That said, there are still challenges that emerge when teaching and learning occur remotely (Herbiger et al., 2020). Many of the same needs that exist for students with disabilities in typical classrooms, remain in remote ones. Therefore, teachers must seek out practices that not only embody “good teaching” but also minimize barriers to successful and engaged online learning.

### HLPs to Facilitate Remote Teaching and Learning

One framework teacher educators can use to facilitate the transition from face-to-face pedagogy to online instruction is the set of High Leverage Practices (HLPs) developed by the Council for Exceptional Children (CEC; McLeskey et al., 2017). These HLPs fall across four aspects of practice that comprise the day-to-day work of special educators: *collaboration*, *assessment*, *social/emotional/behavioral* and *instruction*. Special and inclusive educator preparation programs are encouraged to use these HLPs as a foundation, focusing on what teachers *do* in practice versus simply focusing on what they know and can describe about practice (see CEC Initial Preparation Standards, 2020). Indeed, some teacher education programs have integrated HLPs into their training, using them to plan for and assess candidate acquisition and fluency of essential practices (e.g., Maheady et al., 2019).

Even though these HLPs were designed with face-to-face instruction in mind, it is reasonable to assume many of the critical attributes of these practices can impact teaching and learning in remote environments as well. For example, regardless if the P-12 students are learning face-to-face or virtually, it is always important that teachers: (a) create a learning environment that is consistent, organized, and respectful (HLP 7), and (b) use strategies that actively engage their learners (HLP 18). HLPs also have the potential to remove barriers to effective distance learning for students with and without disabilities (Herbiger et al., 2020).

Thus, in teacher preparation, HLPs can continue to

serve as a useful analytical lens through which candidates can learn how to identify, critique, and implement effective practices across a wide range of instructional modalities. The role of teacher educators in this process is to: (a) help candidates identify the most salient and impactful features of the HLPs, and (b) identify methods and procedures in which HLPs can be applied across modalities.

### Tips for Translating HLPs Across Modalities

In this paper, we outline five tips for teacher educators to use when helping candidates translate HLPs across modalities (see Figure 1). We propose that well thought out procedures and routines rooted in the critical attributes of HLPs, regardless of modality, should positively impact student learning. *How* teachers deliver instruction—what they say, what they do, and what they expect the students to say or do—is still the most vital contributor to learning success (Dean et al., 2012; Marzano, 2017). We describe how to prepare candidates for remote implementation of HLPs utilizing what we view as “common technology” (i.e., virtual meeting software and Google suite of apps). We believe that limiting extraneous tools in the early stages of developing teaching practice can help candidates zero in on the most salient and impactful features of HLPs and may assist with generalization across modalities.

**Figure 1.** Tips for Teacher Education Faculty to Help Teacher Candidates Translate HLPs to Remote Environments

- Tip #1: Identify target HLPs and their key components.
- Tip #2: Compare what HLPs look like when instructing via different modalities.
- Tip #3: Model HLPs in remote instruction with teacher candidates.
- Tip #4: Provide practice opportunities with HLPs in remote instruction.
- Tip #5: Explore technology to support HLPs.

In the accompanying vignette, we demonstrate how Dr. Huang, a special education faculty member, implemented these recommendations in her course on classroom and behavior management. Specifically, we focus on two HLPs that are most relevant to Dr. Huang’s course—HLP 7: *Establish a Consistent, Organized,*

*and Respectful Learning Environment and HLP 18: Use Strategies to Promote Active Student Engagement.*

### **Tip #1: Identify Target HLPs and their Key Components**

Although candidates should have a general understanding of what HLPs are and how they work together, it is not advisable or possible to focus on all the HLPs in depth in every course. A first step, therefore, is to identify which HLPs should be targeted for use in a course and to identify the key components within each HLP. When selecting the HLPs, faculty should choose HLPs directly related to the content and objectives in their course. Input from school partners and other stakeholders should also be considered when identifying what HLPs to emphasize (Maheady et al., 2019).

Focusing on just a few HLPs in a course can allow candidates to gain a deeper understanding of the HLPs and have more focused practice opportunities. Each HLP can be broken down into multiple components, which can be further broken down into actionable steps. Due to this complexity, teacher educators need to help candidates dig deeper within an individual HLP to discern the key, impactful pieces of each.

To accomplish this, faculty may begin by having candidates read the more in-depth descriptions of the HLPs provided by CEC, which also include information on research supporting the practices (McLeskey et al., 2017). Then, faculty can design discussions and activities to guide candidates in breaking the HLPs apart and deciding what is most important.

#### **Dr. Huang Identifies Course HLPs**

*Recalling the work of Archer and Hughes (2011) and conversations with mentor teachers at her professional development school, Dr. Huang determined that the most important takeaway of her course should be the notion of “effective and efficient” teaching, which (a) employs clear rules, routines, and expectations, and (b) fosters high levels of student-teacher interaction via questioning and engagement. This type of teaching results in students who are on task, have increased learning opportunities, and fewer behavioral challenges. Dr. Huang recognized that these are key features of HLP 7, “Establish a consistent, organized, and respectful learning environment” and HLP 18: “Use strategies to promote active student engagement.” Dr. Huang set out to have her candidates explore these HLPs in more depth.*

### **Candidates Read, Research, and Review**

*In order to help her teacher candidates identify the salient and impactful features of the two target HLPs, she recognized that each contained certain “active ingredients” or “kernels” (Embry & Biglan, 2008) that were essential to success. For example, Dr. Huang knew that for her candidates to successfully implement HLP 7 in any environment, they needed to understand the expectations for performance. That is, a teacher must: (1) explicitly teach their students expectations, routines, and procedures, (2) capitalize on mutually respectful relationships, and (3) enhance student performance through the provision of age-appropriate, specific, and timely feedback shared in meaningful ways, all while valuing ethnic, cultural, contextual, and linguistic diversity of his students.*

*To help her candidates identify the key attributes of the HLPs, Dr. Huang required that they read the description of each HLP, highlight the “actions” required of teachers and their students. Candidates were directed to focus on the “kernels” that comprise the HLP, with the understanding that the HLP would fundamentally change without these kernels. Next, teams of candidates reviewed extant literature to identify support for each practice and share with their peers. Finally, candidates reviewed example and non-example classroom case studies to analyze the extent to which critical features of the HLP were applied. Once Dr. Huang and her candidates were able to analyze the HLPs in this way, her next task was to plan for a way to help her candidates think about the application of these practices across instructional modalities.*

### **Tip #2: Compare what HLPs Look Like when Instructing via Different Modalities**

The second tip is for faculty to help candidates compare what HLPs look like when instructing via different modalities. When doing this, they also need to focus on the salient and impactful features that make the practices effective (Tip #1), regardless of modality. Faculty could provide candidates with illustrative examples of HLPs being applied in face-to-face and various modes of online instruction. In small groups with their peers, candidates could be instructed to examine each example and co-develop a chart detailing the similarities and differences in how the salient features of HLPs might be carried out in each modality. Finally, the faculty could lead the candidates in discussions emphasizing how the fundamental practices (i.e., HLPs) and their salient fea-

tures remain the same, regardless of modality.

It is also important for faculty to highlight how P-12 students will need to be explicitly taught how to use any routine, strategy, or tool regardless of the instructional modality. Further, when modalities shift, new routines, strategies, and tools may be needed and should be accompanied by new instruction. This is especially important for students with and at-risk for disabilities who have difficulty with generalization. Archer and Hughes (2011) provide a list of face-to-face situations requiring classroom routines or procedures (see pp 125-124). Their list can be used as a starting point for faculty who are trying to help candidates make the connection between traditional classroom routines and similar needs that exist in remote instruction. Figure 2 provides sample situations requiring routines and procedures across modalities, offering insight in how to flexibly apply HLPs.

### **Candidates use Checklist: What does the HLP Look Like?**

*Dr. Huang wanted her teacher candidates to recognize that before students can be expected to engage in high levels of student-teacher interaction through questioning or other responses, expectations must be established in the classroom, regardless of modality. For example, a teacher must think about: When and how should students engage and respond when in a face-to-face setting? What about in a synchronous or asynchronous remote environment? What happens if they do, or do not, respond?*

*To begin, Dr. Huang required her candidates to watch several classroom teaching video cases. The videos were pre-selected to represent classrooms where teachers demonstrated age-appropriate and culturally responsive expectations, routines, and procedures. Using a “look-for” checklist, candidates identified specific examples that supported a “consistent, organized, and respectful learning environment” and operationalized how they recognized them. They also tracked various ways in which students were able to respond or strategies the teacher used that seemed to keep students engaged and connected to the learning in each modality.*

### **Candidates Brainstorm and Collaborate: HLPs Across Modalities**

*Next, Dr. Huang had her candidates brainstorm classroom situations that call for a specific routine or procedure (e.g., asking for assistance in the middle of*

*a lesson, when/how to leave room to use the bathroom, where to put work when finished). She then shared Archer and Hughes’ (2011) examples of routines and procedures for many common situations. Candidates were required to modify the rules or expectations for one of the face-to-face situations by applying it to either a synchronous or asynchronous remote environment. They had to review HLP 7 and HLP 18 and provide a direct rationale in their revision, showing how an effective practice in traditional face-to-face instruction could be used within another modality (see Figure 2 for examples). Dr. Huang also asked candidates to discuss when and how they would go about explicitly teaching those routines to their students.*

*During another application activity, Dr. Huang required candidates to develop at least three approaches to promoting active student engagement in each online environment (i.e., synchronous, asynchronous) using only video conferencing and the Google Classroom suite of tools. Finally, Dr. Huang had her students look for similarities and differences in their approaches. Through careful questioning and responses, Dr. Huang helped the candidates discover that while instructional modalities shifted, the salient and impactful features of effective teaching practices never changed. That was the most important takeaway.*

### **Tip #3: Model HLPs in Remote Instruction with Teacher Candidates**

Tip #3 is for faculty to model HLPs in their own remote teaching. It is not enough for faculty to simply explain HLPs to candidates. Instruction in implementing HLPs (regardless of modality) should follow an explicit format including modeling, guided practice, and independent practice. (For this tip, we emphasize remote environments given that it is the focus of this paper.)

After considering how to introduce and discuss HLPs, faculty need to consider how they can model the HLPs within their course. Although HLPs will look somewhat different when delivered by P-12 teachers to their students, the fundamental aspects of those HLPs are still applicable at the university level. When faculty demonstrate HLPs in their courses, candidates can both observe and experience specific examples of these practices in action. Further, faculty can explain exactly why and how they are implementing the practices to make them overt for candidates. It is useful for faculty to consider how they will engage in modeling in remote environments as: (a) they may not be used to teaching

**Figure 2.** Sample Situations Requiring Routines and Procedures Across Modalities

	<b>Routines and Procedures by Modality</b>		
	Face-to-Face	Synchronous	Asynchronous
<b>Movement:</b>			
Transition to a new activity	<ol style="list-style-type: none"> <li>1. Teacher provides verbal, visual, or auditory signal that it is time transition.</li> <li>2. Teacher reminds students of expectations (time allotted, voice level required, etc.).</li> <li>3. Students put away unnecessary materials and take out new activity materials.</li> </ol>	<ol style="list-style-type: none"> <li>1. Teacher provides verbal, visual, or auditory signal that it is time transition.</li> <li>2. Teacher reminds students of expectations (time allotted, camera on/off, if allowed to leave meeting).</li> <li>3. Students put away unnecessary materials and take out new activity materials in the allotted amount of time.</li> </ol>	<ol style="list-style-type: none"> <li>1. Teacher provides visual schedule with checklist of daily expected activities that can be printed or used digitally.</li> <li>2. Students check-off each activity upon completion.</li> <li>3. Parent signs off on checklist and student submits to Google Classroom at the end of day.</li> </ol>
<b>Use of:</b>			
Bathroom	<ol style="list-style-type: none"> <li>1. Students should use bathroom during non-class times (before school, after class, recess, etc.)</li> <li>2. If emergency, student silently takes hall pass and leaves room for no more than 10 minutes.</li> <li>3. If privilege is abused, teacher meets with student.</li> </ol>	<ol style="list-style-type: none"> <li>1. Students should use bathroom during non-class times (before logging on to video call, during a break, etc.)</li> <li>2. If emergency, student can leave without telling teacher by turning off camera and staying signed into the video meeting.</li> <li>3. Student must silently return within 5 minutes and not interrupt teacher to ask what they missed.</li> <li>4. If privilege is abused, teacher meets with student.</li> </ol>	n/a
<b>Materials or Assignments:</b>			
Submitting homework	<ol style="list-style-type: none"> <li>1. Student puts name on paper or uses appropriate heading.</li> <li>2. Student places completed homework in teacher's bin at the start of class.</li> </ol>	<ol style="list-style-type: none"> <li>1. Student puts name on assignment obtained from Google Classroom Classwork page.</li> <li>2. Attaches completed assignment item, clicks "Turn In", and checks the status to ensure it is turned in.</li> </ol>	<ol style="list-style-type: none"> <li>1. Student puts name on assignment obtained from Google Classroom Classwork page.</li> <li>2. Attaches completed assignment item, clicks "Turn In", and checks the status to ensure it is turned in.</li> </ol>

**Cues for Things:**

Attention	Teacher provides a pre-taught verbal, visual, or auditory cue to students that it is time to attend (e.g., 1-2-3 eyes on me, flicker lights, clap).	Teacher provides a pre-taught verbal, visual, or auditory cue to students that it is time to attend  (e.g., holds up a “stop” hand to the camera while playing a soft chime).	Teacher embeds cues such as “stop and listen” signs into video to cue students to minimize distractions and focus on the important teaching component or changes the color and size of font to emphasize key ideas in the guided notes.
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**Gaining Assistance:**

During independent work	Students must employ the “Ask Three Before Me” strategy if the teacher is not near to ask for assistance (consult with 3 classmates before teacher).	Student must post name in chatbox if help is needed and wait to be called on by the teacher.	Student must post to the Google Classroom Stream page. Peers are encouraged to respond if they see a question before the teacher.
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**How to Act:**

During read alouds	<ol style="list-style-type: none"> <li>1. Students sit quietly on floor with eyes on teacher or looking at book.</li> <li>2. Teacher is the only voice heard unless questions are asked.</li> <li>3. Students raise hands if they want to share a relevant connection or question and wait to be called on.</li> </ol>	<ol style="list-style-type: none"> <li>1. Students select “Speaker View” to reduce distractions and look at teacher on screen with microphones muted.</li> <li>2. The chatbox is not used during this time.</li> <li>3. Completing other work, playing with objects or pets at home is not allowed.</li> <li>4. Students raise virtual hands if they want to share a relevant connection or question and wait to be called on.</li> </ol>	<ol style="list-style-type: none"> <li>1. Students play audio or video recording in quiet place or attempt to minimize home distractions during reading.</li> <li>2. Students jot on sticky notes or post to a collaborative technology tool (i.e., Padlet) with any connections or questions they have during the reading.</li> <li>3. Students post a photo of their sticky notes on Google Classroom Stream page (or Padlet bulletin board) for feedback from peers and teacher.</li> </ol>
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**What to do When:**

You are tardy	<ol style="list-style-type: none"> <li>1. Student enters classroom quietly and completes morning routine (lunch selection, submit homework, etc.) without interrupting teacher.</li> <li>2. Teacher continues teaching and waits to speak to tardy student to catch him/her up once free.</li> </ol>	<ol style="list-style-type: none"> <li>1. Student enters virtual meeting with microphone muted and waits for teacher to be free.</li> <li>2. Teacher continues teaching until there is a break and speaks to the tardy student to catch him/her up or provide a time when they can talk.</li> </ol>	<ol style="list-style-type: none"> <li>1. Student completes work and meets assigned deadlines as soon as possible.</li> <li>2. Student notifies teacher when work is submitted via Google Classroom.</li> </ol>
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remotely and may need to be creative in figuring out how to use HLPs in new modalities, and (b) it may be less obvious to teacher candidates when faculty are engaging in HLPs in the remote environment since they are also new to this way of teaching and learning.

### **Dr. Huang Demonstrates**

*Given the fully online nature of Dr. Huang's course, she decided to capitalize on the opportunity to model for her candidates what HLPs #7 and #18 could look like in a remote environment. For HLP #7, she started out the semester by explicitly stating her expectations for the remote learning environment. As appropriate, she reviewed prerequisite skills needed and modeled the expectations (e.g., how to mute and unmute the microphone, how to indicate a raised hand, how to use a virtual background if desired in order to feel comfortable leaving the camera on). On her course syllabus, as well as on the course site on her college's learning management system, she wrote out step-by-step procedures for class routines such as posting on a discussion board, completing quizzes, and submitting assignments. As she went over these expectations and procedures with her candidates, she explained how they could serve as a model for what they could do as future teachers in their own virtual learning environments. For example, she stated, "Notice how I included step-by-step directions in the syllabus for how to participate in a discussion forum. I have outlined the technical aspects (e.g., where to find the discussion, how to make a post, how to respond to a peer's post, etc.) as well as the expectations for participation (e.g., how many posts to make, what to include in posts, etc.). All of this information is critical to ensure that you understand how to independently complete this task."*

*For HLP #18, she brainstormed several simple ways to elicit student engagement in both the synchronous and asynchronous portions of her class. For example, during synchronous sessions, she asked her candidates to hold up 1, 2, 3, or 4 fingers to respond to multiple choice questions as an alternative to the use of physical response cards. She also created opportunities for candidates to engage in carefully structured small group discussions and application activities in breakout rooms (see Tip 4 for more detail). One method of student engagement she modeled for asynchronous tasks/sessions was to have teacher candidates respond to journal prompts in pairs in a Google doc. In this way, the candidates were able to write back and forth to re-*

*flect on class topics, and she was able to respond to each pair with her feedback.*

### **Tip #4: Provide Practice Opportunities with HLPs in Remote Instruction**

It is important that candidates receive scaffolded support and guidance as they implement HLPs in a variety of practice scenarios. At this stage in candidates' development, teacher education faculty play an essential role in bridging the gap between candidates' knowledge of effective practices and their ability to integrate these practices into their teaching repertoire. During face-to-face instruction, it is common for candidates to be arranged in small groups and given structured opportunities to apply new techniques in the context of microteaching. At first, faculty typically help focus candidates' attention on a few specific practices and their essential components. Then, as they gain proficiency, faculty incorporate additional practices. During online synchronous instruction, these practice sessions can be conducted in virtual, small group, breakout rooms. During asynchronous sessions, candidates can be provided with ample practice opportunities using pre-recorded video lessons with built-in checks for understanding, such as having candidates practice and record implementing a practice for feedback.

In addition, case studies developed by faculty can provide candidates with important contextual information that is difficult to convey through small group activities. For example, case studies can provide background information about student or classroom-level scenarios that are typical but are not easily replicable by peers during micro-teaching sessions (e.g., students not turning on camera, misusing chat boxes, disengaged in learning activities).

A combination of microteaching and case studies can provide candidates with valuable opportunities to address these typical scenarios by applying HLPs (or their kernels) to improve student performance in the remote setting. In addition to considering the range of potential instructional modalities their candidates are likely to teach, faculty must also decide how much support and feedback candidates may need to best support their application of HLPs in these various teaching contexts. The importance of scaffolding candidates' performance across modalities with appropriate feedback should be considered a critical lynchpin to their future proficient implementation of HLPs in all instructional modalities.

## **Candidates Practice HLPs with Feedback and Reflection**

*In her typical practice scenarios, each candidate in Dr. Huang's class teaches a mini-lesson to a small group of peers while capturing the teaching on video. Then, each group reviews their session and shares constructive feedback to the candidate who taught as a means of further enhancing the candidate's instructional practices. In this micro-teaching cycle, the candidate then has an opportunity to reteach the lesson, incorporating feedback provided by Dr. Huang and peers, with the goal of improving his/her instructional repertoire.*

*In her online, synchronous class, Dr. Huang decided to continue this practice by having groups use breakout rooms and record their microteaching lessons for later review and re-teaching. As she developed plans to support her candidates' application of HLP 7 in their synchronous lessons, Dr. Huang designed a case study to provide important context for her students. The teaching scenario was set in the early days of a new school year, thus creating the need for her candidates to devote substantial time to setting expectations and building a respectful and organized learning community. She also guided candidates to use the checklist she created in her own syllabus and adapt it for their specific grade-level and own expectations. In this way, candidates had not only a clear model from Dr. Huang's own instruction, but also the scaffolding to render HLP 7 relevant and adaptable for their own teaching. To guide candidates' application of HLP 18 in their micro-teaching scenarios, Dr. Huang explicitly required candidates to use at least one of the response methods that she had modeled during her instruction (e.g., holding 1, 2, 3, or 4 fingers up as a response to a multiple-choice question).*

*Using these methods, candidates in Dr. Huang's class were given the best opportunity to successfully implement the practice on the first attempt. As the semester progressed, candidates would be given more practice opportunities with gradually less support. The explicit requirements and directions on what to incorporate in these early micro-teaching scenarios were removed as their proficiency increased. By continuing her practice of giving specific and timely feedback about candidates' performance, and structuring candidates' post-teaching self-reflection prompts to emphasize the salient features of the HLPs they were enacting, Dr. Huang was increasingly assured her new approach would be met with success.*

## **Tip #5: Explore Technology to Support HLPs**

While we have proposed the previous four tips under the premise of using only basic technology tools as a foundation, there is certainly a clear rationale for teacher education faculty to help candidates explore a variety of technology tools to support HLPs. As candidates learn about various popular technology tools that are being used in remote environments, teacher educators can help candidates consider why those tools may or may not be effective at helping students learn. The idea is that before adopting new tools, candidates need to be able to "separate the wheat from the chaff" and understand their pedagogical value. In other words, candidates need to be able to explain why these tools might be beneficial in remote teaching and learning. If candidates are not able to do this, they may choose strategies that are simply popular or seem exciting, instead of those that include evidence-based attributes that make them effective.

The abundance of technology for teaching and learning can be both advantageous and challenging to educators seeking to enact high quality instruction in a technology-saturated society. In addition to the potentially arduous process of selecting worthwhile (i.e., effective) tools aligned to learning objectives and matched to student needs, teachers must also contend with, among other things, students' varied levels of technology proficiency and more broadly with the issue of inequitable access to technology tools as well as the internet connections on which they rely. While these latter challenges are beyond the scope of this paper, they nonetheless exert differential impacts on learners, and as such must be addressed by the array of stakeholders committed to successful student outcomes in remote learning environments.

With issues of access and proficiency aside, teacher candidates need to be prepared to evaluate, select, and implement technology tools in service of student learning. As candidates leverage their insights about key elements of practice embodied in HLPs to enact them in remote environments, they must similarly tighten the process with which they consider, adopt, and use technology tools. Of utmost relevance for the translation of HLPs to remote teaching is priming candidates to consider how a given technology tool facilitates the enactment of key features of HLPs in a given modality. Faculty can help candidates reject the harmful notion that exciting or popular technology tools should be

embraced without consideration of these important and interconnected elements of practice. Free, high-quality guidance documents abound to assist educators in finding technology tools. For example, candidates can be directed to a document offering tips for tool selection and use key points such as keeping the number of tools limited and manageable, explicitly teaching and modeling tool use, and ensuring accessibility features are included (Herbuger et al., 2020).

**Candidates Judiciously Select Technology**

**Tools**

*Dr. Huang was concerned about some of her candidates’ seeming enthusiasm for the surface appeal*

*and popularity of some common technology tools. She worried they were failing to give much consideration to why and how a tool might be useful, and thus warranted for implementation. She wanted to help focus candidates’ attention on a vital question: does the technology tool enable the teacher to enact critical features of HLPs? Because the answer would depend on the modality in which the teacher was delivering instruction, Dr. Huang decided to have candidates use the list of critical features they developed (i.e., in Tip #1 vignette) as a way to facilitate a decision-making process about tools which were attentive to the “kernels” of effective practices they had uncovered. In considering how to best implement HLP 18 across modalities, for example,*

**Figure 3.** Example of Comparing Strategies for an HLP Across Modalities

HLP 18: Use Strategies to promote active student engagement

HLP Feature	Strategies by Modality		
	Face-to-Face	Remote - Synchronous	Remote - Asynchronous
<b>Movement:</b>			
Active responding (or eliciting responses)	response slates; response cards; think-pair-share; Numbered Heads Together	hands signals (1, 2, 3, 4 fingers as response card); response boards held to screen; breakout rooms for partner and group work	Edpuzzle (allows teacher to embed questions within a video lecture); GoogleDoc or Blogger as a digital journal with students asked to respond at various points in a reading; students can be asked to find a working partner they can meet with at a mutually agreeable time
<b>Use of:</b>			
Self-management	model goal-setting; self-monitoring checklists; self-instruction think-alouds.	share goal setting in breakout rooms; post self-monitoring checklists at key junctures in the class; self-instruction think-alouds	share and respond to goal setting via Flipgrid; incorporate self-monitoring checklists; self-instruction think-alouds
<b>Materials or Assignments:</b>			
Monitor student engagement and provide feedback	circulate around room; provide 1:1 and whole-class verbal feedback	record session for later analysis; monitor whole class using “grid view”; provide verbal feedback to whole class, breakout rooms, or individuals; written feedback in chat box; email feedback after class	attend to student log-in data in Learning Management System; enable automated real-time feedback when possible (e.g., for M/C and T/F questions); provide additional feedback in ways that are teacher friendly (i.e., develop general written feedback and then personalize by student need)

Dr. Huang guided students through deliberation of a few tools. She selected tools that were prime examples of HLP alignment and others that were non-examples of such alignment, forcing careful evaluation of each tool for its potential utility in enacting the HLP. As they considered the extent of alignment with the critical features of HLPs, Dr. Huang's candidates developed tables much like the one in Figure 3, revealing a variety of tools that facilitated implementation of HLP 18 in one or more modalities. Creating these tables helped candidates begin to conceptualize the interplay between HLP features, instructional modality, and the rationales for using specific technology tools in these learning spaces. While their evaluations of specific tools were important in identifying a starting point for tool selection in their remote teaching, Dr. Huang was most eager to equip candidates with both a mindset and a process by which they could approach the planning of their technology-infused remote lessons.

### Wrap-up

As educators across the country work to improve teaching and learning in a variety of modalities, it is necessary to reflect on what we already know about effective practices and use that knowledge as a guide. Many challenges experienced by students and teachers new to remote learning can be addressed by applying HLPs (i.e., Herbuger et al., 2020). Through Dr. Huang's teaching, we were able to observe the process of translating HLPs to remote environments by: (1) identifying key components of HLPs, (2) recognizing what they would look like across a range of instructional modalities, (3) modeling the use of HLPs in different modalities, (4) providing practice opportunities for these the relevant HLPs, and (5) exploring technology to support the use of HLPs. Dr. Huang's embrace of a modality-agnostic perspective in teaching HLPs required some important pedagogical shifts to help ensure that teacher candidates were prepared to teach effectively in any environment. By following these tips, Dr. Huang supported her candidates' understanding that their success hinged not on any particular instructional modality, but on their creation of engaging, organized, and respectful learning environments.

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