

DOCUMENT RESUME

ED 305 355

SP 03i 054

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 TITLE A Longitudinal Assessment of the Affective Impact of Preservice Training on Prospective Teachers.
 PUB DATE Mar 89
 NOTE 17p.; Paper presented at the Annual Meeting of the American Educational Research Association (San Francisco, CA, March 27-31, 1989).
 PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
 DESCRIPTORS *Affective Behavior; Affective Measures; Anxiety; Higher Education; Individual Development; *Preservice Teacher Education; *Self Esteem; *Student Behavior; *Student Teacher Attitudes; *Student Teaching

ABSTRACT

This study sought to determine whether or not teacher training had a predictable impact upon the affective attributes of prospective teachers. Measures of anxiety, attitude, concerns, and confidence about teaching were administered to a sample of 153 prospective teachers before and after their student teaching experience. It was found that as these prospective teachers progressed through teacher training they became less concerned about their self-survival as a teacher but more aware of the complex demands of the teaching profession (task concerns), became less anxious about becoming teachers, and became more assured about the decision to become teachers. They maintained high and relatively stable scores related to their: (1) self-ratings of probable success as future teachers; (2) positive attitude about teaching as a career; and (3) concerns about their impact upon their future pupils. These findings were found to be generally predictable and consistent with theories of teacher development such as Fuller's stages of concerns model. (Author/JD)

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A Longitudinal Assessment of the Affective Impact of
Preservice Training on Prospective Teachers

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A paper presented at the annual meeting of the
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San Francisco

March 27-31, 1989

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Running Head: IMPACT PRESERVICE TRAINING

Abstract

This study was designed to determine whether or not teacher training, in accord with various models of teacher development, had a predictable impact upon the affective attributes of prospective teachers. Measures of anxiety, attitude, concerns, and confidence about teaching were administered to a sample of 153 prospective teachers upon commencement of training and again upon their completion of student teaching. It was found that as these prospective teachers progressed through teacher training they became less concerned about their self-survival as a teacher but more aware of the complex demands of the teaching profession (task concerns), became less anxious about becoming teachers, and became more assured about their decisions to become teachers. In addition, they maintained high and relatively stable scores related to their: a) self ratings of probable success as future teachers, b) positive attitude about teaching as a career, and c) concerns about their impact upon their future pupils. These findings were found to be generally predictable and consistent with theories of teacher development such as Fuller's stages of concerns model.

A Longitudinal Assessment of the Affective Impact of
Preservice Training on Prospective Teachers

Veenman (1984) noted a growing trend during the last couple decades toward viewing teacher training and the transition into teaching from more theoretical frameworks such as Fuller's (Fuller, 1969; Fuller & Bown, 1975) stages of concerns developmental model. Within the Fuller model, teacher training is characterized by intense concerns about survival (self concerns) as a student with little concern about teaching during early preservice training, followed by intense concerns of self-survival as a teacher as early teaching activities are experienced, and finally intense concerns related to the heavy situational demands (task concerns) of day-to-day teaching emerge near the completion of the preservice experience. This model also suggests that concerns about teachers' effect upon pupils (impact concerns) are not likely to be addressed during the preservice period as the immediate survival and task concerns demand all the attention and resources of the novice teacher. Also, within a developmental perspective, one might logically hypothesize that as the prospective teachers' knowledge and skills develop during preservice training their attitude anxiety levels, and confidence about teaching should become increasingly more positive (Merwin & DiVesta, 1959; Parsons, 1973).

Not all theorists, however, believe that significant change occurs during teacher training (Lortie, 1975), and findings from research of the impact of inservice training upon prospective teachers can be described as inconsistent at best. For example, Paschal and Treloar (1979) reported that inservice teachers' attitudes do become more humanistic and liberal in orientation but appeared to return to essentially the same as at the outset of teacher training by the third year of teaching; whereas other researchers have reported that prospective teachers develop a less positive attitude toward teaching as their preservice training progressed (Callahan, 1980; Lipka & Garlet, 1981). Similarly, Adams (1982) and Adams and Martray (1981) found that prospective teachers' concerns about teaching did change through preservice training and early inservice teaching although these changes were not entirely consistent with the Fuller developmental concerns model. In contrast, Silvernail and Costello (1983) reported that neither those students in a typical student teaching program nor those in an extended preservice internship experienced a substantial change in overall concerns about teaching. And, Pigge and Marso (1987) and Marso and Pigge (1989) identified changes in attitude and concerns about teaching in cross-sectional samples of prospective teachers during training and in cross-sectional samples of teachers during their first five years of actual teaching, but these researchers also reported that not all of the

identified changes in attitude and concerns about teaching were consistent with the developmental models of teacher evolution.

The major purpose of this study was to assess the changes, if any, in prospective teachers' attitude, concerns, anxiety, and confidence about teaching as they progressed through teacher training and secondarily to determine the extent to which any such changes are consistent with various theoretical models of teacher development such as Fuller's (1969) stages of concerns model. To statistically test the data collected for this study related to the general purposes described above, it was hypothesized that there would not be a significant average difference for each of the following measures which were administered to a sample of prospective teachers at the beginning and again upon the completion of their teacher training: a) concerns about teaching, b) attitude toward teaching as a career, c) anxiety about teaching, and d) confidence about teaching.

Method

The subjects of this investigation were composed of all students entering the teacher preparation program at Bowling Green State University during the calendar year 1985 who had completed their student teaching experience by the second semester of 1987-88. This longitudinal sample consisted of 153 prospective teachers of whom 127 were females and of whom 58 anticipated teaching at the secondary level and 75 at the elementary grade

level. These prospective teachers were predominantly from small to medium-size high schools (80% from < 500), from rural and suburban communities (87%), from families with at least one near relative a teacher (55%), from families with well over one-half of their mothers or fathers not having a four-year college degree, and from somewhat larger than average size families (over 60% with two or more siblings).

Each of the subjects completed upon entrance to teacher training and again upon completion of student teaching: The Teacher Concerns Questionnaire (George, 1978), The Attitude Toward Teaching As A Career Scale (Merwin & DiVesta, 1959), The Teaching Anxiety Scale (Parsons, 1973), and a confidence about teaching scale constructed by the researchers. The concerns questionnaire consists of 15 items with five items on each of the self, task, and impact subscales. The response scale for each item is a continuum from not concerned (1) to extremely concerned (5). The attitude scale contains 11 items each of which is responded to on a scale from strongly disagree (1) to strongly agree (6) where the higher scores indicate a more positive attitude. The anxiety scale is comprised of 29 items with a response continuum for each item from never (1) to always (5) with higher scores indicating more anxiety toward teaching as a career. The confidence about teaching scale consists of two single item scales: assurance of becoming a teacher responded to on a five-point scale from very

certain (1) to very doubtful about actually teaching (5), and anticipated effectiveness as a future teacher responded to on a seven-point scale from not effective at all (1) to truly exceptional (7).

Findings

Dependent t-test comparisons of the means derived from the eight affective measures administered to the longitudinal sample of prospective teachers upon the commencement of teacher training and again upon completion of student teaching were used to test the hypotheses. These analysis procedures resulted in the identification of significant mean changes in the prospective teachers' concerns about teaching, anxiety about teaching, and confidence about teaching but did not detect a significant change in attitude toward teaching as a career. Further, the pattern of change for each of the four affective measures revealing a significant mean difference across the two points in teacher training appear to be in a desirable and predictable direction (see Table 1).

Insert Table 1 about here

Relative to the four concerns scales, significant mean differences were found between the two points in training for the task and self concerns scales but not for the impact and total

concerns. The task concerns reported by the prospective teachers' increased between the two points in teacher training (pre-mean = 11.63, post-mean = 12.93; $t = 3.15$, $p = .002$); whereas the self concerns of these students decreased to an extent that was deemed statistically significant (pre-mean = 16.22, post-mean = 15.45; $t = 1.93$, $p = .055$).¹

The anxiety scale also revealed a significant change for the prospective teachers between their two points in training. Anxiety about teaching declined significantly (pre-mean = 71.21, post-mean = 63.69; $t = 8.01$, $p < .001$) between pretraining and the completion of their student teaching. In contrast the prospective teachers' attitude toward teaching was stable and highly positive over the two measurement points (pre-mean = 51.28, post-mean = 51.62).

The two confidence about teaching measures each revealed desirable changes between the prior to training and following student teaching measurement points; however, only the assurance of the decision to teach scale revealed a mean change sufficiently large to be statistically significant (pre-mean = 1.68, post-mean = 1.46; $t = 2.93$, $p = .004$) between the two measurement points. These findings indicate that the prospective teachers did become more confident about teaching during teacher training (see bottom portion of Table 1).

Summary and Discussion

The affective measures administered to the longitudinal sample of prospective teachers at the commencement of teacher training and again upon the completion of their student teaching revealed that significant changes occurred during teacher training in their anxiety, concerns, and confidence about teaching, but not in their attitude about teaching as a career. Mean differences between the two points in training of the prospective teachers were significant for four of the eight criterion measures and led to the rejection of three of the four stated hypotheses. Further, each of the significant affective changes identified during teacher training were found to be in a desirable direction and consistent with teacher development theory.

The prospective teachers as they progressed through teacher training reported being much more concerned about the task of teaching, less concerned about their self survival as a teacher, more assured about their decision to become teachers, and less anxious about teaching while maintaining a positive attitude about teaching as a career, a high level of concern about their impact upon pupils, and a strong stable perception of themselves as becoming highly effective future teachers. The findings related to the concerns measures are generally consistent with Fuller's stages of concerns teacher development model (Fuller & Bown, 1975) and with teacher development research findings. With respect to

related research findings primarily from cross-sectional samples, total concerns have been found to show little or no change, teaching task concerns to increase, self concerns to decrease, and impact concerns to remain high and relatively stable during teacher training (Pigge & Marso, 1987; Adams, 1982). The decrease in anxiety about teaching reported by the prospective teachers as they enhanced their skills and knowledge during teacher training is also consistent with the developmental model of teacher evolution; however, the prospective teachers did not report as expected an increasingly more positive attitude about teaching as they progressed through training. This latter finding may have been due to the already very high, positive attitudes expressed by these teacher candidates upon the commencement of their training, but it also should be recalled that previous research findings on this attribute have been somewhat inconsistent as noted earlier. For example, Pigge & Marso (1987) reported no change in attitude about teaching during teacher training for cross-sectional samples of students measured at different points in their training, and in contrast Callahan (1980) and Lipka and Garlet (1981) have reported that prospective teachers develop less positive attitudes toward teaching during preservice training.

In summation, the results of this study have provided further evidence that measurable and desirable affective changes in prospective teachers occur during teacher training. Secondly, it

is becoming more evident that these changes in prospective teachers during teacher training are generally predictable as hypothesized by various developmental models of teacher evolution.

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Footnotes

¹Findings of a significant mean decrease on this "self" scale during teacher training for cross-sectional samples from essentially this same population of prospective teachers support this seemingly arbitrary interpretation of a significant mean decrease when $p = .055$ [see Marso & Pigge (1989) and Pigge & Marso (1987)].

Table 1

Dependent t-Ratios for the Eight Pre-Posttest Affective Means

| Dependent Variables | N | <u>Prior to Training</u> | | <u>Post-Student Teaching</u> | | t | p |
|------------------------|-----|------------------------------|-------|----------------------------------|-------|------|------|
| | | \bar{X} | S.D. | \bar{X} | S.D. | | |
| Concerns | | | | | | | |
| Task | 153 | 11.63 | 3.85 | 12.93 | 4.18 | 3.15 | .002 |
| Self | 153 | 16.22 | 4.26 | 15.45 | 4.41 | 1.93 | .055 |
| Impact | 153 | 18.41 | 4.61 | 17.73 | 5.11 | 1.65 | .101 |
| Total | 153 | 46.52 | 11.49 | 46.05 | 11.26 | 0.45 | .651 |
| Attitude | 149 | 51.28 | 6.22 | 51.62 | 6.92 | 0.61 | .544 |
| Anxiety | 150 | 71.21 | 10.49 | 63.69 | 11.37 | 8.01 | .000 |
| Confidence | | | | | | | |
| Assurance* | 149 | 1.68 | 0.76 | 1.46 | 0.82 | 2.93 | .004 |
| Effectiveness | 148 | 5.24 | 0.91 | 5.37 | 0.94 | 1.51 | .134 |

*Smaller mean values indicate more assurance about the prospective teachers' decisions to become teachers.

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