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Institutional Constraints and Role Expectations:
Perspectives on field experiences in an on-site teacher education program

Abstract

This paper presents results from a study of the interactions between student teachers and significant others within the context of an "On-site Teacher Education Program." The focus was on those identified as significant others by student teachers, how these participants viewed their roles, and the institutional constraints which influenced their interactions. Two key themes emerged from the data. One was the notion of multiple players influencing student teachers. While our data support the literature which suggests the cooperating teacher plays a significant role, they also highlighted that other participants (notably counsellors and other students) have an important influence. Another emerging theme was the notion of the multiplicity of factors which influence field experiences. The data suggest that institutional constraints and role expectations are important dimensions of field experiences for all participants. However, other factors, such as "teacher role identity" in terms of student teachers' preconceived notions of teaching and on-site advisors' notions of their role in the professional development of novices, warrant further investigation.

Résumé

Les auteurs de cet article présentent les résultats d'une étude sur les interactions entre élèves-maîtres et personnages-clés dans le cadre d'un programme de formation des maîtres en cours d'emploi. L'analyse porte essentiellement sur les personnages-clés tels que perçus par les élèves-maîtres, sur la façon dont ils percevaient leur rôle et sur les contraintes institutionnelles qui ont influé sur leurs interactions. Deux thèmes importants se dégagent des données. L'une est la notion de protagonistes multiples qui influent sur les élèves-maîtres. Alors que nos données corroborent la documentation qui donne à entendre que l'enseignant associé joue un rôle important, elles font également valoir que d'autres participants (notamment les conseillers et d'autres étudiants) jouent eux aussi un rôle important. L'autre thème qui se

dégage est la notion de multiplicité des facteurs qui influent sur les expériences vécues. Les données portent à croire que les contraintes institutionnelles et les attentes de rôle sont des paramètres importants des expériences vécues par tous les participants. Toutefois, d'autres facteurs comme "l'identité du rôle de l'enseignant" en termes des idées préconçues des élèves-maîtres sur l'enseignement et des notions des conseillers sur leur rôle dans le perfectionnement professionnel des novices, méritent une étude plus fouillée.

Griffin (1989) stated that there are a number of reasons for studying the student teaching practicum. One reason is its perceived importance for teachers. He noted that "when recalling their education programs, teachers generally acknowledge that student teaching was the most valuable component" (p. 344). This point is also highlighted by Goodman (1985) who stated, "[t]here seems to be an almost universal assumption among both educators and students that field experience is the most crucial aspect of teacher preparation" (p. 26). MacKinnon (1989) makes a similar point in his statement: ". . . the field experience component of preservice preparation continues to enjoy the support of virtually all stakeholder groups. Indeed, it is most commonly identified as an indispensable element of professional preparation" (p. 2).

Yet, despite the perception that field experiences are the most beneficial aspect of preservice teacher education programs, and despite numerous accounts describing particular field experience arrangements, there is a dearth of research which systematically documents what happens during student teaching. Goodman (1985) argued that systematic examination of student teaching experiences is essential: ". . . reviews of the literature in this field conclude almost unanimously that serious study of practicum experiences which illuminates what occurs during the process itself is desperately needed" (p. 25).

The need to examine field experiences more systematically has also been highlighted by Zeichner (1984) who stated that results of field experience research are often contradictory and ambiguous. He noted while several studies have documented the development of student teachers under particular circumstances, much of the research has failed to ". . . attend to the complex, dynamic, and multidimensional nature of settings and people, individually and in interaction . . ." (p. 3). As a result, our knowledge-base related to the influence of field experience on preservice teacher development is limited. He argued that in order to expand our insights regarding theory and practice, we need to restructure the dominant research paradigm in this area. That is, we need to move away from descriptions of individual features of field experiences, and move towards more comprehensive examinations of the interactions among participants, social contexts, and programs. In particular, he recommended that researchers need to focus on the "ecology of field experiences", rather than continue to focus on what he referred to as "isolated bits of this ecology" (p. 26).

Other researchers (e.g., Feiman-Nemser & Buchman, 1987; Goodman, 1986; Olson & Carter, 1989; Zeichner & Liston, 1987) have also suggested that we need to expand our focus beyond the dyadic relationship of student teacher and cooperating teacher if we hope to understand the complex nature of field experiences. They have argued that we need to reconsider the apprenticeship model which has traditionally dominated field experiences. The assumption underlying this model is that teaching is learned best by observing experienced teachers and working with them in a master-apprentice relation. Within this framework, the cooperating teacher is seen as the most important socializing agent; the student teacher is expected to "fit into" practices found in the cooperating teacher's classroom; and the university supervisor is relegated to a peripheral role, in the sense that s/he is not directly involved in the dyadic relationship between master and apprentice.

Alternative approaches to field experiences, which support redefinitions of the roles of participants and a greater attention to the social contexts in which these interactions occur, have been initiated in response to calls for new models of field experiences. According to these approaches (e.g., Boydell, 1986; Feiman-Nemser & Buchman, 1987; Goodman, 1988b; Zeichner & Liston, 1987), the cooperating teacher is seen as a coach rather than a master; the student teacher is encouraged to reflect on curriculum decision-making or experiment with instructional strategies; and the university supervisor is regarded as an equal partner in the reflection-action process examining theory and practice.

Support for such alternative approaches to field experiences comes from researchers such as Goodman (1988a) who noted "although most preservice teachers' approach to learning to teach seems relatively passive, the socialization research also identifies a few student teachers who do not take traditional education for granted, but thoughtfully inquire into the merits of various teaching strategies, learning theories, and instructional resources" (p. 24). He argues that further research is needed on innovation programs to identify the institutional and individual factors which contribute to differential socialization experiences for student teachers.

The purpose of this paper is to present results from a preliminary study of the interactions between student teachers and significant others within the context of an "On-site Teacher Education Program." The results presented are preliminary in that they are based on research which is still in progress. Thus, data are discussed as emerging trends which warrant further investigation rather than as definitive findings. In particular, focus is on who were significant others for student teachers, how the participants viewed their roles, and the institutional constraints which influenced their interactions. Where feasible, questions which warrant further investigation in subsequent stages of the research will be raised.

Context of the Study

The "On-site Teacher Education Program" was developed by members of a university faculty of education in consultation with personnel in area school boards to address the assumption that teaching is best learned by observing experienced teachers and working with them in a master-apprenticeship relationship. This program operates as one option given to student teachers in the primary-junior section of the teacher education program. The program is set up so that student teachers are placed in the field for much of their preservice education time. Student teachers are matched with teachers in the field who act as the students' on-site advisors. The matching of students in the program initially is based on travel access and to some extent on the type of setting, be it a primary or a junior placement or within a Catholic or public school board. During the school year the student teachers spend an average of two or three days per week in their on-site advisor's classroom. The on-site advisor's responsibility is to guide the student teacher through all aspects of the program particularly with regard to pedagogy and curriculum studies.

The on-site advisor's role is innovative in that it is an extension of the traditional cooperating teacher's role as it includes mentoring, coaching, advising, and critiquing, and it can involve evaluating. The interaction between the student teacher and the on-site advisor is viewed as an evolving relationship since the student teacher remains in a professional relationship with this advisor for the duration of the eight-month program.

To facilitate the needed interaction with other student teachers, the students are brought together in counselling groups, consisting of approximately eleven students. Each group has a counsellor who meets with the students to discuss educational issues and to share ideas and concerns. The counsellor's role, while similar to the university supervisor, also differs from traditional notions of the faculty supervisor whose main task is supervision of students in the field.

The counsellors are involved in both fieldwork and coursework in the sense that they meet regularly with student teachers to discuss theoretical and practical issues. They organize group counselling sessions, monitor independent reading and research projects, teach the foundations and politics seminars, organize opportunities for reflection through discussion and journal writing, and visit students and on-site advisors in the field.

Students in this program are given survey courses in the area of pedagogy and curriculum. Several courses and topics which make up the regular course requirement of the preservice program are grouped into minicourses which are taught by content specialists. The content covered in these sessions is expected to be reinforced by the on-site advisor and discussed within the counselling group.

Methodology

Several data collection procedures including a survey, focus-group interviews, and individual interviews were used in this research. As the on-site program is a pilot it seems appropriate to use a design where the emphasis is on discovery rather than on testing and refining specific hypotheses (see Everhart, 1988). In addition, we are interested in exploring field experiences from the perspective of the various participants - what is typically referred to as focusing on "multiple constructed realities" (Lincoln & Guba, 1985). That is, we are interested in understanding how various participants view their roles within field experiences and the factors they see as contributing to and/or limiting their interactions.

Survey

All on-site students in the primary-junior concentration of the teacher education program in this study were administered a questionnaire. Students were asked to select from a list those individuals who had influenced their development as a teacher during the year. The list included the following categories: fellow student, principal, on-site advisor/associate teacher, other teacher, professor, counsellor, relative, friend. Students could also add additional categories to this list. The questionnaire had space for six individuals although students were advised they could use as many spaces as they needed. In addition to identifying these individuals, students were asked to explain why and how these individuals had influenced them. In total, 21-completed questionnaires (of a possible 27) were returned to the researchers and analyzed.

Focus-group interviews

A focus-group interview was conducted with a small group of students enrolled in the on-site program ($n=7$) in late April 1990. The purpose of this interview was to obtain information about the student teachers' perceptions of their interactions with on-site advisors/associate teachers. Through a series of open-ended questions, the students were asked to talk about their classroom experiences, focusing in particular on what they felt were the important factors which contributed to or limited the development of their professional relationships.

Individual interviews

Individual interviews were conducted in early April 1990 with selected individuals representing various categories of participants in the on-site program (e.g., on-site advisors, counsellors, and faculty). Through a series of open-ended questions, participants were asked to discuss their roles and to

identify factors which limited or enhanced their interactions with student teachers. In total, seven participants were interviewed: two on-site advisors, two counsellors, and three faculty members.

Emerging Trends

Of the 21 student teachers who completed the survey, all but one (95.2%) cited the on-site advisor as a major influence, while the one holdout cited an associate teacher as a major influence. Similarly, the counsellor was very important for 95.2% of the students, and both the counselling group and friends were of importance to a relatively high percentage of the respondents. If this third group of friends and fellow students is considered as a whole, being all members of a peer group for the student teachers, the importance of the category becomes clearer - 90.5% of student teachers selected at least one individual from this group, and 47.6% selected at least two.

On-site advisors or associate teachers were most often cited as the primary influence for student teachers (57.1%). Counsellors were ranked as the top influence for 19% of all responses, while the peer group category accounted for the remaining 23.8% of all responses. When one includes all influences with rank 1 or rank 2, the pattern remains clear. The advisor is mentioned by 85.7% of all respondents; the counsellor is cited by 57.1% of the student teachers, and the peer group as a whole is valued by 38.1% of them.

In general, there were three main types of influence in the professional development of the would-be teacher, namely the advisors, the counsellors, and the peer group. These three groups together formed a triad of influence on student-teacher formation. In order to understand why these individuals were so important, the reasons given by the student teachers for the value of each of the relationships were analyzed. The 130 reasons given for the value of the 76 individuals cited in these categories were grouped into four sets: support, practical assistance, theory, and professional attitude.

The comments that were considered supportive included descriptions such as "was available for help when I needed it", and "gave me feedback on my teaching techniques". The practical assistance group consisted of comments such as "taught me techniques to use", and "helped me to organize". The comments considered to be theoretical included remarks such as "presented a clear view of higher education philosophy", and "presented subject matter from both theoretical and practical standpoint". The professional attitude set of comments included remarks such as "was a good role model for me", and "taught me the importance of firm, caring leadership in the development of self-esteem of the children".

There are definite differences in the affinities between the student teachers and the three main groups of significant others, suggesting that these student teachers felt differently about the three categories of influence. Al-

though support was a critical component of all three relationships, the student teachers expected and received different things from their on-site advisors and associate teachers, from their counsellors, and from their fellow student teachers. The peers were valued mainly for the moral and emotional support they provided (86.7%), while only 36.7% were cited for practical help. The on-site advisors and counsellors were both valued for their practical assistance to the student teachers, almost two-thirds of the individuals from these groups being singled out for this type of assistance. A difference between the on-site advisors and associate teachers and the counsellors was noted in regards to their roles. The on-site advisors were valued for their professional attitude (44.4%), while the counsellors were appreciated for the theoretical framework which they provided (47.4%).

Boydell (1986), in her review of research examining factors influencing teaching practice, stated that many people are involved in the "coaching" and "legitimation" of student teachers during field experiences. Although our data suggest that student teachers perceived associate teachers/on-site advisors as the most powerful influences on their professional development, they acknowledged that other participants, notably counsellors and fellow students, also played a significant role. The fact that counsellors were so important to the student teachers is interesting, given recent calls to reconceptualize the role of the university supervisor. Boydell (1986) cites several researchers who argue that the supervisor's role should be expanded to include more of a collaborative, inquiry-based approach to working with teachers and students. Results from our survey data would appear to suggest that the role of counsellor is important in the professional development of student teachers.

Interview data

To ensure that the beliefs and orientations of participating student teachers, on-site advisors/associate teachers, counsellors, and faculty were reflected accurately in this presentation of results, we have supported our observations and conclusions with extensive verbatim comments and responses from subjects' interviews. All subjects have been assigned a pseudonym to ensure anonymity.

Institutional constraints

Several researchers (e.g., Goodman, 1988a, 1988b; MacKinnon, 1989) point out that institutional constraints may influence the extent to which participants are actively involved in field experiences. In his study of active, reflective preservice elementary teachers, Goodman (1988a) found that factors such as routinized curricula, which allowed little scope for innovation in instructional activities, and a focus on managerial aspects of instruction, rather than on content, limited student-teacher involvement in classroom activities.

Data from the individual and focus group interviews support the notion that institutional constraints influence involvement in field experiences, not just for student teachers, but also for faculty, on-site advisors, and counsellors. In particular, our data suggest that **time** was an important institutional constraint for faculty, on-site advisors, and counsellors. For the faculty, who taught mini-courses which ranged from 4 hours to 12 hours, there were few opportunities for contact with students or on-site advisors. All three faculty interviewed mentioned that they rarely saw students outside of class, that there was little chance for follow-up through assignments, and that time pressures to cover "the curriculum" limited their classroom interactions with students. Furthermore, they were often unclear about how their coursework related to fieldwork. Paul's comment was typical of other faculty members interviewed:

> I never once established contact with any of the on-site advisors
> and I found that frustrating because here I was teaching lesson
> plans and I didn't know what their expectations were. . . .

For the on-site advisors, time was also an important factor in the sense that they spent considerable time working with their student teachers. Both of the on-site advisors who were interviewed mentioned how much time it took to "do a good job." Amy, an on-site advisor, commented:

> I found a problem was that to do a proper job took a lot of hours
> of discussion. One of my suggestions is to have. . . some release
> time. . . so that it is not always prep time that is being used.

For counsellors, the time issue revolved around the amount and distribution of time. Student teachers commented that it was not the amount of time, but rather the quality of time spent with their on-site advisor/associate teacher which was important. As Lois commented: "My junior advisor gave a lot to time, but she was resentful of that."

It would appear from these comments that while **time** was an important dimension of field experiences for all participants in the on-site program, it affected them differently and was linked to other dimensions such as curriculum concerns and role expectations.

For student teachers the aspect of institutional constraints which appeared most relevant, centered around the social and political dimensions of teaching. For example, Tanya indicated that she felt constrained in how much she could do to challenge the system.

> . . . there is still so much discrimination going on in schools at so
> many levels. . . . There were a few incidences where I wanted to
> intervene and I was subtly advised not to. . . . I was put in such a

bind because my conscience was telling me to do one thing and then I was subtly directed in another direction.

It would appear from these comments that the students felt they had little power to challenge the status quo. Goodman (1988b) states that student teachers are frequently seen as passive beings who simply conform to existing practices. However, he and several other researchers (e.g., MacKinnon, 1989; Zeichner & Tabachnick, 1985) have argued that students can play an active role in shaping their own occupational identity. MacKinnon (1989) argues that conformity should not be regarded as passive acceptance of the status quo, but rather as a response to the perceived constraints of being a student teacher operating in someone else's classroom. Peter, a student teacher, makes a similar point in the following statement. "To a certain extent I went along to get along. . . . I didn't feel it was my place to disrupt the classroom, to change his [the on-site advisor's] way of doing things for that short period of time".

Nevertheless, despite being constrained by his situation, Peter felt he could still contribute to change.

I think I did make some incremental changes. I tried to move things along in the direction I would like to teach without being confrontational and with respect to the way that the on-site advisor does it. . . .

This point of contributing to change was also reiterated by Amanda, another student teacher. She commented that although initially she was hesitant to take a stand on issues related to injustice and prejudice because she didn't know how it would affect her evaluation, once she felt more comfortable with her on-site advisor, she started to take "small steps and challenge people in an intellectual way". Even Tanya, who felt limited in what she could do at the school level, also felt it was important to try to break down stereotypes. Interestingly, she felt more confident in challenging stereotypes in the class-room than she did in the schoolyard. "In the classroom, it was very easy to do because I was going to stand my ground. I took any opportunity given to challenge the views that I thought were discriminatory in any way." Perhaps this confidence was linked to a notion of empowerment within the classroom that was not available to her outside the classroom. It would appear from these comments that the whole notion of conformity/challenge needs further inves-tigation.

Role expectations

A second major theme to emerge from our interview data clustered around the issue of role expectations. Several dimensions of this theme were mentioned by participants. These included support and role clarification.

Support. Student teachers, on-site advisors, and counsellors mentioned that support was a key feature in their interactions with each other. For student teachers, this support was manifest in activities such as sharing resources, giving feedback about teaching techniques, and providing guidance about classroom management. They described their on-site advisors as teaching partners, mentors, and colleagues. Several students talked about a mutuality of support. For example, Donna reported: "We worked together. She offered me resources, ideas on how to present things; but she also gave me the liberty to take it further and to change my ideas, to teach alone."

Amy, an on-site advisor, also mentioned the mutuality of support. She described her student teacher as a "partner". "We discussed children's development and problems that we faced, and having each other as a sounding board. It was very positive."

Cathy, a counsellor, also commented on the reciprocal nature of her relationship with the student teachers. "Probably the students have gained a lot from my experience, . . . [And] I also feel I have learned a lot from them — their attitude, their fresh way of approaching teaching."

Although support was a factor which strengthened the relationship between student teacher and significant others, it is important, however, to point out that lack of support was occasionally a factor which contributed to difficulties. Amanda, a student teacher, described the following situation with an associate teacher. "I had another experience where the teacher was never there. I felt the reason I was there was so she could have two weeks holiday. It is obviously a compliment to me, but I didn't appreciate it".

Lois, another student teacher, felt that she was left alone too often without explicit support and guidance.

> . . . I was expected to take the manual and go my own way with
> no input from the on-site advisor at all. I asked for input. I said .
> . . it is not for me to 'hit and miss'. . . . I think this idea of freedom
> is wonderful but it should only go so far. . . . I said to my on-site
> advisor 'I am not here to borrow your classroom.'

It would appear from these comments that student teachers, on-site advisors, and counsellors felt that support was an important dimension of their interactions. However, expectations of support did not always match the reality.

Role clarification. There is considerable debate in the literature about the multi-dimensional nature of the cooperating teacher's role. Olson and Carter (1989) acknowledge that the role is indeed a complex one and includes

such dimensions as model, mentor, provider of feedback, and coach. Much of the debate about the cooperating teacher's role seems to revolve around the issue of modelling versus experimentation. Goodman (1988a) stated that: "Popular conceptions of good cooperating teachers usually emphasize the individual's teaching ability. That is, the best cooperating teachers are 'master' teachers who can demonstrate the 'way to do it'. . ." (p. 39).

He goes on to argue that

. . . if helping preservice teachers become more reflective and active is a worthwhile goal, then it is more important to find cooperating teachers who support an experimental approach to student teaching and who can facilitate an open exchange of ideas. (p. 39)

The issue of role clarification, particularly with regards to the role of the on-site advisor, is one which emerged from the interviews. Ben, a counsellor, stated that he thought an on-site advisor should be "someone who relates well to adults, is progressive in his educational method and operation and is a good role model as a teacher." He noted however, that it is difficult to define precisely what constitutes "a good role model". He also noted that the model of expert teacher may not be an appropriate one for preservice teachers who are not experts.

Fay, an on-site advisor, felt that her role was to "model good teaching". She explained: "We establish a modelling role. . . . This will be their first experience with children so how they teach will be how they model after us". However, she felt it was important for her student teacher to be exposed to a variety of different points of view. "I didn't just want her to have my point of view, so I would give her all the different points of view." She also encouraged her student to "see other approaches being used [in the school]. . . so that she could develop her own teaching style."

Both of the on-site advisors we interviewed highlighted the need for flexibility and communication. Amy stated that careful attention should be given to the selection and matching process.

If the student and the on-site advisor are not a good match, it could be a year of frustration for both parties. . . . I have heard of some cases this year where the criticism has been taken in the wrong way and there has been a certain amount of anxiety on the part of both the student and the teacher.

For the student teachers, role clarification, especially as it related to on-site advisors, was essential. Amanda, a student teacher, stated that on-site

advisors play a significant role in the professional development of student teachers. As she explained it, "on-site advisors should be at the top of the pile because we are dependent on them to help us become a rounded teacher". Mary, another student teacher, commented that her on-site advisor never appeared to be clear about her role. This lack of clarity, however, offered certain advantages to Mary.

> She [on-site advisor] was always asking my opinion, my advice about what should be next. So, I had full rein to do whatever I wanted because she was never quite sure what was appropriate or which direction to take.

Other students also mentioned that they were free to explore their own interests during field experiences. Mark stated that his teacher offered him complete freedom to do whatever he wanted. "I had a great time in my primary placement because I was in control for a lot of it. I ran the whole show."

Tim, another student teacher, also felt that he had considerable freedom. "In general, I think I went in with a pre-determined agenda. . . and I was fortunate enough to carry it through because my advisor allowed me so much liberty." Unfortunately, it was not possible to explore this notion of "a predetermined agenda" in the focus-group interview. However, several researchers (e.g., Calderhead, 1987; Weinstein, 1989) have suggested that student teachers' preconceived notions about teaching contribute significantly to the field experiences.

Several students talked about how their teaching styles were different from those of their on-site advisors. Tanya stated that her on-site advisor allowed her to pursue her own interests in the classroom. "I am a very affectionate person and she wasn't at all. It didn't bother her that I interacted that way, although she wouldn't want to pursue that aspect."

Amanda also commented on the fact that she and her on-site advisor had very different teaching styles. Like Tanya, she did not feel pressure to conform to his style. They were able to work out their differences. "We had personal teaching styles that were at opposite ends. . . He respected me and I respected him, but I wouldn't teach his way." It is not clear from the data how Amanda and her on-site advisor managed to resolve their differences. As Fay, an on-site advisor, noted there was considerable potential for conflict between student teacher and on-site advisor.

> I can see that people get into completely wrong matches where they [student teacher] were keen to try new things and they were

with really rigid teachers. And this [was] no fault of that teacher
because that is... how they felt successful over the past twenty years.
... If the role model isn't a good one or if the student model isn't...
then you have real problems.... You could... get a poor role model
and end up getting a student cloning more of what we don't want....

The data regarding role expectations would appear to suggest that
further research is needed to explore how the various participants define their
role. In addition, training programs for the participants – especially on-site
advisors – warrant further investigation. Olson and Carter (1989) argue that
training programs are needed to help cooperating teachers understand the
multiple realities of their role and to develop appropriate skills to deal with
these realities.

We also need to look more closely at the role of the counsellor in
contributing to the interactions between student and on-site advisor. Ben, one
of the counsellors, felt that he had an integral role to play in terms of coaching
the on-site advisors "in the appropriateness of their role or any actions which
I would see would be beneficial for the students."

Conclusion

The data from this research revealed a few emerging key themes which
warrant further investigation. One is the notion of multiple players influencing
student teachers. While our data support previous literature which suggests that
the cooperating teacher plays a significant role, they also highlight that other
participants (notably counsellors and other students) have an important influ-
ence.

Another emerging theme is the notion of the multiplicity of factors
which influence field experiences. The data suggest that institutional con-
straints and role expectations are important dimensions of field experiences for
all participants. However, other factors such as "teacher role identity" in terms
of student teachers' preconceived notions of teaching and on-site advisors'
notions of their role in the professional development of novices, warrant further
investigation. By monitoring how students and on-site advisors define and
redefine their roles over the term, how they resolve conflicts regarding different
interpretations of roles, and how they interact with others (e.g., counsellors and
other students) to clarify these roles, we will be able to understand more clearly
the complex ecology of field experiences.

REFERENCES

Boydell, D. (1986). Issues in teaching practice supervision research: A review of the literature. *Teaching and Teacher Education, 2*(2), 115-125.

Calderhead, J. (1987). Cognition and metacognition in teachers' professional development. ERIC Document Reproduction Service, ED 282844.

Everhart, R.B. (1988). Field work methodologies in educational administration. In N.J. Boyan, (ed.), *Handbook of research on educational administration*. New York: Longman.

Feiman-Nemser, S. & Buchmann, M. (1987). When is student teaching teacher education? *Teaching and Teacher Education, 3*(4), 255-273.

Goodman, J. (1988a). The political tactics and teaching strategies of reflective, active preservice teachers. *The Elementary School Journal, 89*(1), 23-41.

Goodman, J. (1988b). Constructing a practical philosophy of teaching: A study of preservice teachers' professional perspectives. *Teaching and Teacher Education, 4*(2), 121-137.

Goodman, J. (1986). Making early field experience meaningful: A critical approach. *Journal of Education for Teaching, 12*(2), 109-125.

Goodman, J. (1985). Field based experiences: A study of social control and student teachers' response to institutional constraints. *Journal of Education for Teaching, 11*(1), 26-49.

Griffin, G. (1989). A descriptive study of student teaching. *The Elementary School Journal, 89*(3), 343-364.

Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.

MacKinnon, J.D. (1989). Living with conformity in student teaching. *The Alberta Journal of Educational Research, 35*(1), 2-19.

Olson, P., & Carter, K. (1989). The capabilities of cooperating teachers in USA schools for communicating knowledge about teaching. *Journal of Education for Teaching, 15*(2), 113-131.

Weinstein, C. (1989). Teacher education students' preconceptions of teaching. *Journal of Teacher Education, 40*(2), 53-60.

Zeichner, K. (1984). The ecology of field experience: Toward an understanding of the role of field experiences in teacher development. ERIC Document Reproduction Service, ED 240 111.

Zeichner, K., & Liston, D. (1987). Teaching student teachers to reflect. *Harvard Educational Review, 57*(1), 23-48.

Zeichner, K., & Tabachnick, B. (1985). The development of teacher perspectives: Social strategies and institutional control in the socialization of beginning teachers. *Journal of Education for Teaching, 11* (1), 1-25.

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