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Facilitating Teacher Candidates' Reflective Development Through the Use of Portfolios, Teacher Work Sample, and Guided Reflections

Cynthia Gordinier, Kathy Conway, and Alan Journet

This paper describes curricular developments within the teacher education program of the Department of Elementary, Early, and Special Education at Southeast Missouri State University and how we constructed a program that combines Certification Portfolios, the Teacher Work Sample, and Guided Field Reflections as a means of developing the reflective skills of teacher candidates. This model facilitates the development of teacher candidates who reflect both on their teaching and how their teaching promotes P-12 student learning.

Introduction

To meet the challenge of preparing effective classroom teachers, national and state organizations have identified standards for teacher education programs that teacher candidates must meet before they can receive professional certification. The challenge to teacher education programs is not only to develop effective ways to build teacher candidates' skills and guide them in the effective application of their knowledge, but also to develop their reflective skills so that as teachers they can examine their own teaching and make appropriate decisions to enhance their teaching effectiveness (Rodgers, 2002).

Standards have become the focus of several reform movements. A decade ago the Interstate New Teacher Assessment and Support Consortium (INTASC, 1992) drafted a set of ten standards. Subsequently, the Missouri Department of Elementary and Secondary Education (DESE) adopted standards similar to those of INTASC for

teacher candidates. As a result of the acceptance of these standards by state departments of education and teacher education programs throughout the country, theoretical and practical knowledge are no longer considered enough (Ambach, 1996); teacher candidates must now demonstrate how to apply their knowledge and skills to promote student learning (Girod, 2002).

Emphasis on the ability to be reflective is not new to education. Historically, Plato wrote of the “rational soul” who discerned and judged what was true and right in making reasoned rational decisions (Delphi Plus, 2000). Dewey (1933) suggested that when teachers are confronted with an instructional dilemma they intellectualize the difficulty of the situation, develop a potential solution, and test this as a hypothesis. This process requires reflection throughout its application. When teachers reflect and are able to draw conclusions about their teaching, they develop new insights that they can apply to future planning and teaching. More recently, Schön (1987) added to Dewey’s reflective ideas by suggesting that teachers can modify their instructional repertoire only if they have the knowledge and skills to undertake the necessary inquiry and analysis in a reflective and thoughtful manner. Schön (1983) pointed out that teachers need to be able to frame the question or cause of the instructional problem they have identified in their teaching before they can attempt to find an answer. Cruickshank and Haefele (2001) suggest that reflective teachers are students of teaching; they think introspectively as they examine their own practice and seek a greater understanding of their teaching. Not surprisingly, many teacher candidates do not naturally have these abilities—they must be developed throughout the teacher training program (Rodgers, 2002; Cruickshank, 1987).

Rodgers’ (2002) work in describing a four-phase reflective cycle supports the role of reflection in aiming at improved student learning by being “present” to students’ learning and responding with the most effective instructional choice. Through this cycle teachers are guided as they develop the ability to observe and think critically. This is followed by taking action as they work through the phases of: Presence in Experience, learning to see; Description of Experience, learning to describe and differentiate; Experimentation, learning to take intelligent action; and Analysis of Experience, learning to think from multiple perspectives and to form multiple explanations.

This paper will discuss curricular developments within our teacher education program and how we constructed a system based on Rodgers' model, above, that not only uses Certification Portfolios, but also the Teacher Work Sample (TWS) and Guided Field Reflections to develop reflective teacher candidates. Our experience suggests that this program facilitates the development of teacher candidates who reflect both on their teaching and how their teaching impacts P-12 student learning.

Program Description

Our teacher preparation program uses a block format with four distinct instructional blocks; each block comprises integrated coursework and a field experience. During the first block the teacher candidates observe in K-6 classrooms; then in the second block they teach independent lessons. The third block integrates subject matter methods courses with a related field experience in which the teacher candidates teach units in specific subject areas. They also develop a portfolio that demonstrates their completion of most of the state's required standards. The fourth, and final, block is student teaching, in which the teacher candidates complete their portfolios and also complete a unit using the Teacher Work Sample Methodology (Girod, 2002).

Reflective assignments are introduced in Block I and subsequent blocks scaffold on these reflective experiences to develop teacher candidates' reflective skills. These assignments have improved over time in response to inconsistencies and gaps that have been identified by the faculty.

The Previous Program

Field Reflections

Prior to the implementation of the newly designed system in fall 2002 (to be discussed below), the teacher candidates were required to write reflective statements on the lessons they taught during Blocks II and III. However, there was no systematic instruction on how students should write reflections nor were there uniform formats to evaluate

reflections and provide feedback. There was inconsistency in the collection and frequency of assignments and the grading standards. For example, one instructor collected journals at irregular intervals and graded on a credit/no-credit basis. The only directions provided to the teacher candidates were that the candidates should apply higher order thinking skills and reflect on what they thought was significant. However, there was no instruction on how to apply higher order thinking skills, and minimal feedback was given. Additionally, the instructors did not make connections between the teacher candidates' reflections of their teaching and their students' learning. As a result, students' reflections on their teaching were often only descriptions of what they did with no evidence of higher order thinking. These are typified in the following two examples:

The purpose of my lesson was to help my students learn more about the Native Americans and the Pilgrims. They had fun coloring their costumes for the Thanksgiving dinner.

Students gave suggestions for things to put on the KWL chart and answered questions asked throughout the book.

Clearly both responses are confined to descriptions of what happened and contain no genuine reflection or analysis of the situation.

Beginning in fall 1999, as a consequence of faculty discussions resulting from the development of a uniform portfolio requirement for all teacher candidates in the department, an effort was made to help establish quality reflective writing for all teacher candidates. It was decided that reflections would be required of all teacher candidates following every lesson they taught. However, there continued to be no uniform expectations for instruction or feedback. All faculty continued to review reflections but still scored them on a pass/no-pass basis. The reflections written by the candidates continued to be task focused. These two examples focus on the tasks that were completed but, again, exhibit no evaluative reflection on its value or how it might be improved.

My transitions were smooth between the changes in aspects that we discussed. We reviewed terms, sang a song that went along with a book focused on the day before, talked about how slaves used symbols to travel along the

Underground Railroad, and introduced the term “abolitionist.”

In my reading unit I began each day triggering their prior knowledge on the previous day. On the first day we went through the introduction of a double entry journal and a picture walk. Then they would read the story and complete the journal with writing whether or not the prediction was right.

While all instructors were consistently asking students to reflect and students were practicing reflecting, the quality of reflections remained one dimensional. As a result, the faculty met and focused their discussion on ways to strengthen the development of teacher candidates’ reflective skills.

Portfolios

Recognizing the need for teacher candidates to have opportunities in which “thinking” is embedded within the context of the learning opportunities, in 1999 our department adopted certification portfolios to meet the portfolio requirement established by the state department of education. Standards were identified and rubrics were developed by the Missouri DESE to measure acceptable achievement of each standard by teacher candidates. Teacher candidates wrote a two- to three-page reflective statement for each standard as they addressed it. The role of the portfolio was to document the teacher candidate’s achievement of the standards. Teacher candidates wrote reflections to justify their claim that materials submitted by them in the portfolio demonstrated that they met the standards. Initially, there was little ownership of the process by the faculty or the teacher candidates since it was required by DESE.

During an ongoing faculty review of the portfolio process, we examined candidates’ performance as demonstrated by their portfolios. Our discussions revealed that during the first semesters of the portfolio requirement, the standards of the portfolio were introduced in the college classroom and the teacher candidates wrote their reflections at the end of the semester. Although there was variation among our teacher candidates in their development of their reflecting skills, most were

not at the level we desired. Teacher candidates' reflective statements frequently demonstrated an ability to describe and summarize the experience, yet there was little evidence of the ability to relate their experience to the standards.

This is illustrated in the following two examples where the students summarized and restated the writing prompts, but there is no elaboration of their summaries to support their statements of the value of the activity.

These courses studied all aspects of human growth and discussed often and in great detail. The information gained in these classes, such as the age at which students can begin to think about and comprehend abstract ideas, allowed me to successfully plan my lessons.

I selected NEA student conference information (Artifact B), Multiple Intelligences for Your Classroom packet (Artifact D), tutee report/lesson plans, and social studies (Artifact H) and science (Artifact A) unit plans as artifacts to meet this standard. I chose these artifacts to show my ability to actively seek out opportunities to grow professionally, to be a reflective practitioner, and to apply professional ethical practices in education.

The students' reflections exemplify the concerns expressed by Delandshere and Arens (2003) that certification portfolios were not supporting the development of reflective teacher candidates since they were simply using key words from the standards rather than reflecting on the experience.

In preparation for national and state accreditation, faculty members met to discuss teacher candidates' progress on the portfolio. Through these discussions it was revealed that many faculty and teacher candidates did not understand the process of developing reflective thought required for successful completion of the portfolio; the portfolio continued simply to be a hurdle over which teacher candidates were required to jump. As a result, the teacher candidates did not see the portfolios as a meaningful representation of themselves and their learning. The problem then became one of encouraging teacher

candidates to see that reflection was a valued skill that could effectively impact student learning and could contribute to their future teaching (Wade & Yarbrough, 1996).

Teacher Work Sample

In Fall 2001 we began using the TWS methodology that was developed at Western Oregon University (WOU, 2003) and is a model of effective teaching that is “grounded in a concept of teaching and learning that is student centered, outcome based, and context dependent” (WOU, 2003, p. 1). The TWS requires that teacher candidates use effective planning, instruction, assessment, and reflective teaching strategies (Girod, 2002). The teacher candidates were required to develop the following elements as they develop a unit of instruction: Contextual Factors, Learning Goals, Assessment Plan, Design for Instruction, Instructional Decision-Making, Analysis of Student Learning, Reflection, and Self-Evaluation.

When the faculty started using the TWS we did not understand how it could be used to complement our existing program. We added the requirement and assignments to our existing curriculum with the hope that we would soon understand how to improve its implementation. During the first semester, the faculty’s lack of understanding resulted in a lack of instruction, whereby teacher candidates not only responded somewhat perfunctorily to the prompts in the different elements, but also they lacked an understanding of the total process.

This is illustrated by the following example from a teacher candidate in Block III as they respond to the prompts in the last section of the TWS. The teacher candidates are asked to reflect upon the effectiveness of their plans and implementation, as well as their impact on student learning.

The instructional strategies I used were paired work, lecture, discussion, independent work, and modeling. I had the children work in pairs to peer review each other’s short stories. There were specific questions that the students had to answer about their partner’s paper. When I taught my mathematics lesson on the area of a circle, I began by lecturing on the formula. The class then discussed the formula and asked questions if they were confused. I then

assigned an independent assignment for the students to complete. I used modeling in my Science lesson on mirrors. This teaching was also very hands-on. I first demonstrated each of the mirror activities in the front of the classroom. The students then modeled what I did by themselves and in small groups.

This illustrates our observation that teacher candidates' reflections initially tended to be one dimensional: focusing on themselves by summarizing their actions and showing no evidence of analyzing their actions and the instructional consequences thereof.

The teacher candidates continued to view the Field Reflections, Portfolio, and TWS as tasks to complete rather than activities that enhanced their teaching skills and impacted student learning. They did not understand that the Field Reflections and elements of the TWS should provide evidence that they met the standards of the portfolio. They were still only describing experiences and not analyzing the situation (Rodgers, 2002).

Modified Program

The faculty collected and analyzed scoring results from the portfolios in preparation for our state and national program reviews. The data collected over three years reflected an unacceptable level of performance since there was minimal increase in the performance on the portfolio. This supported our informal observations that the teacher candidates' portfolio reflections continued to focus on themselves with minimal evidence of analysis of their observations. We realized that simply requesting candidates to be reflective was insufficient. The candidates did not really understand our expectations and we realized that we had not provided the necessary clarity, samples, and support.

Our discussions continued in program faculty meetings following the review of our program, and as a faculty we identified that reflective thinking is multifaceted and requires time to develop. The question became how best to develop the skill and disposition of reflection in our teacher candidates. Although teacher candidates were being asked to reflect, the implementation did not result in higher quality reflections.

We recognized that any development in more effective reflections must occur in conjunction with field experiences where the teacher candidates have opportunities to apply their knowledge and reflect upon their teaching. We concurred with teachers in the study conducted by Delandshere and Arens (2003) when we identified that the development of effective reflections could not occur in an entry level course because teacher candidates at this level have no teaching activities upon which to reflect. Therefore, development of effective reflections must be introduced over time. These factors were considered as we developed a series of integrated activities that fit into our existing course structure.

Guided Field Reflection

At the beginning of fall semester 2002, in response to concerns that had risen from an analysis of teacher candidate reflections in their portfolios, Block III faculty developed a series of written questions to provide the framework for teacher candidate field reflections to be used as teacher candidates first observed and then taught in the field (see Appendix A). These prompts were designed to assist the teacher candidates in the development of their reflective skills by helping them connect discussions in the college classroom with their field experiences. This activity begins with reflections based on observations of the cooperating teachers and their students as teacher candidates develop their observational skills as in the first phase of Rodgers' Reflective Cycle, Presence in Experience (learning to see) (Rodgers, 2002). These reflections are used as the basis for discussions during class meetings as the teacher candidates move to the second phase, Description of Experience (Rodgers, 2002). During the subsequent weeks of classroom teaching, a different set of writing prompts focuses reflection on the instructional behaviors of the teacher candidates themselves and the responses of their students as they explore the third and fourth phases of Analysis of Experience and Experimentation. All reflections are scored on a weekly basis, and written feedback is provided to each student along with discussions during college classroom sessions. Our objective is that through repeated use of this guided field reflection protocol incorporating feedback, teacher candidates will begin to think more deeply about their field experiences;

our hope is that they can better connect theory to application through their developing habit of reflective thought. Through this process of reflection, the teacher candidates begin to understand the role reflective thought plays in their professional development, thus allowing them to take a more personal ownership of the thoughts expressed in the field reflections. This is consistent with Wade and Yarbrough's (1996) conclusion that teacher candidates learn from experience, create meaning, and develop a commitment to the process of reflection. Examples from two Block III students follow:

I learned that it is important to break down the concepts into the smallest part for the students at this level. These were new terms for them and they needed the experience of touching and telling me what the parts were called. During the time I spent with the first group I drew the whale and labeled the parts as a model. Then I asked the students to draw their whale and label the parts. This was difficult for them to do. When I worked with the next group, I drew a whale and then had them draw a whale. Next I labeled each part and then they labeled their parts. I had to modify the lesson even further for some of the lower students. I would draw a part of the whale and then they drew. When we labeled the parts I had to write one letter at a time and let them copy the letter in order for them to label the parts.

I learned that formative assessments are important. When I allowed each student to touch and tell me the name of the whale parts, I had a good idea of who was grasping the concept and who still needed practice. If someone needed practice I allowed everyone to have another turn at identifying the parts of the whale.

I was very impressed with how well they listened to the book. When we were filling in the "L" section of the KWL bat board the students listed many facts that I had forgotten about. Such as, bats can hop and they help the farmers by eating bugs. During the reading of the book I could tell the students were very interested about bats because when I would read the words that went along with the picture the

students would get excited and make a comment, such as cool or awesome.

These examples demonstrate the teacher candidates' development in their use of critical thinking skills. They are now extending their descriptions as they analyze and experiment with their teaching. Through this process, evidence of critical thinking is demonstrated as they evaluate the impact of their choices on student learning.

Portfolios Improved

The quality and depth of the portfolio reflections, as documented through the results of the portfolio scoring, improved after its initial use. We feel that this was due in part to teacher candidates' understanding and connection of the standards to classroom practices. This was accomplished through changes made in both Blocks II and III. During Block II, an introduction to the portfolio was incorporated into instruction. Reflections on some of the standards that were relevant for this field experience were required. We also added seminars to Block II and III that were designed to increase teacher candidates' understanding of the content of the standards as well as help them begin thinking about applying these ideas in their classroom teaching. Faculty in Block III used instructional time to help teacher candidates make direct connections from the standards to their teaching. The refined focus of the Guided Field Reflections was also instrumental in the improvement of teacher candidates' reflections in the portfolio. This revised format allowed for greater development of the necessary skills, eliciting a better understanding on the part of Block III teacher candidates of the reflection required to demonstrate competence sufficient to meet the standards.

A teacher candidate enrolled in Block III demonstrates her ability to analyze instructional choices and her development as a "student of teaching" as suggested by Cruickshank & Haefele (2001). The teacher candidate has examined her own practice and is seeking a greater understanding of teaching.

My math unit shows how I can apply the concepts of math from my Mathematics course to my preparation and

teaching of the lesson plans. I used the knowledge that children learn best from hands-on activities to help make counting concrete. I learned about the constructivist theory which states that children are active participants in the learning process and that, especially in the preoperational stage, children should be given manipulatives to explore math to understand what they are learning. ... I provided teddy bears for students to manipulate and count to help them build their counting skills through hands-on activities.

Enhanced TWS

The TWS process was modified to integrate the TWS within appropriate instruction throughout the blocks. The first step was to introduce the elements of Contextual Factors, Learning Goals, and Assessment Plan elements during Block I and Block II. These elements were discussed during class meetings and connections were made to Block II field experiences. Teacher candidates respond to the prompts in these elements and are provided feedback using the TWS rubric. Block III included these elements and also added the Design for Instruction, Analysis of Student Learning, and Reflection and Self-Assessment elements into course requirements. During Block III the teacher candidates participate in a seminar that focuses on the TWS elements and connect this information to their prior experiences from the field and portfolio. Teacher candidates also review and critique TWSs that were written previously. They then discuss the elements in detail before they write and rewrite different elements based on their current field assignment. Finally, the last element, Instructional Decision Making, is introduced in Block IV and the entire TWS is completed by all teacher candidates. Teacher candidates in Block IV are further guided by instruction provided in a seminar that focuses on the TWS as well as discussions with their Student Teaching Supervisor throughout the development of their TWS document. Following is a quote from a teacher candidate that illustrates how they think from multiple perspectives (Rodgers, 2002).

Even though the unit had a lot of success and student growth, there are a few areas that I think I could have improved upon as a teacher in order to facilitate more student

learning. Because the students as a whole were not as successful at mastering Learning Goal 2 as they were mastering Learning Goal 1, I definitely think there were some things that I should have done differently when I was teaching information about Learning Goal 2. For instance, the beginning of the third lesson, which correlated with Learning Goal 2, was not very detailed and was not presented in a very interesting manner. While I was teaching the first part of the lesson, I had some students staring off into space, some students messing with items in their desk, and some students stressing about the homework assignment that I could have assigned to them after the lesson. Part of the reason this was occurring was because I was trying to give the students some background information prior to having them complete an activity, and a lot of the students wanted to do something interactive before getting into [the] instructional segment of the lesson. As a result, the beginning of the lesson did not seem to be too big [of a] deal to the students. This is definitely something that I should have considered when I was developing the third lesson of my science unit.

Looking to the Future

We feel that using Guided Field Reflection, Portfolio, and TWS as instructional tools with teacher candidates has improved teaching and learning for faculty as well as teacher candidates. This has been accomplished by applying the Reflective Cycle that Rodgers (2002) developed with practicing teachers. Our teacher candidates develop their ability to observe throughout their field experiences since their growth in describing their experiences is nurtured through the Guided Field Reflections. The phases of experimentation and analysis are developed through the use of an imbedded sequence where the teacher candidates plan, implement, and then reflect. The prompts that are used provide the necessary scaffolding as they develop their skills in this sequence. They then return to the beginning of the sequence armed with the new insights gathered through their earlier reflective thinking.

We feel that repetition in this sequence is critical to their development, and, as such, it is maintained throughout the system that comprises the Guided Field Reflection, Portfolio, and TWS.

Through observing, describing, experimenting, and analyzing teaching experiences, the teacher candidates demonstrate their ability to reflect on the effectiveness of their teaching. This reflection will ultimately have a positive impact on their students' success as learners. Dewey's (1933) view of intellectualization of the activity becomes our 'mantra.' In essence, we are implementing the instructional technique of scaffolding to help teacher candidates think reflectively about their own performance as they identify what specific characteristics and concepts represent effective teaching practices.

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Appendix A Guided Field Reflection

Teacher candidates write reflections using different prompts depending on their field activities.

Prompts used during weeks 1-3 while observing:

1. Identify instructional strategies observed (cooperative learning groups, whole group, small group, lecture, discussion, independent work, reciprocal teaching, etc.). Identify instructional technique(s) and provide specific examples.
2. How were varied learning styles addressed within the instructional delivery? Identify the learning style and provide specific examples of how the different styles are supported through instructional delivery.
3. What have you learned about teaching this week?
4. What have you observed/learned about students and their learning this week? (Observation connected to theory: Identify the theory and examples to support it.)
5. Personal reflection: Personal connections and responses to what you observed.

Prompts used during weeks 4-6 while observing:

1. Identify pre-assessment strategies observed. Identify strategies and provide specific examples.
2. Identify formative assessment strategies observed. Identify strategies and include specific examples.
3. Identify post-assessment strategies observed. Identify strategies and include specific examples.
4. What have you learned about teaching this week?
5. What have you observed/learned about students and their learning this week? (Observation connected to theory: Identify the theory and examples to support it.)
6. Personal reflection: Personal connections and responses to what you observed.

Prompts used while teaching units:

1. Daily objectives.
2. What I did well.
3. What the students did well.
4. What I didn't do well.
5. What the students didn't do well.
6. What I would change if I teach this lesson again.
7. What I would keep the same.

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