A Case Study: Helping Preservice Teachers Internalize the Interconnectedness of Believing, Knowing, Seeing, and Doing.

22 Apr 95


Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

Case Studies; *Educational Philosophy; Education Courses; Elementary Secondary Education; Higher Education; *Preservice Teacher Education; *Reflective Teaching; Seminars; Student Journals; *Student Teacher Attitudes; Student Teachers; *Teacher Competencies; Teacher Role; Teaching Methods

This case study used an expanded method for helping student teacher interns examine their interpretation of what it is to be a teacher. Participants were two faculty members and four groups of preservice teachers working in a collegial environment at a small liberal arts college. Students participated in a professional development seminar that functions as a culminating reflective activity for the students' professional preparation. Study components included the students' own case studies of themselves, analysis of student progress toward 10 program competencies, journals, self-analysis videotaping, and portfolios. During the seminars the researcher-facilitators modeled reflective strategies and an action research process by responding to the interns' written commentaries and engaging them in discussion. Constant change and modification to respond to the group and their changes was a central component of the process of the study. The process showed that the student teaching seminar raised the interns' philosophy of teaching to a consciousness that was intentional, not just implicit. Through the seminar's many opportunities for reflection, the interns were able to "work at" their philosophy. Interns used the knowledge gained from their professional coursework as building blocks for designing their own teacher identity. (JB)
A Case Study: Helping Preservice Teachers Internalize The Interconnectedness of Believing, Knowing, Seeing and Doing

Barbara J. Kasten, Ph.D.
Joan M. Ferraro, SND, Ed.D.
Trinity College

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Introduction

With the call for collaboration between classroom teachers and other human service professionals, it is imperative that programs of teacher preparation incorporate strategies for developing reflective practitioners who understand their own individual role as "teacher" as well as their role as members of this larger community. Inherent in that understanding is an awareness of and a commitment to the interconnectedness of believing, knowing, seeing and doing (Harrington, 1994). Acquiring that understanding is an objective of the teacher education program described in this paper.

Helping prospective teachers to understand "how they know" and the effects of how they know on their conception of their role as teacher is one of the most perplexing objectives of a teacher education program (Harrington, 1994). Student teaching interns need to construct their own knowledge about who they are as teacher and rediscover the linkages they have previously discussed and experienced in their professional course work (Colton & Sparks-Langer, 1993).

Engaging preservice teachers in journal writing is one mode of encouraging the development of reflection. Kasten (1993) found that during periods of stress and when assuming responsibility for the classroom, student teachers were likely not to maintain their previous level of reflection.

The current case study describes an expanded method for helping student teacher interns examine their interpretation of what it is to be teacher. In individual case studies, student interns described the process of change as they were internalizing their beliefs about teaching. Their metamorphosis from college students to teachers is documented in their culminating portfolios.

To develop as reflective practitioners, it is necessary for beginning teachers to practice a philosophy of teaching that embraces both the metacognitive process: How do I know what I know? (epistemology); and the process of applying thought to action: How do I use what I know? (axiology), analyzing values and behaviors to see if morality and ethics are reflected in their actions. This study describes the strategies used to develop such a philosophy, an expanded method for developing an understanding of relating the acts of believing, knowing, seeing and doing in both the student interns and the professors working with those interns.
The two researchers used some of the strategies to assess their own growth as teacher educators as well as the effectiveness of their program of study for preparing reflective practitioners who also understand their role as teachers in the larger community. The researchers focused their assessment by asking three questions: (a) How do preservice teachers construct their knowledge? (b) How do preservice teachers conceptualize their role as teachers and its effect on learners? (c) How does working with preservice teachers in this mode affect the growth and reflectivity of their teacher educators?

Subjects and Methodology

Participants in this study were two faculty members and four groups of teacher interns working in a collegial environment at a small liberal arts college. As part of the student teaching internship, interns participated in a regularly scheduled professional development seminar facilitated by one of the researchers. The seminar functions as a culminating reflective activity for the students' professional preparation. Data consisted of oral and written responses of the interns during their internship period and were collected by the two faculty members over four semesters.

Seminars. The populations in the seminar included interns who were completing (a) a traditional undergraduate major in education, (b) an alternative undergraduate program through a weekend college model, (c) a graduate Master of Arts in Teaching degree and (d) an alternative Master of Arts in Teaching program while already employed as instructional assistants within a school district. These interns were completing practica in the areas of early childhood, elementary, secondary and special education.

The seminars were designed to help the interns identify and document changes in their beliefs and their perceptions of their role as teacher. Interns were asked to: (a) identify personal highlights and concerns, and perceived level of attainment in ten areas of competence; (b) comment on relationships, reflection, research and repertoire; (c) identify their own and their cooperating teachers' preferred styles of teaching; and (d) set a personal goal for the upcoming week.

Highlights and concerns. At the beginning of each seminar meeting, interns were invited to share a highlight and a concern that they had reflected on since the last seminar meeting. These sharings usually generated productive discussion and problem solving among the participants.

Reflective instrument. Interns wrote brief comments and reflections on a four-part instrument addressing the topics of
reflection, research, repertoire and relations. In addition to producing discussion during seminar, this instrument was available to both the seminar facilitator and the college supervisor to provide them with additional insight into the progress of the interns.

**Case studies.** Interns developed individual case studies on two students in their classrooms during the internship. The components of the case study include (a) identifying a student, (b) gathering information, (c) planning strategies, (d) implementing strategies, (e) observing, (f) reflecting on the observations and (g) continuing or revising the strategies. This action research case study model is supported by Kasten's (1991) research finding that interest in the individual student was the one concern that persisted through the entire internship period.

An early seminar meeting was devoted to developing individual case studies. The researcher/facilitator engaged the interns in reflection and shared dialogue about each intern's selected case, providing an opportunity for the interns to collaborate on developing strategies for meeting the needs of these individual students. After consulting with their cooperating teachers, the interns began implementing strategies. The interns engaged in continuous reflection on their action research during seminars and in their journals. Their resulting case study reports became part of their portfolios.

**Competencies.** Ten areas of competence have been identified by our program as critical to the growth and development of preservice teachers: (a) An understanding of child development and learning theory; (b) support for student's intellectual, social, and personal development; (c) development and utilization of assessment strategies; (d) creation of instructional opportunities adapted to meet the needs of diverse learners; (e) mastery of a variety of instructional strategies; (f) creation of learning environments that reflect understanding of individual and group behavior; (g) ability to plan instruction based upon knowledge of students, community and curriculum goals; (h) knowledge and understanding of concepts and experiences in the subject areas to make learning meaningful for students; (i) development of positive relationships with colleagues, parents and agencies in the larger community; and (j) reflection and evaluation of decisions.

Interns reported their level of attainment on these competencies three times during the internship: at the beginning, at midpoint and at the end. This was a both a group activity and an individual reflection on the progress of their professional development. During the midpoint and final evaluations, the college supervisor and cooperating teacher shared with the intern their perceptions of the intern's level of competence in these areas.
Journal writing. The interns were asked to maintain a journal as a basis for analyzing their own teaching. The researchers responded to the journal entries during their site visits.

Self-analysis videotape. At least once during the internship period each intern was videotaped while engaging in an activity with the students. The interns were asked to analyze their own videotape within 48 hours of being taped. They responded to questions patterned after the guidelines developed by Stone and Perez (1989): (a) What happened that you thought would occur? (b) What did not happen that you thought would occur? (c) What happened that you had not expected? (d) What would you do differently and why? (e) Additional comments, reactions, feelings and questions. The videotape and analyses also became a part of their portfolios.

Portfolio. The portfolio is a culminating activity documenting the competencies the student has acquired throughout the professional development program. The researchers began using the portfolio as a formal assessment tool three years ago. This was a new form of assessment for both the college and the students.

Findings and Discussion

During the seminars, the researcher/facilitator modeled reflective strategies and an action research process by responding to the interns' written commentaries and engaging with them in discussion. Following the seminar sessions, the researchers met together. Not only did they reflect on the progress of individual interns, but they also discussed the seminar process and its evolvement in response to the growth in the interns. An action research agenda was developed as change occurred. The researchers became aware of the changes, some more subtle than others, in both the format of the seminars and in their interactions with the interns.

Following the case study cycle the researchers gathered data on the professional development of the interns and reflected on their roles as teacher educators. The shared analysis resulted in the researchers developing new strategies for fostering professional growth in the interns, not only during the internship period but throughout the teacher preparation program.

Seminars. The researchers began to reexamine their seminar format as well as the time in which it was offered. At times it seemed that the interns had "regressed" to wanting to be "told" the answers to the questions they raised, rather than reflecting and deciding on possible solutions. The researchers discussed "what had worked" in previous seminars and tried to structure a
less formal approach to having the interns report on their internship experience.

The researchers experimented with a variety of formats for the scheduling of these seminars. Their weekly dialogues were often focused around how to make best use of the interns' time during this seminar. Traditionally seminars had been scheduled weekly, in the late afternoon. The researchers found that the student interns were often too tired to actively participate in an examination of theory to practice. Therefore, they tried bimonthly seminars which were scheduled for a longer time period. However, after two semesters of the bimonthly format it was concluded that the longer time period and meeting on alternate weeks did not foster more intensive participation on the part of the interns.

Highlights and concerns. The researchers found that, when they began the dialogue by having the interns reflect on their own personal "highlights" and "concerns" of the week just past, the interns were more capable of entering a problem solving mode;

My highlight of my week occurred when I gave Monday's math lesson. The students in my class had been studying place value and extended numeration. I was amazed that they had retained most of the lesson and were able to move on...I had no teacher manual to go on, so I had to make up all my lessons. Thanks for great notes from the math curriculum methods course.

that is, their contributions to these reflections sparked interest and a new synergy among them. They began to see the researchers once again as facilitators for their growth and development, rather than lecturers of "what is."

By having the interns write and discuss their highlights and concerns on a regular basis, the researchers were able to learn if occurrences outside the internship were the source of either concern or joy:

I am not going to get everything done that I need to get done. Instead of being happy that it is getting closer to being over, I'm upset that I won't have enough time to get everything done. Guess there's just no pleasing some people, huh!

When this occurred it became necessary to examine what circumstances were inhibiting the interns from focusing on the teaching experience. As the researchers reflected on this problem they decided to include a session on time management early in the seminar series.
Reflective instrument. Initially the researchers found that having the interns take the time to write out their highlights and concerns helped them focus on both the positive and less positive aspects of their emerging role as teacher. Building on that format the researchers constructed a simple four-component instrument which encouraged the interns to organize their thoughts about aspects of their experience into reflection, research, repertoire and relations. This organizational format provided a vehicle for helping the interns construct their teaching philosophy from what they were believing, knowing, seeing and doing.

The reflection quadrant helped the interns focus on the decisions they had made before, during and after the act of teaching:

I am preparing my lesson plans and following them to the letter. That created some degree of difficulty because I always have to make accommodations with some issues students come up with during my presentations.

The research quadrant was originally designed with the purpose of having them report on the progress of their individual case studies. Often this quadrant became a vehicle for reporting on their observations of how what was happening in the classroom related with the theories they had studied in their earlier course work.

Much more research on case study, subject matter, plus computer searches. I'm learning wonderful things. My CT has told me to relax, but I am constantly looking for innovation.

I have been researching ideas for my unit on communities. I have also been doing research on curriculum development and parent involvement to add info to my papers.

Interns used the relationships quadrant to report on their interactions with students, their cooperating teacher, other school personnel and parents.

Now that I have gone to several In-Service workshops with the other teachers I feel as if I am really part of their staff.

Erin hates me. My kids hate me. I hate me. My mommy loves me. Seriously, relations are strained all over. I'm particularly bothered by the fact that I am starting to really dislike my students...that ain't good.
Getting along much better with students, administrators and even my cooperating teacher! I am also glad that my case study student is doing better and having fewer confrontations with his teachers. My strategies are working for him.

Repertoire called on them to analyze their attempts to incorporate into their practice the techniques they had learned in their method courses as well as the strategies they observed being used by the cooperating teacher. The researchers found that this quadrant helped them to make sense of lesson planning.

In my ESL classes, I use a lot of repetition to make sure they listening and comprehending the material. I also have my students paraphrasing their reading assignments to make sure they are understanding...

In my regular English class, I try to make the material relevant to what is going on in their lives.

I have started planning lessons and grading papers. The concept of not teaching grammar in isolation has been reinforced for me by observing my CT teach grammar through writing.

The instrument provided a quick check for the researchers to assess the interns' progress. By having them use this instrument the researchers found that not only were the interns relating theory to practice, but they were beginning to complete the cycle of inquiry by relating their practice and observations to the construction of new and different theory.

I have been trying new classroom management strategies. Instead of singling out students I hold the whole table responsible. This has been helping keep everyone on task and sometimes your peer telling you to be quiet is more effective than the teacher. It has been working wonders!

Their own philosophies and theories became the basis for their decisions about teaching behaviors in the classroom. As their teaching styles emerged, their philosophies were no longer abstract thoughts, but the rationale for their actions.

Provided with the opportunity for brief reflective reporting as an integral part of the seminars, interns often engaged in shared dialogue about the issues they had identified. They thought the seminar discussions focused on their issues and concerns. Their written responses provided a framework for them to examine what was happening with themselves as well as with others.
Relationships are good but my confidence is slipping now that I am in stuff I don’t understand. The kids used to think I knew everything...now they know I don’t!

Need to improve classroom management with math class. There are so many different levels, some finish early and have half an hour left, others spend one hour working on a few problems. The math center helps but I need to work on putting these kids into groups having other hands-on activities.

If only I didn’t have all the paperwork required by annual reviews on top of four different class preps, I could do a better job. I feel stretched to the limit.

The responses also provided a basis for the researchers to analyze how their engagement of the interns in reflective activity from the beginning of the program influenced their behaviors during the internship and their internalization of the interconnectedness of believing, knowing, seeing and doing—their identification of themselves as teacher.

Case studies. By sharing the process of constructing case studies with one another, the interns found that they gained additional insight and strategies for problem solving in a variety of situations in meeting individual needs of students. Although the individual case studies focused on differing grade levels and learning environments, the interns were able to transfer shared learnings to their own experiences and expand their repertoire for accommodating individual special needs.

I’ve changed by case study from a 5th-grader to a kindergartner. I’ve watched for 2 weeks and I’ve looked into his file. Since he is young there isn’t alot of info yet but the teachers are trying to exit him. He enjoys art—short attention span, yet gets the process down.

Competencies. The interns discovered that their level of "comfort" with their development of competence in the various areas fluctuated throughout the internship. This fluctuation was influenced not only by their teaching behaviors, but also by their relationship with their cooperating teachers.

This is a rollercoaster. One day I feel terrible and others great. Sometimes I feel like my brain just stops while I’m right in the middle of something. I did feel more comfortable when my CT left the room.

As they began to assume total responsibility for the classroom, they began to question their previously achieved level of
competence. At the completion of their internship they usually had regained a more positive sense of their level of competence.

The researchers found similarities across the four groups of interns in the level of "comfort" that they had achieved at different periods during the internship. By discussing the likelihood of change in the perceived level of competence at the beginning seminar, the researchers were able to reassure the interns. The researchers determined that having the interns maintain individual records of their levels of competence in different areas helped them recognize their patterns of growth.

**Journal writing.** The written responses of the researchers in the interns' journals often provided the scaffolding necessary for the interns to link previous knowledge from professional course work with current experiences. The initial entry by an intern might not have demonstrated the interconnectedness of believing, knowing, seeing and doing. But the collaborative dialogue between an intern and the researcher in the journal provided an additional perspective on the intern's construction of reflection. This dialogue provided an additional resource for the intern in developing creative solutions to problems and making decisions.

As in Kasten's (1993) study, the researchers found that the journals provided additional insight into the teaching behaviors of the interns. Even with the inclusion of "Highlights and Concerns" as part of the seminar, interns wrote about other concerns in the journals. These frustrations were often associated with the relationships they had with their cooperating teachers. The journals might contain one-line comments about some occurrence that created minor tension, but it was not until the situation became a major problem that it was identified as a "concern" during the seminar.

*My cooperating teacher feels like we have a good relationship because she gave me a 5 on my evaluation in that category. I feel frustrated with her, but bit my tongue and come in early and leave late and do what she wants...I'm a guest in her classroom.*

*Self-analysis videotape.* The interns experienced both positive and negative feelings about their teaching performance.

*This was my first science lesson and if I could have found a place to hide I would have gone there fast. From that lesson I found out that I really need to learn more about plants and seeds.*

The videotape allowed them to see student behavior that they had not been aware of while teaching the lesson. It also enabled
them to recognize aspects of their own behavior that needed to be adjusted to be more effective teachers.

*I feel that I am continually expecting too much from these kids, and don't seem to be able to find a way to adjust, I've got to lower my expectations.*

The videotape became a "third eye" with which the interns could observe themselves in the teaching act. As they become more reflective practitioners, it is likely that they will internalize the process of the "third eye" so that they are able to adjust their teaching as they are practicing it, moving from seeing to knowing to doing.

**Portfolios.** As the researchers have become more familiar with the portfolio form of assessment, it has been expanded beyond a mere replacement for comprehensive exams and research projects. As part of the seminars interns were given assignments for completing short, two-page reflective papers on the topics of: overall philosophy of teaching, creating effective classroom environments, providing for individual student needs, developing appropriate curriculum, continuing professional growth and integrating community resources. This framework was developed from the interviewing protocol and written evaluation/reference forms from five of the local school districts recruiting students from the program. Interns were given the option of offering an alternative format for the foundation of their portfolio if they chose.

The portfolio provided the interns with a mechanism for gathering artifacts demonstrating the products of their internship as well as documenting the process of incorporating the professional knowledge they have constructed throughout the program. The portfolio became an expression of their personal teaching philosophy as it had begun and continues to evolve through their ongoing professional development. The resulting portfolio was an evolution of their individual journey of creating a personal statement of philosophy—epistemology and axiology—about teaching; their believing, knowing, seeing and doing.

**Implications**

This study emphasizes the importance of using multiple modes for encouraging reflection in preservice teachers. It was originally undertaken by the researchers as a study of a particular component of their program, the internship seminar. It became the source of a reflection action process which led to modifications in their own teacher education practice.
Effects on the interns. One of the most important outcomes of this case study was the researchers' awareness that the revised method of conducting the student teaching seminar raised the interns' philosophy of teaching to a consciousness that was intentional, and not just implicit. Because of the many opportunities within the seminar format for reflectivity, the interns actually "worked at" their philosophy.

Throughout the program of teacher preparation the interns had been challenged to refine and even redefine what their personal philosophy of teaching was. They had examined what their beliefs were about learning, teaching and the social construct of education. As their professional development continues, it is hoped that the cycle of connecting their experiences and theory about teaching will become a dynamic personal framework known as their philosophy of teaching.

Being part of a reflective seminar provided an opportunity for the interns to synthesize the components that had been shaping their beliefs about what it is to be teacher. During this time their believing, knowing, seeing and doing became an integrated process. Providing structured opportunities for reflection assisted the interns in remaining focused and able to engage in shared dialogue and collegial problem solving even during periods of intense stress. They were able to establish their own system of support and encouragement, seeing each other as a valuable resource. They were able to construct together their understanding of the role of teacher and, in fact, became a community of learners.

I have become a lot closer to the other student teachers. We often share ideas and concerns we have. Sometimes we are there for each other just to have a listening ear.

The researchers found that the interns used the knowledge gained from their professional course work as building blocks for designing their own teacher identity. The opportunity to engage in the process of communal reflection and dialogue allowed the interns to create the "mortar" for their personal construct while maintaining a sense of community. The unique designs of the culminating professional portfolios documented their individuality. The written reflections in the portfolios expressed the interns' sense of membership in a community of teachers.

Several interns responded positively to the benefits of the modeling of reflective and dialogical processes by the researchers. This research corroborated the research of John Loughran (1994) on the importance of teacher modeling of reflection as an integral part of a teacher preparation program. Other interns commented on the positive effect of being asked to
participate in this case study and in becoming part of an action research community.

Effects on the researchers. This case study reinforced the researchers' commitment to providing an environment that facilitates the assessment of effective teaching and the internalization of the process of relating being, knowing, seeing and doing. The interaction between the researchers and the seminar process became part of a change in the way they interacted with the learning agenda in their other courses. It also mirrored the researchers' own process of continually reflecting on and reconstructing their identity as teachers.

An important part of the study was the changes in the researchers' perceived role as teacher educators, facilitating rather than directing student learning. Deciding to conduct a case study with a research agenda disciplined the researchers to take the time to reflect on a regular basis and in a collegial manner about the effects of their own practice on their students.

Three years earlier, the researchers had had the opportunity to co-facilitate the internship seminar. That process enabled the researchers to watch each other in the teaching act, giving them the same experience that they subsequently provided for their students in seminar. That experience is one of listening to one's colleagues, watching their interactions with students, discussing with them their choices and decisions about teaching and helping them to solve problems as they arise in the course of teaching.

The shared seminar provided the researchers with a prototype for the model of behavior they desired for the seminar participants. It was also the basis for this case study which has enabled the researchers to continue their construction of a framework for reflection and growth in their students as well as in themselves. It provided an opportunity for assessing the effectiveness of helping preservice teachers and teacher educators internalize the interconnectedness of believing, knowing, seeing and doing.

References


