Preservice Teachers as Researchers: Using Ethnographic Tools To Interpret Practice.

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*Preservice Teachers; *Reflective Practice

The structures of meaning preservice teachers perceived and interpreted as a result of field placements in a methods course and through the use of ethnographic tools were studied in an ethnographic design. The study involved 11 preservice teachers. It described how they shaped each other's thinking about teaching and it examined how ethnographic tools enabled these students to rethink the act of teaching for themselves and reflectively interpret and construct meaning about their observations and teaching. Teachers were organized into four dyads and one triad for field placements in elementary school classrooms. The participants took observational fieldnotes and constructed an interpretive ethnographic analysis of perceptual and pedagogical considerations using the interpretive process defined by N. K. Denzin (1989). Results made it apparent that learning ethnographic work through constructivist processes enabled these preservice teachers to develop reflectively and pedagogically. The methodology assisted these teachers in exploring classroom settings. Four of the five groups moved beyond previously established perceptual boundaries to make sense of the complexities they interpreted in field settings. These results demonstrate that teacher educators can use ethnographic methodology to assist preservice teachers to develop reflectivity and to become teacher-researchers. (Contains 81 references.) (SLD)
Preservice Teachers As Researchers:
Using Ethnographic Tools to Interpret Practice

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Preservice Teachers-As-Researchers:
Using Ethnographic Tools to Interpret Practice

Introduction

The sixteen years that preservice teachers spend as students in the United States' educational system greatly influence their perceptions of the act of teaching as they observe in field experiences (Lortie, 1975; Goodlad, 1990). Moreover, their perceptions lead them to settle for reenactment of past methods and strategies as they take on the mantle from cooperating teachers in field experiences (Goodlad, 1990). Preservice teachers' prior educational experiences seem to create perceptual filters which have more influence on how they judge and compare pedagogy than do the principles taught in teacher education programs (Lanier & Little, 1986). Therefore, preservice teachers tend to resist and reject innovative teaching practices presented in teacher preparation programs and observed during field experiences unless the practices are congruent with their interpretations of past pedagogy (Calderhead & Robson, 1991; McDaniel, 1991). However, perceptions based upon past experiences are not the only important factor influencing preservice teachers' views of the act of teaching.

Researchers suggest that certain kinds of experiences do have lasting consequences on future teachers (Joyce, Yarger, & Howey, 1977). Hollingsworth (1989) found that five of fourteen preservice teachers modified prior beliefs and made conceptual changes when cooperating teachers encouraged them to confront the meaning of past perceptions. Another feature of teacher preparation programs that appears to encourage preservice teachers to rethink and reconstruct past perceptions regarding teaching is that of "critical reflectivity upon action" within field experiences (Adler, 1994;
Duckworth, 1986; Knowles, Cole, & Presswood, 1994; Schon, 1987). Observing and reflecting on the act of teaching appears to promote the questioning of some previously drawn conclusions or generalizations (Knowles, Cole, & Presswood, 1994).

Because teaching, in large part, is about perceiving, interpreting, and making meaning about circumstances in the classroom, support for the idea of "teacher-as-researcher" is found throughout educational research (Cochran-Smith & Lytle, 1990; Patterson, Stansell, & Lee, 1990; Patterson, Santa, Short, & Smith, 1993). If teaching is thought of as an investigative act, commitment for change toward improvement is inherent (Mathison, 1994). The "teacher-as-researcher" tradition often is based on an ethnographic research paradigm in which researchers attempt to generate rich substantive information about a particular context. As applied by teacher-researchers, ethnographic research has the capacity to uncover phenomena that can lead to instructional improvement in classrooms where the research has been conducted. Helping the preservice teacher to become a reflective inquirer, in essence a researcher in training, is a relatively new approach to educational research (Knowles, Cole, & Presswood, 1994). Ethnographic tools used to assist development, increase understanding, and gather specific information from classroom inquiry enables preservice teachers to answer the question, "What is going on here?" (Gitlin & Teitlebaum, 1983; Knowles, Cole, & Presswood, 1994).

Black and Ammon (1992), Brooks and Brooks (1993) and Brown, Collins, and Duguid (1989) support the conception that when learners engage in the act of analyzing events within a contextual environment they actively come to know. A constructivist process of learning provides various opportunities for learners to explore phenomena and make conjectures in order to revise their prior constructions of
knowledge (O'Neil, 1992). Constructivist learning theory is consonant with the teacher-as-researcher model. Constructivist learning is based on a view that conceptual understandings are achieved through one's relevant, sensory life experience in context rather than from discrete facts passively received from another (Black and Ammon, 1992). Knowledge is constructed through a systematic cognitive process whereby information is interpreted conceptually from interaction in situated contexts. Social and cultural mores abet knowledge construction. A conceptual picture is painted, new colors interacting and interfacing with colors in place, and patterns become manifest on the conceptual canvas. Contextual interaction and sensory perception interface with existing knowledge construction. This is key to conceptual learning (Brown, Collins, and Duguid, 1989; Eisner, 1991). This theory is closely related to the action of digging below the surface to uncover the enigmatic aspects within the lived experience of the classroom. The examination of perceptions, interpretations, and meaning-making in particular contexts which are essential characteristics of ethnographic methodologies (Eisner, 1991).

Logically, preservice teachers who are exposed to preparation programs featuring both constructivist and ethnographic perspectives are likely to have their perceptions of the teaching act influenced as a consequence of their exposure to these perspectives (Henderson & Hawthorne, 1995). Exploration within the complexities of field placement classrooms while using ethnographic tools to assist development, increase understanding, and gather specific information from inquiry, enables preservice teachers to answer the question, "What
is going on here?” (Gitlin & Teitlebaum, 1983; Knowles, Cole, & Presswood, 1994).

The purpose of this study was to analyze the structures of meaning preservice teachers perceived and interpreted as a result of field placements in a methods course and through the use of ethnographic tools. From the data, an analysis of perceptual and pedagogical considerations was made. An answer to this question was sought: How do preservice teachers perceive, interpret, and make meaning about observations connected with teaching in elementary field placements while enrolled in a methods course that was designed to promote the development of reflective and ethnographic research skills?

Methodology

This study was guided by an ethnographic design. The inquirer sought to capture the preservice teacher's voices, emotions, actions, and perceptions through an interpretive, ideographic, narrative account. The account interprets a slice of eleven preservice teachers' lived experienced while in a field placement connected to the course. It describes how all participants mutually shaped one another's' thinking and perceptions about the act of teaching. This study examines how ethnographic tools enabled eleven preservice teachers to rethink the act of teaching for themselves and reflectively interpret and construct meaning about their observations and teaching.

Preservice teachers were organized in dyads, and one group was in a triad for field placements in elementary classrooms. Each preservice teacher chose her own field placement based on her personal schedule and grade level preference.
Following rudimentary instruction and practice guided by Spradley's (1980) ethnographic matrix to focus observations, the preservice teachers took directed and focused observational fieldnotes from their participation in the methods class and interactions in field settings. From the data generated (ten journal entries consisting of at least two pages, a collaboratively written ethnography of preservice teacher interpretations about their field placement and an individually written reflection on the take-home course final exam), an interpretive ethnographic analysis (Denzin, 1989) of perceptual and pedagogical considerations was made. The inquirer's fieldnotes consisted of interviews with inservice cooperating teachers and her own perceptions about field observations.

To interpret the data set, Denzin's (1989b) interpretive process was applied. There are six phases of Denzin's (1989b) interpretive process:

1. framing the question of study;
2. deconstruction of existing theoretical literature;
3. capturing the historical aspects of the study;
4. bracketing the salient structures of meaning that emerge from the data under study;
5. construction of the bracketed elements into a coherent whole; and
6. contextualization, the chapter in which the reconstructed elements that were bracketed and constructed from the data set are interpreted and reviewed to illuminate and document outcomes, establish transferability and make recommendations.
Strategies to protect the authenticity and trustworthiness of the data were implemented throughout the course of this study (Lincoln & Guba, 1985; Merriam, 1988). Triangulation, the support of multiple sources confirming data analysis, was applied (Lincoln & Guba, 1985). The preservice teachers' fieldnotes, ethnographies, and final evaluations, follow-up interviews with some preservice teachers, cooperating teachers' written final evaluations for each preservice teacher, follow-up interviews with cooperating teachers, and the inquirer's data from campus-based course work and the observations of preservice teacher instruction in each field placement classroom served together as data for triangulation. The narrative account was proofread by participants in the study. A peer debriefer assisted. An audit trail was organized and myriad records of raw data are retained.

Bracketing of Essential Elements

Essential structures of meaning found in the narrative ethnographic accounts written and identified by the eleven preservice teacher participants served as bracketed elements. Their personal experiences documented in fieldnotes and more closely examined in their collaboratively written ethnographies served as dominant data sources for bracketing (Denzin, 1989a; Husserl, 1913 [1962]).

Collaboratively-written ethnographic accounts about the preservice teachers' field placements from individually taken fieldnotes, and their reflection about their field experiences within the context of a question, one out of twenty-five questions, on a final take-home final exam were the primary data sources analyzed. The question on the final read, "How has keeping fieldnotes and writing an ethnographic work about your field experience assisted or hindered your professional
Distinctive units of meaning repeatedly emerged in their fieldnotes and ethnographic accounts (Lincoln & Guba, 1985). Key elements also resurfaced in the reflective answers to the question on the final exam. These key phrases revealed comparable essential episodes. However, the five ethnographic accounts were the greater source where key features were manifest. The preservice teachers' articulated features that systematically arose were as follows (Denzin, 1989b):

- Descriptions of the preservice teachers' unique classroom settings;
- Their described entries into the elementary school settings;
- Their observations and analyses about their cooperating teacher behaviors, the student activities, and student behaviors within those settings;
- Observations and reflective analyses made about their experience of planning and teaching in the field settings; and
- Their reflective perceptions, interpretations, and constructed meaning about their participant observation experience in elementary classroom settings.

Essential features, the bracketed elements, which emanated from the data set and each group's perceptions are documented and organized in the following figures:
### Bracketing of Essential Elements  Dyad #1

<table>
<thead>
<tr>
<th>Setting</th>
<th>interdisciplinary curriculum approval; described placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry</td>
<td>discussion of arrangements before entry; discussed perceptions of &quot;bracketed roles&quot;</td>
</tr>
<tr>
<td>Observations &amp; Analysis About Coop &amp; Student Behaviors</td>
<td>qualified value judgments had descriptive language to describe teacher behaviors; reported observations about teacher behaviors</td>
</tr>
<tr>
<td>Observations &amp; Analyses About Preservice Teacher Planning and Teaching</td>
<td>focused on student behaviors; organization; planning, teaching</td>
</tr>
<tr>
<td>Reflective Perceptions, Interpretations, and Meaning Constructed</td>
<td>individually reflected; 1) learned about Kidsnet; teaching strategies; value of fieldnotes; gave confidence 2) assumptions can be wrong; things are not always as they seem; plan for &quot;older students&quot;; preparation for student teaching</td>
</tr>
<tr>
<td>Setting</td>
<td>concern about science being taught rather than social studies; students work in groups; described meeting coop at mutual friend's house and discussing arrangements</td>
</tr>
<tr>
<td>---</td>
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</tr>
<tr>
<td>Entry</td>
<td>initially found interdisciplinary curriculum problematic; secure with rapport;</td>
</tr>
<tr>
<td>Observations &amp; Analysis About Coop &amp; Student Behaviors</td>
<td>noticed varied instructional strategies; T &amp; S selective verbatim in fieldnotes but none in ethnography; noted teacher behaviors without analysis</td>
</tr>
<tr>
<td>Observations &amp; Analyses About Preservice Teacher Planning and Teaching</td>
<td>when planning isn't thorough, adapt; incorporating science, math, and social studies into enjoyable curriculum</td>
</tr>
<tr>
<td>Reflective Perceptions, Interpretations, and Meaning Constructed</td>
<td>planning was tough but taking ideas to incorporate into all subjects; noted reflectivity, fieldnotes, and observational skills</td>
</tr>
</tbody>
</table>
# Bracketing of Essential Elements  
## Dyad #3

<table>
<thead>
<tr>
<th>Setting</th>
<th>thickly described the physical setting; physical set up easily imaged</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entry</td>
<td>perceived excellent rapport, communication, and ability to ask questions; however, no pre-entry arrangements noted; &quot;As we entered the room, three-fourths of the students were out of their seats.&quot;</td>
</tr>
<tr>
<td>Observations &amp; Analysis About Coop &amp; Student Behaviors</td>
<td>commented on both student and teacher behaviors but more focused on teacher, student behaviors were mostly management related; one member &quot;couldn't deal with the set up;&quot; other member saw teacher as &quot;laid back&quot; and &quot;working well for her.&quot;</td>
</tr>
<tr>
<td>Observations &amp; Analyses About Preservice Teacher Planning and Teaching</td>
<td>needed more time for lessons; some management problems; lesson &quot;went well,&quot;</td>
</tr>
<tr>
<td>Reflective Perceptions, Interpretations, and Meaning Constructed</td>
<td>one member - what she would do differently, classroom needed more control, disappointed about so little time actually using Kidsnet; other member - &quot;treated student with respect and earned respect, never raised her voice or seemed mad or upset.&quot; learned from teaching styles and management</td>
</tr>
<tr>
<td>Setting</td>
<td>Hidden curriculum noticed; relaxed environment; (mapped room in fieldnotes, not in ethnography)</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Entry</td>
<td>perceived rapport with coop; described signing in at office; relaxed, students could talk, take off shoes</td>
</tr>
<tr>
<td>Observations &amp; Analysis About Coop &amp; Student Behaviors</td>
<td>Concentrated on student behavior</td>
</tr>
<tr>
<td>Observations &amp; Analyses About Preservice Teacher Planning and Teaching</td>
<td>judged lesson to have gone well; noted what they should have done differently; aware of prior knowledge necessary for students</td>
</tr>
<tr>
<td>Reflective Perceptions, Interpretations, and Meaning Constructed</td>
<td>&quot;Top ten insights&quot;</td>
</tr>
</tbody>
</table>

**Dyad #4's Insights**

1. We learned the importance of flexibility in classroom management.
2. We learned the importance of knowing your students for efficient, strategic grouping.
3. Always plan more! It is better to be over prepared than to be under prepared and not having enough to keep the students actively engaged.
4. Be specific in instructions. Choose your words carefully.
5. We learned the importance of flexible lesson planning. Be prepared to modify a lesson if it suits the needs of your students.
6. Be certain to plan appropriate activities to get and maintain attention of students.
7. We learned important teacher research skills such as observation, fieldnotes and ethnographic accounts.
8. Activities are more effective when they are multisensory.
9. We learned how to expand on a single topic or idea to integrate each content area.
10. We learned the importance of working collaboratively with colleagues.
"***Don't reinvent teaching. If something works, use it!"
## Bracketing of Essential Elements

<table>
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<th>Setting</th>
<th>expected setting to be structured but found out differently; thickly described physical space; map of physical space and photograph</th>
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<tr>
<td>Entry</td>
<td>group apprehension; excited about early childhood placement; contact initiated with coop prior to entry; became more comfortable as time passed</td>
</tr>
<tr>
<td>Observations &amp; Analysis About Coop &amp; Student Behaviors</td>
<td>focused more on teacher behaviors; used selective verbatim; student realizations - things are not as they seem</td>
</tr>
<tr>
<td>Observations &amp; Analyses About Preservice Teacher Planning and Teaching</td>
<td>planning and research as essential; lessons &quot;flowed nicely&quot; taught 3 lessons</td>
</tr>
<tr>
<td>Reflective Perceptions, Interpretations, and Meaning Constructed</td>
<td>background knowledge on topic necessary for teacher; learned teaching strategies; positive experience team teaching; reflection, reporting, listening, and discussing pedagogy with colleagues; learned from &quot;organizing thoughts out loud; learned from colleagues; cannot assume anything; working knowledge of teaching</td>
</tr>
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Clearly, ethnographic tools appeared to help these eleven preservice teachers in this study to challenge existing perceptions and to consider changes in prevailing patterns. Through this type of intervention preservice teachers' perceptions about teaching could be changed, and the cycle of reproduction and perpetuation of traditional pedagogy possibly could be broken. Ideally, this approach would help preservice teachers to go beyond simply modeling what they observe and rethink the act of teaching. Therefore, it is imperative to have more information about how ethnographic tools can best be deployed for preservice teachers in field experiences in order to prepare reflective teachers.

Contextualization and Description of Findings

It was apparent that learning to do ethnographic work through constructivist processes enabled eleven preservice teacher participants to develop reflectively and pedagogically. Because they were immersed into a methods course culture where ethnographic assumptions were enacted, modeled, and practiced, they learned to do ethnography, and they not only accomplished it, they tailored and particularized their narratives. Moreover, these preservice teacher-researchers reaped the benefit of educational opportunities in elementary classrooms where they could apply ethnographic methodology learned through a constructivist model, as they concurrently developed instructional strategies around curricular content and then reflectively analyzed it.

The teacher-as-researcher paradigm is inquiry accomplished through an act of reflection upon intentional observations. Fundamental to teacher-as-researcher inquiry is the generation of rich substantive descriptions about the classroom setting (Cochran-Smith &
Lytle, 1990; Cruickshank, Bainer, & Metcalf, 1995; Eisner, 1991; Hollingsworth, 1994; Patterson, Santa, Short & Smith, 1993; Patterson, Stansell, & Lee, 1990). During the investigative act of gathering data, some groups of preservice teachers studied were more astute at generating richly descriptive accounts than others. A broad variance occurred in the ethnographic approaches used to analyze their data and uncover and report the patterns they discerned. Even though, (1) every group had prior working knowledge of Spradley's (1980) matrix for data gathering, and (2) Stringer's (1996) elements to report ethnographic accounts, four of the groups applied different methodologies to report patterns and analyses derived from the data. Only one group, Dyad #2, adopted Stringer's elements as a means to report the data observed in the field setting.

Dyad #1 developed their own archetype for reporting the patterns that emerged from their data. Dyad #1 appeared not only to cast out a large net in which to catch data, but created four compartments in the net as they sorted and analyzed their catch (McConaghy, 1986; Patterson, Stansell & Lee, 1990). They employed their variation of Denzin's (1989b) framework for interpreting ethnographic data. Amazingly, they had no knowledge about bracketing elements; this was solely an intuitively designed framework for their written account based on roles they played as observers, analysts, assistants and teachers.

Furthermore, Dyad #2 used an ethnographic reporting framework borrowed and modified from Stringer's (in press) work. This was the construct I recommended to assist them in writing their ethnographies. Yet, Dyad #2 modified the content of each heading on their own, making
it work for them. The construct they used were the bracketed elements of focus, entry, information, recording, analysis, and products (Denzin, 1989b; Stringer, 1996).

Dyad #3 reported their data chronologically while also using Spradley's (1980) data gathering matrix. This was another totally different approach to reporting data and analyses. Additionally, creating a unique modification to Spradley's (1980) matrix, each member of Dyad #3 personally interpreted and evaluated the field experience on the final two pages of their ethnography. One member evaluated the experience as positive, and the other showed her dissatisfaction when she wrote, "I wish we could have been more actively involved with the students from the beginning. I don't feel that my expectations matched my experience." Much of their raw data collected in fieldnotes were never interpreted in the ethnographic account.

Dyad #4 began their ethnographic report with a historical background of the study. Next, they continued in a narrative style that they entitled, "Biography." Their distinctive variation, adapted to report, summarize, and analyze their data, concluded with an epilogue of "insights" on the final page of their ethnographic account.

The Triad also developed an unprecedented methodology for reporting. Their ethnography read like story, beginning, "Once upon a time, at Texas A&M University..." As they interpreted their entry into the field setting, the physical setting, the cooperating teacher and student behaviors, as well as their own teaching, they summarized and interpreted their collective experience. Then, as they continued reporting, they applied a rubric that also differed from Spradley's
They, like Dyad #1, employed a Denzin-like (1989b) framework of bracketing key elements, again without having any prior knowledge about it. Researching the unit topic, reporting, planning, and the history of the setting and students were the four essential elements emerging from their data. These elements served as the framework for their ethnographic narrative about what they learned from the process of analyzing and summarizing the data.

Ethnographic methodology assisted these eleven preservice teachers to systematically explore classroom settings and transactionally come to know as predicted by Eisner (1991), Gitlin and Teitlebaum (1983) Henderson and Hawthorne (1995), Stringer (1996), and van Manen (1990). It enabled four of the five group members to move beyond their previously established perceptual boundaries to make new sense out of the complexities they interpreted in field settings (Adler, 1995).

Implications

The implications of this study contribute to the knowledge base about factors that influence preservice teacher perceptions about teaching, namely ethnographic tools which assist in systematic interpretation about field-based practice while enrolled in a teacher education program. If teaching is reconceptualized as an investigative act by preservice teachers, then a commitment to change traditional practice will be enacted by them as they become newly certified inservice teacher-researchers. Considering these several reports from preservice teachers, it appears that teacher educators can use ethnographic methodology to assist preservice teachers to develop reflectivity and to become teacher-researchers who are continually in search of effective instructional practice within elementary learning environments. Furthermore, if ethnographic methodology was used as a strategy for these
eleven as they became student teachers, their growth as evidenced by this short practicum might well be further nurtured. Most of the preservice teachers emerged from this experience, in differing degrees, determined not to simply reenact what they had learned from past educational experiences. But rather, through engaging in reflective, ethnographic processes, these preservice teachers were forced to let go of their stereotypes, develop an openness toward alternative and innovative instructional practice and begin to value ethnographic means to record observations in classrooms.

Because they entered into an ethnographic process, they had an ethnographic outcome, which appeared to enable them to become preservice teacher researchers committed to continuous research for better understood and effective curriculum and instruction. Reconstructed knowledge about the act of teaching emerged from a forum that promoted collaboration, dialectics, and reflection. These eleven have tools to be the inservice ethnographic teacher-researchers of tomorrow.

If preservice teachers are to become more open to new ideas and strategies, they must recognize their stereotyped perceptions of what teaching ought to be. If that step is completed successfully, then it is essential for them to confront and rethink their past educational experiences reflectively (Adler & Goodman, 1986; Britzman, 1986; Henderson & Hawthorne, 1995). Additionally, they must learn to use tools to guide their observations and to extract data from field settings.

This work illuminated initial perceptions held by eleven preservice teachers and detailed how their cognitive operations interpreted and reconceptualized elementary classroom phenomena. Indeed, as faculty in teacher education programs rethink and revise pedagogical purpose and programs, a constructivist and ethnographic
methodology should be strongly considered, rather than a traditional
teacher-centered model built upon transmission of knowledge.

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