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Preservice teachers' perceptions of feedback: The importance of timing, purpose, and delivery

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Preservice teachers' perceptions of feedback: The importance of timing, purpose, and delivery

Abstract

If the purpose of feedback is to reduce the discrepancy between the established goal and what is recognized, then how can this discrepancy be minimized through support and guidance? Feedback is instrumental to a preservice teacher development during their teacher preparation program. This qualitative study examines 31 first year teachers' previous experiences with feedback during their undergraduate practicums. The two research questions addressed: What can be learned from PSTs' perceptions of feedback practices utilized in teacher preparation programs? and What modifications or adaptations can be made to current feedback practices and structures in teacher preparation programs to enhance teacher efficacy and classroom readiness? Semi structured interviews provided a comparison of qualitative data and an opportunity for open ended questioning. Using descriptive analysis, researchers discovered that current feedback loops and structures can inhibit pre-service teachers' ability to make meaning from the information and move their learning and instruction forward. As teacher preparation programs work to establish more dialogic approaches to feedback that provide pre-service teachers with multiple opportunities to reflect individually and collaboratively with university faculty, timing, purpose, and delivery are important components to consider. Although this article is written based on preservice teacher perceptions, the implications pertain to multiple fields and authors share a universal framework for feedback.

Practitioner Notes

1. The goal of teacher preparation is simple: create teachers who are well equipped with the knowledge and skills to positively impact PK-12 students. Field experiences are embedded throughout teacher preparation programs to provide pre-service teachers (PSTs) with meaningful opportunities to develop their ability and knowledge of effective instructional practices.
2. As teacher preparation programs work to establish more dialogic approaches to feedback that provide pre-service teachers with multiple opportunities to reflect individually and collaboratively with university faculty, timing, purpose, and delivery are necessary considerations.
3. What is the timing of the delivery? The timing of the delivery of feedback must be considered. Frequency plays a large role in how PSTs view and utilize feedback.
4. Do receivers of the feedback understand the purpose? Ties to evaluation and the need for directive solutions impact preservice teachers understanding of the purpose behind the feedback. One way to support this need it to strengthen PSTs' assessment feedback literacy.
5. Does the delivery clarify the content and support reflection? As university faculty continue to explore how to provide explicit feedback, delivery methods that support reflection and pre-service teacher's growth are important to consider. With the purpose of feedback being to help reduce the discrepancy between the intended goal and outcome, pre-service teachers must have easy access and retrieval of feedback.

Keywords

Preservice teaching, feedback literacy, assessment, teacher preparation

Preservice Teachers' Perceptions of Feedback: The Importance of Timing, Purpose, and Delivery

The goal of teacher preparation is simple: create teachers who are well equipped with the knowledge and skills to positively impact preschool through high school students. Field experiences are embedded throughout teacher preparation programs to provide pre-service teachers (PSTs) with meaningful opportunities to develop their ability and knowledge of effective instructional practices. Practicum experiences in classrooms give PSTs opportunities to practice specific pedagogies with students and refine their abilities in real time (Cheng, et al., 2012). It is critically important for PSTs to experience the teaching process to develop pedagogical and reflective skills as well as teacher efficacy (Darling-Hammond, 2012; Liakopoulou, 2012; McGlamery & Harrington, 2007). These structured experiences can bridge understanding on how to apply feedback and make connections in the context of a school setting (Flushman, et al., 2019). This practice builds confidence in effectively delivering instruction and managing challenges that occur in the learning environment.

If the purpose of feedback is to reduce the discrepancy between the established goal and what is recognized (Hattie and Timperley, 2007), then how can this discrepancy be minimized through support and guidance? Feedback is instrumental to a PSTs development during their teacher preparation program and learning is optimized "when they receive systematic instruction, have multiple practice opportunities and receive feedback that is immediate, positive, corrective and specific (Scheeler et al., 2004, p. 405). It is important to guide PSTs to interpret their experiences in authentic settings (Schwartz et al., 2018) and to support the development of effective teaching practices (Hammerness et al., 2005). Constructive feedback coupled with reflective opportunities allow the PST to distinguish effective classroom practices from those that are not (Hudson, 2014;

Pena & Almaguer, 2007). "Good quality external feedback is information that helps students troubleshoot their own performance and self-correct: that is, it helps students take action to reduce the discrepancy between their intentions and the resulting effects" (Nicol & Macfarlane-Dick, 2006, p. 208). For feedback to be integrated effectively, it needs to be timely, specific, and accessible to encourage the individual to apply what they learned in future teaching opportunities (Van Rooij et al., 2019). This is correlational to self-efficacy.

Feedback can also be a significant source of self-efficacy in pre-service teachers (Mulholland & Wallace, 2001; Mahmood et al., 2021; Schunk & Pajares, 2009). Though feedback can come in a variety of formats, Rots et al. (2007) found that quality feedback and supervision provided by university faculty correlated to higher levels of self-efficacy in pre-service teachers. Efficacy increases when university faculty use prompts to encourage PSTs to focus on what went well and build upon the strengths of the lesson (Nicol & Macfarlane-Dick, 2006). Timing, purpose, and delivery play an important role in how faculty use feedback practices with pre-service teachers.

In many current teacher preparation program models, PSTs spend more time working in the field than they do in coursework (National Council for Accreditation of Teacher Education [NCATE], 2010). With such an emphasis placed on practicum experiences (American Association of Colleges of Teacher Education [AACTE], 2018; Lester & Lucero, 2017) and the critical role these play in the development of pre-service teachers, one must consider if current feedback practices and structures positively contribute to higher levels of teacher efficacy and classroom readiness. The role of university faculty is to acknowledge and clearly articulate the strengths and weaknesses of the lesson to promote productive behaviors that will positively contribute to student learning (Fletcher, 2000). This gap in the research does not include preservice teacher perceptions. Therefore, it is imperative to consider the perception of pre-service teachers regarding

their experiences with feedback, how these experiences align with high quality feedback practices, and how they are designed for students who experience them (Smith and Lowe, 2021).

This qualitative study examines first year teachers' previous experiences with feedback during their undergraduate practicums. The study is expected to contribute to a deeper understanding of what feedback practices pre-service teachers determine as beneficial and their interpretation of the context, in addition to what action steps or modifications teacher preparation programs can take to maximize feedback practices within practicum experiences.

The Purpose of Feedback

Feedback has often functioned as a punisher or reinforcer, a guide or rule, or served as a discriminating or motivating stimulus for individuals (Mangiapanello & Hemmes, 2015). Historically feedback has been a one-way transmission of information (Ajjawi & Boud, 2017), but contemporary views on feedback recognize it as a reciprocal exchange between individuals focused on knowledge building versus the arbitrary delivery of information (Archer 2010).

Daniels & Bailey (2014) defined performance feedback as, "information about performance that allows a person to change his/her behavior" (p. 157). Studies show organizations that establish strong feedback environments exhibit better outcomes in terms of employee performance (Steelman et al., 2004). Constructive feedback in the presence of a well built feedback hierarchy, builds intrinsic motivation of employees (Cusella, 2017; The Employers Edge, 2018). With that explanation, appropriate and meaningful feedback are essential in ensuring that good practices are rewarded, ineffective practices corrected and pathways to improvement and success identified (Cleary & Walter, 2010).

A key purpose of feedback in teacher preparation programs is to enhance pre-service teachers' knowledge and skills (AACTE, 2018). Feedback serves as one component within complex structures and interactions to support PSTs' development (Evans, 2013). Through feedback, PSTs realize their strengths and weaknesses, gain understanding of instructional methods, and develop a repertoire of strategies to enhance their performance and student learning (Nicole & Macfarlane-Dick, 2006). With this knowledge and understanding, PSTs have opportunities to act upon the received feedback to improve their performance and enhance student learning (Carless et al., 2011). Feedback allows PSTs to define effective teaching practices and determine what instructional methods are valued in specific learning environments.

Feedback is also meant to stimulate PST's self-reflection. Feedback allows the pre-service teacher to deconstruct and reconstruct instructional methods and practices with guidance from university faculty. Specific feedback and reflective dialogue contribute to the pre-service teacher's ability to critically reflect on their performance individually and use this understanding and knowledge to regulate future teaching experiences (Tulgar, 2019). These reflective opportunities to identify strengths and weaknesses create pathways to improvement.

Feedback can also serve as a way for university faculty to monitor, evaluate and track pre-service teacher's progress and performance (Price et al., 2010). Many teacher preparation programs use feedback as a measure in evaluating PST performance during practicums or other field-based components. This feedback, often documented through rubrics or other assessment criteria, is useful in helping establish measurable goals and effective teaching practices across a teacher preparation program. When the feedback or assessment tools reflect the objectives and goals of the program, they can strengthen the connection between theory and practice, thereby increasing PST learning (Ericsson, 2002; Grossman, et al., 2008; Vasquez, 2004). PSTs rely on experienced

individuals such as university faculty to articulate, model and provide high quality feedback through practicums (Darling-Hammond & MacDonald, 2000). This guidance increases connections between coursework and the classroom.

With research suggesting that pre-service teachers welcome constructive feedback and the opportunity to learn (Chaffin & Manfredo, 2009; Chesley & Jordan, 2012), university faculty must seek collaborative opportunities to provide effective feedback that positively contributes to the development of PSTs. A major role of university faculty is to guide the PST in setting goals for practicum that foster their development and growth as an educator. When university faculty clearly articulate the strengths and weaknesses of the lesson and assist the PST in identifying their next actions, outcomes can be achieved faster.

Components of Effective Feedback

Effective feedback provides the learner with a clear understanding of how the task is being accomplished or performed and offers support and direction in increasing their efforts to achieve the desired outcome (Hattie and Timperley, 2007). This model reinforces the need for feedback to be timely, content specific ,and delivered to meet the needs of the individual receiving it.

Timing

The timing of feedback plays an essential role in shaping PSTs understanding of effective teaching practices and effective instructional methods. Feedback can be provided to PSTs in a variety of structures and formats. Deferred feedback refers to notes or qualitative data collected when observing shared upon completion of the lesson with the teacher (Scheeler et al., 2009). Deferred

feedback is less intrusive because it allows the teacher to deliver the lesson without disruption. Immediate feedback refers to when university faculty stop the lesson or instructional activity being observed to provide corrective feedback and/or modeling when a problem is noted (Scheeler et al., 2009). Scheeler et al. (2004) found "targeted teaching behaviors were acquired faster and more efficiently when feedback was immediate" (p. 403). Immediate feedback also reduced the likelihood of teachers continuing ineffective teaching practices.

Explicit, Quality Feedback

Corrective feedback that identifies errors and ineffective teaching methods with targeted ways to correct them is one of the most influential means of feedback (Chan et al., 2014; Van Houten, 1980). Studies found that desired teacher behaviors resulted from feedback that was both positive and corrective, focused on specific teaching behaviors and practices, and provided concise suggestions for change (Scheeler et al., 2004; Woolfolk, 1993). Feedback that is individualized and centered on the needs of the individual yields more effective outcomes for learning (Ciman & Cakmak, 2020; Pinger et al., 2018). When this aligns to the goals and objectives of the specific lesson, it provides valuable insight as to where the PST is in relation to the goal (Bloomberg & Pitchford, 2017). This type of feedback increases self-efficacy as it allows the PST to see growth over time.

Delivery

The delivery of observational feedback may vary depending on the development and readiness of the PST. Although the goal is for teachers to engage in self-directed reflection, some teachers may need more support and guidance as they maneuver through the dimensions and complexities of teaching. A variety of differentiated coaching strategies have been researched over the years regarding instructional practice and student learning (Aguilar, 2013; Costa & Garmston, 2002;

Knight, 2016; Sweeney, 2010). These include both conversational and written feedback between the PST and university faculty.

The New Teacher Center (2017) outlines three differentiated dialogic coaching approaches; instructive, collaborative, and facilitative. Instructive coaching is directive and guided by the university faculty who analyze performance and lead conversations. Collaborative coaching is less directive and both the PST and university faculty have an equal voice in the conversation. Facilitative coaching allows the teacher to lead the reflective conversation, while university faculty provides feedback with probing questions to facilitate critical thinking and problem solving. These conversations contain minimal feedback from university faculty and topics for discussion are often directed by the teacher.

While oral feedback is a powerful tool in constructing relationships between the PST and university faculty, written feedback is just as important as it provides pre-service teachers with formal documentation of clearly articulated strengths and weaknesses. Written comments are far more effective than a grade or evaluation (Black & Wiliam, 1998; Crooks, 1988) and provide both the university faculty and the PST with a record of performance in response to learning needs (Flushman et al., 2019). Conversation and dialogue include the thoughts and beliefs of the PST and provide faculty an opportunity to gauge their depth of understanding. Written support provides documentation and a reference for PSTs.

Methodology

This study looks to uncover how university faculty can effectively integrate high quality feedback practices into practicum experiences. Specifically, what can be learned from PSTs' perceptions of feedback practices utilized in teacher preparation programs? What modifications or adaptations can be made to current feedback practices and structures in teacher preparation programs to enhance teacher efficacy and classroom readiness? In the context of this study, not only were PSTs' experiences with feedback considered, but also how these experiences and perceptions align with high quality feedback practices.

Design and Participants

Researchers used semi-structured interviews to provide a comparison of qualitative data and an opportunity for open ended questioning (Yin, 2016). The 30-minute interviews were recorded and transcribed for analysis in Fall 2020. Participation was voluntary and researchers used purposeful sampling (Yin, 2016) from a pool of participants in their first year of teaching. Researchers selected beginning teachers because they are most relative to the practicum experiences since they are recent graduates. Additionally, all participants experienced the same interruptions in teaching during March 2020. Researchers sought a range of participant perspectives; therefore, the study consisted of 31 beginning teachers who spanned seven school districts and 24 schools within a midwestern metropolitan environment. All teachers held a bachelor's degree and teaching certification from a 4-year university or college. Representation included two private institutions and three public institutions. All participants were female apart from one male. Grade levels spanned preschool through eighth grade with five special education perspectives spanning grades preschool through sixth grade. The school districts are in one state and serve approximately one-third of their state's total student population (over 100,000 students). Demographic information is presented in Table 1.

Table 1

Characteristics of Participants

Teaching Endorsement	Teachers N = 31 teachers
PreK-K	5
First - Third	10
Fourth - Sixth	8
Middle School	3
Special Education	5
Teaching Environment	**District Representation N = 7 districts, 24 schools**
Suburban	51%
Rural	6%
Urban	42%

Data Collection & Analysis

Questions asked during the interviews addressed previous experiences with feedback during practicums. Application was also addressed in reference to how it influenced teaching behaviors and actions. More than one researcher took part in the collection, analysis, and interpretation of the data. Both researchers were involved in the preparation of the questions and in the data analysis.

Using descriptive analysis to interpret the data obtained from the semi structured interviews, researchers identified themes using the following process to construct theory: 1) review of the transcribed interviews, 2) open coding, 3) identification of categories and/or themes, and 4) data abstraction (Lawrence & Tar, 2013). Since researcher one conducted the interviews, researcher two reviewed all the transcripts to familiarize themself with the content. Next, open coding

determined themes in participant answers. Patterns in the data showed consistency in ideas (Eisenhardt, 1989; Orlikowski, 1993) and researchers identified overall themes amongst the answers. Once established, researchers coded the remaining transcripts independently. Since coding semi structured interviews involves determining the intent or meaning behind questions answered, researchers also addressed intercoder reliability and agreement (Campbell et. al., 2013). Both noted the same themes with only 20% discrepancy or 80% agreement. Using negotiated agreement, researchers adjudicated the coding disagreements through negotiation for concordance. After reconciling the initial disagreements, researchers coded the transcripts using the identified themes. Inter-rater reliability was 97%.

Results

Results indicated three themes. All stemmed from participant perspectives of beneficial practices and what they found value within or wanted more of during their PST experiences. Out of 31 participants, 29 were coded with at least one of the three themes. Participants who mentioned more than one theme were counted as part of each theme mentioned; 11 of the 31 mentioned more than one identified theme. See Table 2.

Table 2

Themes found in the feedback

Beneficial Practice	Percent (n = 44)
Frequency and structure of the feedback	40%
Example Comment: This respondent reflected on the difference between a few visits and multiple. “Let me come observe you and give you tips here and there” as compared to someone providing feedback multiple times a week.	
The need for explicit and quality feedback	30%

Example Comment: This respondent reflected on how grace and time are not always the most beneficial. My institution "just gave a lot of grace and comfort and even during student teaching … I really enjoy getting told what I can improve on because there's always room for improvement and I like the different ideas."	
The need for conversation linked to feedback	30%
Example Comment: The respondent believed that "conversations more focused on do you think the students understood the concept? How do you feel that it went?" would help PSTs engage in daily reflective practice and goal setting.	

Timing

Frequency was the most cited need at 40% and noted by 55% (n = 17) of respondents. Overwhelmingly, participants referred to the feedback received as pre-service teachers as "minimal". Other phrases included "too spaced out", "lumped together at the end" and "few". Multiple participants mentioned having only been provided feedback following an observation only once or twice. Even when the feedback provided the next steps towards improvement, participants still felt it was too late. "It's like … now I can't implement that until next semester" or "Here's the feedback. Remember when you get a job." Participants felt the timing of the feedback negatively affected the implementation. They wanted more consistency with small tips in real time throughout the experience.

Explicit, Quality Feedback

A need for explicit and quality feedback was cited next at 30% and noted by 42% (n = 13) of respondents. "I always like it straight forward. I want all of the feedback that I can get because I feel like that's going to help me grow". Another noted that they wanted specific feedback on areas to improve instead of "a lot of grace and comfort." They additionally noted building confidence without the skills to back it, does not lead to improvement. Another commented that university faculty was "really really nice but the feedback was all positive like she was kind of scared to give constructive feedback." One commented how she thought the feedback would provide her things

to work on, but instead the feedback was "you're doing what you're supposed to be doing." Participants wanted feedback to provide more direction and insight to enhance instructional performance. Feedback only highlighting the positive aspects or acknowledging "no room for growth" was not useful or beneficial. One respondent noted, I "hardly ever sat down to discuss how I was doing. It was more in passing that the feedback took place." This led to the third theme.

Delivery

A need for conversation linked to feedback was cited next at 30% and noted by 42% (n = 13) of responders. Tied to this conversation was the need for explicit feedback mentioned above. Participants struggled with the broad categories on rubrics which highlight multiple behaviors. "I feel like not all rubric feedback is accurate". This led some to request more specific targets. They felt this could be reached through reflective conversations. One noted the importance of the conversation when helping PSTs reflect on practice and setting goals. The respondent believed that "conversations more focused on do you think the students understood the concept? How do you feel that it went?" would help PSTs engage in daily reflective practice and goal setting. Others noted how conversations allowed for "collaboration and brainstorming" and how conversations better support the reflection process. Dialogue can be beneficial in the moment and authentic, although it was noted that written conversation and feedback can be just as powerful when open ended and used as a communication tool.

Participants noted the importance of written feedback as it provided opportunities to reflect and respond. Also, it gave participants insight and context as to what was happening while they were teaching. "I don't realize everything good that I'm doing or what I need to improve on. So, when university faculty take notes, it really helps me see what I'm actually doing." Another talked about university faculty keeping a notebook. The two used it as a communication tool for written

conversations which the participant "thought was really helpful because … I can look back and see what she wrote, and I feel like it was a little more immediate."

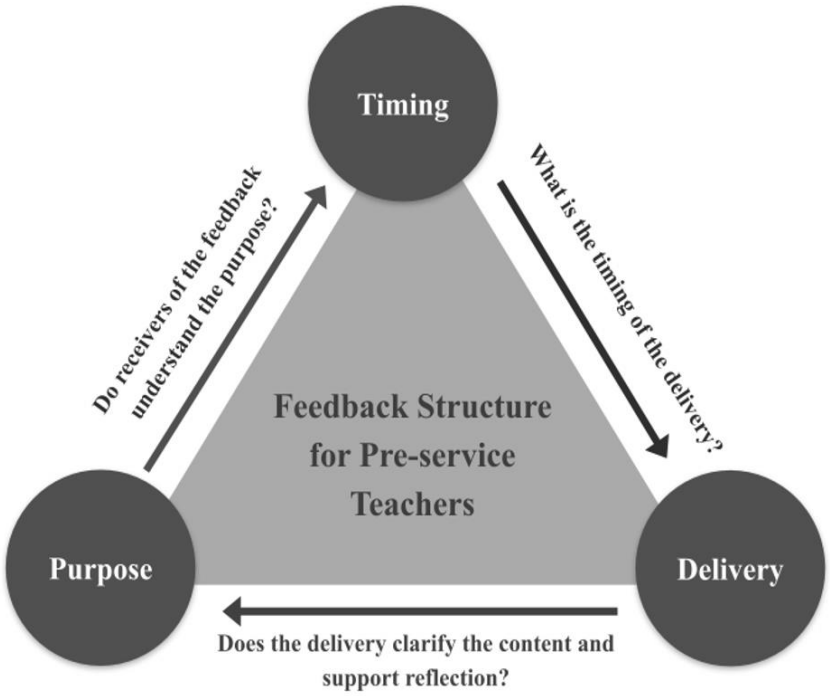
The results indicated that PSTs believe that timely and explicit feedback are beneficial in both goal setting and enhancing their instructional performance. Results also indicated that PSTs find both dialogue and written feedback to be useful reflective tools. As teacher preparation programs consider feedback structures and the levels of support, these are important implications to consider when creating meaningful practicum experiences.

Discussion

Reflection is an expectation in teacher preparation (Brookfield, 1995; Darling-Hammond, 2006; Liu, 2013). The link between reflection and learning is not new (Dewey 1933; Schön, 1983; Ziechner, 1996) as studies highlight that reflection involves emotions and is a context-dependent process impacted by social constructs. PSTs are expected to recognize when adjustments are needed and make them to effectively meet the needs of the students they serve. A cycle of observation, action, and reflection can help PSTs adjust their teaching. This is most effective when the cycle is individualized, collaborative, and embeds frequent opportunities to make meaning of the information for future use (Vartuli, et al., 2014). Current feedback loops and structures can inhibit PSTs' ability to make meaning from the information and move their learning and instruction forward. As teacher preparation programs work to establish more dialogic approaches to feedback that provide PSTs with multiple opportunities to reflect individually and collaboratively with university faculty, timing, purpose, and delivery are necessary components to consider. See Figure 1.

Figure 1

Feedback Structure for Pre-service Teachers



What is the timing of the delivery?

When considering the results, frequency plays a large role in how PSTs view and utilize feedback. It was clear that PSTs desire more frequent, immediate feedback to enhance their instructional performance. Immediate feedback results in quicker acquisition of effective teacher behaviors and greater overall accuracy in the implementation of those behaviors than when delayed feedback is provided (Coulter & Grossen, 1997; O'Reilly et al., 1992; 1994). Though some question if immediate feedback might interfere with the learning environment and reduce instructional

momentum, advancements in technology make the ability to provide immediate feedback both manageable and efficient for both university faculty and pre-service teachers. Devices such as the "bug in the ear" (BIE) have been used to provide immediate feedback in a variety of situations. Results from various studies show these technologies effectively supported university faculty in providing concise, immediate feedback to pre-service teachers to increase their ability to respond to the various needs of students and alter or stop ineffective practices in the moment (Coulter & Grossen, 1997; Scheeler et al., 2009). As teacher preparation programs consider how to increase efforts for university faculty to provide specific, immediate feedback, technical devices have great potential to increase desired teaching behaviors and students' academic performance.

Do receivers of the feedback understand the purpose?

Pre-service teachers request explicit, quality feedback, but there is a clear disconnect between this concept and the PSTs perceptions of the purpose of the feedback provided. The ties to evaluation and the need for directive solutions will not change, so how can mindsets shift to better understand the purpose? One way to do this is through strengthening PSTs' assessment feedback literacy. PSTs need opportunities and a repertoire of skills to engage with feedback in authentic ways, make sense of the information provided, and determine how the information can be productively implemented in future lessons (Carless & Boud, 2018; Price et al., 2010; Smith and Lowe, 2021). Feedback literacy can strengthen reflective capacity as students have more opportunities to engage, interact with, and make judgments about their own practice (Carless & Boud, 2018; Sambell, 2011; Smith and Lowe, 2021). To close the feedback loop, PSTs must acquire the ability to process the comments and information received and then act upon the feedback for future instruction. Students must learn to appreciate feedback and their role in the process, develop and refine their ability to make judgements, and develop habits that strive for continuous improvement (Boud & Molloy, 2013). Designing a program curriculum that emphasizes the importance of the

feedback process and creates opportunities for pre-service teachers to self-evaluate their practice is crucial in building capacity for them to make sound judgments. Equally as important is creating space for pre-service teachers to co-construct meaning of the feedback and demonstrate how they use the information to inform or enhance future instruction (Carless & Boud, 2018; O'Donovan et al., 2016). Building programs grounded in feedback literacy provide opportunities to critically reflect on choices and draw clear connections between feedback and its purpose.

Does the delivery clarify the content to support reflection?

Another consideration worth noting is the need for feedback that prompts both reflection and growth of pre-service teachers. Participants in this study indicated that feedback from university faculty was not always useful because it could not be applied immediately. They also noted the feedback provided did not always prompt reflection that resulted in changes or modifications to their future instructional practices or teaching methods. While this discrepancy could be attributed to the readiness level of the pre-service teacher, it could also be that the feedback loops and structures designed do not create informative pathways that move students learning forward.

As university faculty continue to explore how to provide explicit feedback, delivery methods that support reflection and pre-service teacher's growth are important to consider. With the purpose of feedback being to help reduce the discrepancy between the intended goal and outcome, pre-service teachers must have easy access and retrieval of feedback. While we know that reflective coaching conversations are beneficial in helping pre-service teachers reflect on their teaching practices and to determine alternate methods of instruction that may be more effective, time and availability of university faculty may limit these meaningful interactions from taking place. To overcome this barrier, teacher preparation programs should consider how they might couple traditional forms of written feedback and reflective conversations with digital tools that facilitate collaborative

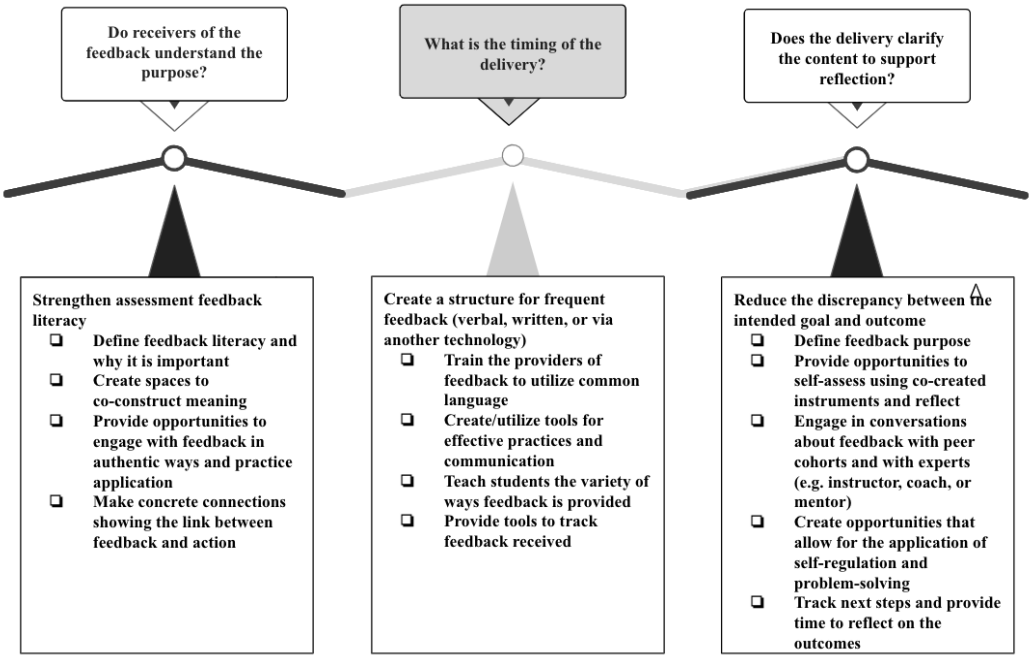
discussion and grant easier access to feedback allowing pre-service teachers space and opportunity to engage in both collaborative and independent reflection and problem solving. Providing pre-service teachers with multiple sources of feedback can be a way to increase the visibility of feedback for pre-service teachers and encourage them to consistently revisit the information to make future instructional decisions and professional judgments.

Implications

Current literature highlights the gap between providing feedback and the receiver's interpretation (O'Connor & McCurtin, 2021). This gap creates growth limitations when the learner is not gaining what is needed from the feedback. This is especially important in higher education as institutions develop students for professional careers which require lifelong learning, critical thinking and problem solving, such as education. Therefore, we propose the following framework and action steps to support the understanding of and implementation of feedback for PSTs. We also assert that this framework could span multiple disciplines and professional contexts.

Figure 2

Framework to Support Pre-service Teacher Capacity Building for Feedback



Limitations and Implications for Future Research

Although the results of this study provide insight into PSTs feedback experiences, they must be interpreted within the limitations of the study. The first limitation is that all participants in this study only represent 5 universities across 3 states. We recognize that this limitation in our sample does not represent the scope of teacher preparation programs across the country but believe that the results provide worthwhile insights into PSTs experiences with feedback in practicum experiences. Future studies including participants across numerous states and teacher preparation programs would allow for more diverse experiences and perspectives to be represented.

Another limitation in this study is that all participants experienced disruptions in their undergraduate practicum experiences. These disruptions likely resulted in condensed or altered experiences which could have impacted the opportunities and quality of feedback provided by university faculty. Future studies that include participants whose experiences consist of traditional structures and timelines of practicum experiences may better reflect the experiences of PSTs' experiences with feedback and practices used by university faculty.

Conclusion

Teacher preparation institutions need to reevaluate current feedback practices with PSTs. Participants indicated that more frequent conversations would make guidance more explicit and support development of practice and reflection. Although this is based on a limited number of participants and in one country, the findings are generalizable in most countries. The concept of feedback literacy needs to be taught, modeled, and PSTs need to be practicing it throughout their course of study for them to better understand the connection between feedback and practice. By focusing on timing, delivery, and purpose, teacher preparation institutions can take one step closer to developing reflective practitioners who embody the knowledge and skills to positively impact learning for every student.

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