Lesson Reflection: A Protocol for Teachers

Emily Russett

Vanderbilt University

Abstract

Reflective practice is identified as an important skill for preservice teachers to develop, yet most teacher preparation programs continue to focus on discrete skills and procedures for teaching. Research shows that reflective practice also yields more effective teachers, but the literature provides few practical, research-based tools that teachers can use to reflect on their instruction (Artz & Armour-Thomas, 2003; Yost, et al., 2000; Van Es & Sherin, 2006). The main purpose of this capstone is the creation of a teacher reflection protocol that fills this gap. First, the disparity between what research says and reality in schools is addressed. Next, definitions and characteristics of reflection are discussed in order to lay the groundwork for the protocol. The protocol is introduced, followed by a description of each phase and the research that supports it. This four-phase lesson reflection protocol allows teams of teachers to complete a reflective action cycle over the course of two professional learning community (PLC) meetings with the goal of increasing positive learning outcomes for students.

Introduction

Ladson-Billings states, in her 2006 American Educational Research Association presidential address, "the moral debt reflects the disparity between what we know is right and what we actually do" (pg. 8). Although her focus was not on teacher preparation, it has become evident that the ways teachers are trained and what we know to be important about teacher practice exhibit the disparity she mentions. Howard (2010) brings together Ladson-Billings' notion of the educational debt and teacher preparation when he expresses that, "teacher educators must reconceptualize the manner in which new teachers are prepared, and provide them with the skills and knowledge that will be best suited for effectively educating today's diverse student

population" (pg. 195). Although the number of reflective teacher preparation programs are increasing as reflection is recognized as an effective teacher practice, most programs focus on a technical preparation in which pre-service teachers are following scripted lessons and rehearing specific methods (Yost, et al., 2000).

Researchers have expressed that teachers acquire more expertise from their experience than from teacher preparation programs, and that teachers entering the profession should have the ability to learn from their work (Morris, et al., 2009). Another way to address pre-service teacher education is to support students in developing skills and practices that extend beyond teacher education and into classroom teaching contexts, such as reflective practices. Heibert, et al. (2007) outlined four skills in a framework for pre-service teachers to learn to analyze teaching, all of which involve reflective practices. The difference in the technical preparation pre-service teachers receive and the skills that have been found most beneficial for teacher growth and positive change in student learning outcomes exemplify the type of disparity Ladson-Billings describes.

Reflection is an important practice that is under-utilized in the classroom teaching profession. Research shows that engaging in reflective practices can support teachers in analyzing their experiences and making changes in their instruction have resulted in positive changes in teachers' thought processes and instructional practice (Artz & Armour-Thomas, 2003; Yost, et al., 2000; Van Es & Sherin, 2006). As the highest regarded teacher certification, the National Board for Professional Teaching Standards (NBPTS) states as one of their five beliefs, that teachers should, "think systematically about their practice and learn from experience" ("Five Core Propositions). Because teachers are not receiving education on reflective practices in their preparation programs and the national standard has an expectation that classroom teachers

engage in this work regularly, there is a need for the information and resources in the school context.

As a math teacher coach in the high school setting, a majority of my work with teachers revolves around teacher reflection, questioning, and action planning. In the high school I serve, we are fortunate to have three instructional coaches engaging in this work every day. This is a rarity in Metro Nashville Public Schools (MNPS) high schools. As a result, most teachers in the district are left to do the reflection and action planning work on their own. However, this is difficult for teachers because they tend to miss practices they do well or want to change when they are actively involved in a lesson, known as "inattentional blindness" (Van Es & Sherin, 2006). Further, upon cursory reflection, teachers often struggle to identify a problem of practice to work on that would affect positive change in student learning outcomes. I see many gaps between the communication through research and from organizations such as the National Board for Professional Teaching Standards about teacher reflection, and what is being communicated in teacher preparation programs and practiced at the school level. This reflection tool is an attempt to fill this gap by providing teachers with a research-based protocol for use in reflecting on and improving their instruction

Definition of Reflection

In an effort to assist teachers in affecting positive change in student learning outcomes by improving their instruction through reflective practices, it is necessary to define reflection. As previously stated, teacher preparation programs often involve pre-service teachers rehearsing procedures and scripted lessons in order to analyze instructional actions; however, teaching is more responsive than performative and teachers need to be able to respond to student thinking

and unpredictable situations (Valli, 1997). Focusing on how effective teachers think and developing reasoning skills in pre-service teachers is important in continuing and advancing the work in reflective teacher practice (Valli, 1997; Lee, 2005). In addition, working toward ambitious teaching practice, as outlined by Lampert, et al. (2011), involves teachers thinking and talking about their practice in order to learn about their students and content from these actions. Upon review of the literature, there are many ideas regarding the actions and goals of reflection but there is not one clear definition or method of assessing reflection (Lee, 2005). A review and comparison of these ideas revealed three themes around reflection: reflective thinking, reflection and action, and making meaning from experience.

Valli (1997), has stated that one reason why teachers may not be considered professionals is that, "their preparation has focused only on narrow instructional behaviors rather than on how to think carefully and reflectively about what they are doing." Thinking is an important aspect of reflection, if not the main vehicle of reflection. Dewey (1933) described reflective thought as "active" and "persistent," something that occurs continuously before, during, and after action. Often, reflection is assumed to be only thought around action, but Dewey goes on to say that reflective thought involves thorough examination of one's principles and knowledge, as well as the resolutions it inspires. He does not only believe that reflection produces an outcome or plan from thinking, but also involves deeply analyzing the principles and knowledge that shape ones thought and decision-making processes as well. This course of thinking is meant to motivate actions that are not spontaneous, but intentional and purposeful.

Valli's (1997) idea of reflective thought is parallel to Dewey's; she states that reflective thought requires logical sequencing and forethought of the consequences of a decision. She takes it a step further, however, to include welcoming thoughts and opinions from others. Reflective

thought does not only have to take place in the practitioner's head, but can be a social learning experience through the involvement of colleagues. Lee (2005) continues this idea, explaining that reflection involves careful thought in working toward a solution to a problem, but summarizes that awareness is an important factor, that "the process and progress must be viewed together" (pg. 701). Lee also outlines four elements of reflective thinking: attitudes, process, content, and depth. She explains that teachers' predispositions, how teachers are using reflective thinking, what they are reflecting on, and the depth of their thinking are important components in assessing reflective thought. Quality reflective thinking requires awareness of one's principles and opinions, a clear goal, and an object of reflection. According to Thompson and Zeuli (1999), learning involved in reflection is "almost exclusively a product or by-product of thinking"; and as Dewey (1933), Valli (1997), and Lee (2005) have described, involves much more than thinking about a specific event.

In defining reflection, it is important to discuss how and when action is involved in the process. There are many interpretations on how action is involved in reflection for teaching purposes, but it is always present in the process. As previously stated, the main goal of reflective instructional practice is to learn about one's practice in order to increase positive learning outcomes for students, which is done because of and through action. One view, from Rodgers (2002), is that learning from instruction combines experience, knowledge, and awareness in order to incite "intelligent action". This view places action as the product of reflective thinking. Hatton and Smith (1995) have a similar perspective as they interpret Dewey's thoughts on reflection and action as reflective thinking versus reflective action. Reflective thinking involves the careful consideration of ideas and problems; reflective action focuses on the execution of solutions. These views separate thought and action into two different stages of reflection.

According to Valli (1997), however, reflective thought does not only bring about action; but more importantly, develops within and from action. This perspective weaves thought and action together as a co-dependent process of reflective action. Schön (1983) described two types of reflection in terms of action as reflection-in-action and reflection-on-action. Reflection-in-action, in the context of instruction, involves reflective thought during instruction while reflection-on-action occurs after instruction. Based on this reflective action research, it can be said that successful reflective practitioners should engage in reflective thought before, during, and after instruction.

The most important part of the experiences of reflection and action, however, is making meaning from them. As previously stated, pre-service teachers should be trained to analyze their experiences in order to learn from them as they continue to teach. Rodgers (2002) described Dewey's concept of continuity as using the meaning created from past experiences and prior knowledge of one's own, as well as of others, to make sense of new experiences. As pre-service teachers learn to reflect, they are then able to use those experiences to reflect on their own instruction as classroom teachers. Reflective thought and action are not mutually exclusive; they should not be episodic or isolated experiences, but rather connected and continuous. Making meaning from these reflective experiences is not only important for one's own learning, but also because reflective action results in a change in the environment (Dewey, 1933). In an instructional environment, that can not only include students, but colleagues and the school culture as a whole.

Reflection is complex. There is no one definition, or even one sentence, to describe its importance, impact, and effective features. From what has been presented in the literature,

careful consideration should be made around the thought, action, and meaning making employed in any reflective practice.

The Protocol

This protocol is largely inspired by my work with new and experienced teachers at the high school level: assisting teachers in reflecting on lessons to identify key aspects of their practice, identifying their influence on student learning, and creating a plan of action to continue that practice or to improve it. As Horn, et al. (2015) express, "preferred methods of instruction remain underspecified," (pg. 209) and teachers are not receiving the professional support they need, deserve, and crave. I see many gaps in the support, personnel resources, and professional development resources for both new and experienced teachers around reflective practices as well as the absence of a readably usable tool in the literature. This reflection tool is an attempt to fill this gap by providing teachers with a research-based protocol for use in reflecting on and improving their instruction in the classroom.

In addition to my work as an instructional coach, the protocol is also inspired by the Japanese Lesson Study and the interpretation of Dewey's work by Carol Rodgers (2002). The Lesson Study engages teachers in peer observations with a goal of growing in their instructional knowledge, beliefs, resources, and community (Lewis, et al., 2009). This planning, observation, and reflection cycle focuses much of its time on the planning and lesson research phases. While the research in the Lesson Study shows incredible results in teacher growth in service of student learning, many teachers do not have the flexibility in their teaching schedule to accommodate the peer observation due to scheduling or the extended time to research due to teaching multiple courses. Planning and testing ideas are, however, important components of reflection and are

supported in research. In studying Dewey's concept of reflection, Rodgers (2002) identified six stages of reflective practice: an experience, interpretation, name problems or questions, generate explanations, hypothesize, and test the hypothesis. All of these stages are reflected in this protocol in order to utilize an experience for teacher and student growth.

This protocol is organized into four phases: Pre-Plan, Enact, Reflect, and Action Plan. Each phase will be described in more detail and its structure supported through research in the sections that follow. The protocol is designed for use in two consecutive high school professional learning community meetings in order to utilize the varied knowledge and expertise other teachers have to offer (Rodgers, 2002; Morris & Hiebert, 2001). The Pre-Plan phase is implemented in the first meeting, the Reflect phase is implemented in the second meeting, and the Action Plan phase is implemented individually. The Enact phase is the instruction that occurs based on the Pre-Plan phase and as the object for the Reflection and Action Plan phases. Each phase includes participation structures, actions, and guiding questions for the teacher and professional learning community team to guide teachers in a reflection cycle that that mirrors the structure of a coaching cycle.

Teacher Reflection Protocol

Introduction

This four-phase lesson reflection protocol allows teams of teachers to complete a reflective action cycle over the course of two professional learning community (PLC) meetings with the goal of increasing positive learning outcomes for students.

PLC Group

In order for the time and energy spent on reflection to be productive for all members, the content and culture must be negotiated and built by the teachers that make-up the group. The members of this group should remain the same. New members should be introduced with the understanding of group norms. Dependent on time and availability, this protocol/cycle can be centered around one teacher's lesson, or groups of 2-4 teachers' lessons.

Phase I: Pre-Plan

- Participation: This phase is completed in the first PLC meeting as a teacher team.
- Actions:
 - 1. Identify specific and measurable student learning goals for the lesson on which you will reflect. In order to reflect on the learning outcomes, learning goals must specify the skills and content students should master during the lesson.
 - 2. Determine the evidence you will collect and how you will collect it. Evidence can include, but is not limited to, a formative assessment, such as an exit ticket, collected from all students or a video clip.
- Guiding Questions:
 - 1. What do I want students to know?
 - 2. What skills will students need to achieve these goals?
 - 3. Does this accurately address the content?
 - 4. What evidence would be beneficial for me to collect?
 - 5. How does this evidence service my learning goals?
 - 6. When will I collect the evidence?

Phase II: Enact

- Participation: This phase is completed individually.
- Actions: Enact the lesson as planned and collect evidence identified in Phase I.

Phase III: Reflect

- Participation: This phase is completed in the second PLC meeting as a teacher team.
- Actions:
 - 1. Each teacher shares their summary of the lesson: learning goals, evidence, and thoughts.
 - 2. Based on the focus teacher's shared summary of the lesson, teachers in the group first share observations.
 - 3. The focus teacher then has a chance to respond to and reflect verbally on the observations shared
 - 4. Based on the focus teacher's shared summary of the lesson, teachers in the group then ask questions.
 - 5. The focus teacher can respond to, through verbal reflection, and/or write down the questions asked.
- Guiding Questions for the Shared Summary:
 - 1. What stood out in the lesson? How did it feel?
 - 2. Did the lesson go as planned?
 - 3. What was successful?
 - 4. What was not successful?
 - 5. Could you have made a different instructional decision during the lesson?
 - 6. What would you change in the future? Why?
 - 7. What are my goals for students in the future?
 - 8. What big takeaways from my class do I want students to have at the end of the year?
 - 9. What have I done in the past, related to this lesson, that did or did not work?

Phase IV: Action Plan

- Participation: This phase is completed individually.
- Actions:
 - 1. After the PLC session, the focus teacher should review any notes, observations, and questions shared in the teacher team reflection.
 - 2. Based on these findings, the teacher should create an action plan to address any issues or new practices to be implemented.
 - 3. The plan should involve small changes that can be tested and reflected on over time.
- Guiding Questions:
 - 1. What stood out during the Reflect phase?
 - 2. What can I implement as a small test of change?
 - 3. What small change could make a significant impact?
 - 4. How will this support student learning?

Phase I: Pre-Plan

The Pre-Plan phase of this reflection protocol engages teachers in planning measurable learning goals and evidence to be collected for the lesson in which they will reflect. The first of these, specifying learning goals, is necessary in identifying ways instruction could improve student learning of the content. Morris, et al. (2009) expressed that if teachers are not clear about what they want students to learn, analyzing instruction and creating activities for students becomes challenging. It is important that this is the first task in planning a lesson for this reflection cycle. Morris, et al. also suggest organizing these learning goals into major concepts and sub-concepts helps determine the knowledge and skills needed to reach the goals. Skills and information teachers want students to master should be unpacked to determine their essential parts. Breaking down learning goals in this fashion assists teachers in reflecting on student understanding of the content and identifying success and growth areas in their own instruction, which makes the reflection process more beneficial (Hiebert, et al., 2007). Not only do the goals assist in the reflective action process, but reflection on instruction using specific learning goals also helps to better identify the goals for students in the future and improve pedagogical content

knowledge (Morris, et al., 2009). As teachers use this protocol in multiple reflective cycles, they will improve in identifying learning goals and understanding their content. Learning is continuous in the planning and reflection cycle.

In order to identify the effectiveness of the learning goals and subsequent instruction, evidence must be collected. The type of evidence and how it will be collected is an important part of the Pre-Plan phase that affects the successfulness of the Reflect phase. Because teachers are not physically in the classroom observing the lesson, evidence is essential for the teacher team to better understand the object of reflection. Hoffman-Kipp, et al. (2003) identify two levels of artifacts that teachers rely on to reflect on instruction; primary artifacts are planned in the Pre-Plan phase and secondary artifacts are analyzed in the Reflect phase. Primary artifacts are those such as student work and formative assessments. Because these types of materials are part of regular lesson planning, the focus of evidence planning should be on how it services the learning goals, what information it can afford, and when it will be collected. Instead of, or even in addition to, primary artifacts, teachers can also plan on collecting video evidence. In their work on learning to notice while teaching, Van Es and Sherin (2006) identified through interviews with teachers that video assisted in examining instruction.

Phase II: Enact

The second phase of the protocol is Enact, in which teachers enact the lesson for which the learning goals and evidence collection was prepared in the first phase. Without an enacted lesson, it is not possible to reflect on instruction. Rodgers (2002) identifies "an experience" as one of the components of reflection in her analysis of Dewey's work. The lesson in this phase is the experience on which the focus teacher and teacher team will reflect in the third phase. While

enacting the lesson, focusing on student thinking in service of the identified learning goals is important for the Reflect phase, and the reflection process as a whole. This focus aids in connecting student understanding, content, and pedagogy (Franke & Kazemi, 2001). Enacted practice is also an important part of the intellectual resources involved in ambitious teaching practice, as it is the subject of thinking about, talking about, learning from, evaluating, and gaining insights about students, content, and pedagogy (Lampert, et al., 2011). As this phase is completed evidence should be secured and unaltered for use in the third phase.

Phase III: Reflect

This reflection protocol is centered around the viewpoint that reflection is an important practice that assists educators in growing in their practice. In order to engage in productive reflection, teachers should identify learning goals and enact a lesson (Morris, et al., 2009; Rodgers, 2002). In order to implement change, teachers should create a plan of action to move forward (Hoffman-Kipp, et al., 2003). The reflection phase connects these pieces with the goal of increasing positive student learning outcomes. In the protocol, the focus teacher shares a summary of the lesson: restates the learning goals from the first meeting, shares the evidence, verbally reviews the lesson, and shares any thoughts or feelings about what occurred. Teachers in the group then share observations they have from the shared summary, the focus teacher has a chance to respond to the observations, the teacher group asks questions, and again the teacher is able to respond.

Situating two phases in professional learning community meetings is an important characteristic of this protocol. Many teachers engage in short reflective thought processes throughout the school day, but there are numerous benefits in reflecting with colleagues. On the

surface level, other perspectives are helpful in thinking about a lesson as are sharing practices that are successful for others. Looking deeper into the participation structures in schools, reflective practice as outlined in this protocol is a form of Lave and Wenger's (1991) theory of legitimate peripheral participation in situated learning. A cohort within a school generally include teachers of varying experience and proficiency that bring different perspectives to the group. The less experienced and/or proficient teachers are more likely to be on the peripheral; learning from those more experienced, not only about teaching as a practice but also about reflective practice. Full participants are able to learn more about and grow their practice while assisting others in increasing their knowledge in teaching and reflection. It is important that teachers practice reflection situated in the, "activity systems of teacher education programs, classrooms, schools, and professional development events" (Hoffman-Kipp, et al., 2003). Participation in these events and reflection protocols such as this one is not just important for learning about teaching practice, but for learning about reflection. Continuing to engage in reflection situated in social spaces allows educators to generate their own understanding and meaning of reflection, making the practice their own (Lave & Wenger, 1991).

Through peripheral and full participation, teachers should create and negotiate the culture and norms of the social space as meetings continue in order for learning to occur (Hoffman-Kipp, et al., 2003). The aspects and goals of the reflective time together changes and occurs based on the needs of the group's members and through learning from each other (Lave & Wenger, 1991; Lewis, et al., 2009). This protocol may seem as though it is not specific enough, however, that is by design. In order for the time and energy spent on reflection to be productive for all members, the content and culture must be negotiated and built by the teachers that make up the group.

The reflective discourse encouraged through this protocol involves aspects of situated learning discourse community and phenomenological discourse community. Situated learning stresses that reflection discourse within a community should be focused on a situated action, is a social activity, and that the activity and its artifacts are distributed amongst its members (Hoffman-Kipp, et al., 2003). All three of these aspects are present in the protocol in that it is based on actions situated in a specific lesson, through the community of teachers it creates, and the shared evidence and thoughts between the participants. Phenomenological discourse community is focused on the source of the reflection as the individual and their experience (Hoffman-Kipp, et al., 2003). The first activity teachers engage in during the reflection of each teacher's lesson in this phase is a shared summary of their experience. This summary is based on the teacher's view of the lesson through guiding questions: how it felt, if it went as planned, moments that were successful, moments that were not successful, etc. Marcos and Tillema's (2006) idea of "talking the walk", discussing action, aligns with these theories in supporting the narrative nature of reflection in order to create knowledge and build on understanding from experience. Discourse between the group members in the observations and questions sections of this phase is conducted through the use of the primary artifacts, evidence collected during the Enact phase, and secondary artifacts, the shared summary at the beginning of the phase (Hoffman-Kipp, et al., 2003).

This phase of the protocol is also motivated by proleptic praxis as discussed by Hoffman-Kip, Artiles, and Lopez-Torres (2003). Proleptic praxis includes in the practice of reflection teachers' conception of the future for their students and their relationship with dominant culture in their lives and pedagogy. While it is important to confront the issues in greater society and culture and their impact on one's pedagogy and life, the goal of this protocol is to introduce and

increase reflective practice with teachers in the use of a tool to improve instruction. Reflecting on how teachers view their class or lesson in their view of their students' future is important to every lesson. How students approach and react to instruction will depend on how they also see its use in their future.

Phase IV: Action Plan

Reflection is productive on its own by bringing instructional decisions and student learning outcomes to the forefront of the practitioner's mind; however, many teachers then wonder what comes next. The fourth and final phase of this reflection protocol engages teachers in action planing based on the previous three phases. The Reflect phase allows for attention on and making sense of experience in order to inform future action and decisions (Howard, 2010; Van Es & Sherin, 2006). Dewey (1933) believed that scientific inquiry is an important part of the reflection process; analyzing an event, forming a hypothesis, and testing that hypothesis are part of the characteristics Rodger's (2002) organized in her review of Dewey's work. This is the format of action planning in this protocol, conducted on a small scale.

Combined with Dewey's scientific inquiry, the structure of this phase is motivated by the idea of small tests of small change as highlighted in Morris and Hiebert's (2011) work. They describe this idea as a common scientific practice because learning from small mistakes is easier than learning from large mistakes in working toward continuous improvement. In this phase, teachers are to identify a small change to make in their instruction based on the evidence collected during the Enact phase and the time and work in the Reflect phase. Because the protocol is focused on improving positive learning outcomes for students, teachers should identify a small change that has the potential to have the biggest effect on instruction and student

learning. Marcos and Tillema's (2006) notion of "walking the talk", doing what you have discussed, asserts that purposeful action planning increases the probability of the desired result. "Talking the walk" during the reflection process, as described above, and "walking the talk" during the action planning process creates informed action.

Data is also often used to make instructional decisions. In this protocol, it is important to use data carefully because using data for the sake of a requirement does not guarantee that it will assist in improving instruction. Two of Jennings's (2012) lenses of data use are reflected in the protocol: diagnosis and a compass. Viewing data as a diagnosis tool allows teachers to identify what and where the problem is occurring. This data is often in the form of formative assessments and allows for making generalizations about the mastery and learning of a class. Another lens in which to look at data is as a compass, to point to specific instructional practices that could be changed or maintained. Data is used as a support in this protocol and is not the only indicator to instructional change or student learning outcomes.

Conclusion

This lesson reflection protocol engages teams of teachers in a reflective action cycle with the goal of supporting teachers in making positive changes in their instruction in service of increased learning opportunities for students. The four-phase protocol utilizes teams of teachers in professional learning community (PLC) meetings to support and learn from each other through situated reflection. Through legitimate peripheral participation, teachers of all experience and proficiency levels are able to access knowledge and improvement through community discourse and a shared culture of growth. Action planning allows teachers to apply their new or growing knowledge and understandings to a small test of change.

Many of my colleagues and I were not afforded the opportunity to learn about reflective practice in our respective teacher preparation programs. This protocol attempts to fill a gap in the disparity between what is known as a positive practice and what is currently practiced by teachers. It provides an opportunity for teachers to analyze their experiences, build on their instruction, and engage in responsive practice. This is a cycle I practice with teachers as an instructional coach, however, that is a resource to which many teachers do not have access. This protocol provides a research-based cycle that can be utilized for continuous improvement and learning through community discourse in the absence of, or in addition to, an instructional resource such as a coach.

As previously stated, there is not one distinctive definition of reflection. Three themes that emerged from the research are reflective thinking, reflection and action, and meaning making. The Reflect phase of this protocol addresses all three themes. Reflective thinking occurs during the shared summary of the focus teacher, observations and questions of the teacher group, and the responses of the focus teacher to the observations and questions. Because the Reflect phase is based on enacting a lesson, teachers are engaging in thinking and communicating about their actions and the actions of their students. Through reflection, teachers are making meaning of these actions in service of student learning. Through writing specific learning goals in the Pre-Plan phase, teachers engage in reflective thinking by considering knowledge of their students and prior student understanding. By enacting a lesson, teachers are completing the object of focus for reflection. Action is a precursor to and a product of reflection. Action planning in the final phase considers the planning, action, and reflection in order to make meaning of the experiences and effect positive change.

Engaging in reflection was a natural practice for me and I was not aware that those practices were not natural for everyone. In starting the position as instructional coach, I quickly learned that for many people reflection is a learned practice and it takes time to reach a level of comfortability in reflecting aloud. Reflection was not something I studied in undergraduate courses and was not common in graduate courses, either. What I did notice, is that professors engaged in reflective practices and built opportunities for students to engage in them during class with the course material and experiences outside of the classroom. The importance of reflection was an implicit lesson learned throughout my program. Coupled with my experiences as a teacher and instructional coach, this lesson grew into a curiosity and desire for more. From this capstone, I wanted to create something that was immediately usable for myself and my teachers. In matching my graduate experiences with needs I detected at the school level, not only did I learn and grow to better understand theory in a research context, but also in practice in the context of a school.

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