

A Comparison of Program Paths: Waiver vs. NTE

By Ruth E. Knudson

Who will be an effective teacher? Are those who demonstrate subject matter competence by completing an approved university program more successful than those who demonstrate competence by passing the NTE? These questions, and others like them, are a continuing focus of research. As Alison Bunts (1994) points out, recent educational reports, including the influential report of the Holmes Group (1986), suggest that changes are needed in entrance requirements into student teaching programs and for higher standards for initial certification. Judith Lanier and Judith Warren Little's (1986) comprehensive review of research on teacher education suggests that the students of teaching have been studied extensively, particularly with respect to their general qualities. Those characteristics most commonly investigated include academic ability or achievement, attitudes, interests, personality, and background experience with children (Schalock, 1979).

Ruth E. Knudson is a professor in the School of Education at the University of California, Riverside.

Much of this research is directed at examining the extent to which these characteristics predict success in teacher education programs or in student teaching. For example, Fred Pigge and Ronald Marso (1990a, 1990b) examined the effect of academic, affective, and personal characteristics on students'

Program Paths

success in student teaching as determined by the university supervisor's ratings of their performance in student teaching. They report that the prospective teachers' GPAs (earned before student teaching) were positively related to their level of performance in student teaching; that the sex of the prospective teachers was independent of their rated performance; and that there was no significant relationship between their attitude and concerns about teaching and their level of performance. They also found that several personal preference attributes were associated with significant mean differences in rated performance.

Research continues, partly because the questions associated with teacher characteristics are viewed as very important, and partly because research results are somewhat contradictory. For instance, Carlton Stedman (1984) reports that a high GPA is no better than standardized tests in predicting teaching success; but—as cited earlier—Pigge and Marso (1990) found that GPA was related to success. Bunts (1994) summarizes several studies and concludes that there is little evidence to support academic achievement as a criterion for prospective teachers. However, she cautions that because of entrance requirements into teacher education programs, the academic range is already somewhat restricted by the GPA requirements for admission. She argues that academic criteria should be one variable considered with a wider set of variables, including personality characteristics.

Results of this research also provide us with a broader picture of teacher education candidates and of teachers. Data is kept with respect to a wide range of teacher characteristics, so we have a demographic profile of the teaching profession. We know, for example, that the sexes are balanced in the secondary school, but women outnumber men five to one in the elementary school (Grant & Eiden, 1982). Overall, 28 percent of the teaching profession is male; 72 percent female. With respect to ethnicity, minority teachers are underrepresented, since 86.5 percent of the present teaching population is white (*Mini-Digest of Education Statistics 1994*).

The characteristics of individuals entering teacher education programs continue to be a subject of study since some of the characteristics are linked to success in teaching; are often associated with the experiences students have in student teaching; and are associated, further, with the attitudes they take from teacher education programs and bring into the teaching profession. It is generally agreed that the point of control for teachers should be before they complete the teacher education program rather than at the end when they apply for certification. Thus, the requirements for entrance into teacher education programs focus on the characteristics which are thought to be desirable for teachers and/or to be essential for success in teaching.

Focus of This Study

The primary purpose of this study is to compare the program paths of students who enter teaching demonstrating competence through (a) the National Teachers

Examination (NTE), or (b) a program approved by the California Commission on Teacher Credentialing (CTC) at an institution of higher education, referred to as a “waiver program” since completion of this program “waives” the requirement of passing the NTE. For example, which group of student teachers is more successful in a professional teacher education program, those who demonstrate subject matter competence by completing a waiver program or by passing the NTE? Since other variables may also affect success, the secondary purpose of the study is to determine if there is an affect for gender, ethnicity, and GPA on student success in student teaching; and to determine differences across programs with respect to gender, ethnicity, grade point average, and those passing the NTE or completing a waiver program.

Candidate Competence

Academic Capability

An especially critical question about teacher education students is their academic capability. Ever since Phillip Schlechty and Victor Vance (1985) found that students in teacher education programs were academically weaker than other students in terms of Scholastic Aptitude Test scores, measures have been taken to ensure that teacher education candidates are academically capable. These measures include raising GPA requirements and requiring students to pass basic skills tests before entry into teacher education programs and/or before issuance of a teaching credential.

To date, research on the effects of higher GPAs on teaching effectiveness has not indicated that there are significant differences between students with GPAs of approximately 2.3 and those with higher GPAs (Demetrulias, Chiodo, & Diekman, 1990; McComb, 1985, cited in Freeman, Martin, Brousseau, & West, 1989). What has been positively related to teaching effectiveness is grades received in teacher education courses themselves (Guyton & Farokhi, 1987). The ability to pass a test of basic skills has not been linked to teaching effectiveness or success, either, although basic skills ability may be a good predictor of subject matter knowledge (Guyton & Farokhi, 1987).

Commitment to Teaching and Subject Matter Knowledge

In addition to GPA requirements and passage of a basic skills test, there are other requirements for admission. Again, these requirements are in place in an effort to admit students who possess characteristics which are thought necessary for good teachers and those which are linked to teaching effectiveness. Two of these requirements are (a) demonstration of a commitment to teaching, and (b) completion of a waiver program or passage of the NTE.

A commitment to teaching, usually defined as work with children/students as early as the student teacher’s high school experience, is important because it

Program Paths

demonstrates that the candidate's desire to work with students is based on actual experiences; and because it indicates that the student is motivated to be a teacher. This is seen as important, also, because teaching has frequently been viewed as a "dumping ground," a profession individuals enter when they have been unsuccessful with another profession. Donald Freeman, Robert Martin, Bruce Brousseau, and Bradley West (1989) demonstrated that teacher education students who met stringent entrance requirements were less likely to have selected teaching after experiencing failure in courses related to their initial choice of careers. They found, also, that there were no clear distinctions in levels of commitment to teaching among entry-level candidates who did or did not satisfy higher program admission standards. Students admitted under more stringent admission criteria were as likely to have worked with school-aged youngsters in various teaching roles while in high school as were applicants who would have been denied admission under those requirements.

Another area of competence is subject matter knowledge, which may be demonstrated [in California] by completion of an approved waiver program or passage of the appropriate NTE test. Jerry Ayers (1988) found that scores from the NTE were significantly correlated with the American College Test (ACT) and mean grade point averages. However, there were few relationships between NTE scores and measures taken in the classroom. To date, however, no one has examined the success of students who pass the NTE versus those who complete a waiver program. Limited research has been conducted using the NTE as a measure of success in student teaching programs. Schlechty and Vance (1981) did use NTE scores to determine which group left teaching first, those with high scores on the NTE or those with low scores. They found that those with high scores were most likely to leave early and in the greatest number. Demonstrating subject matter competence by passing the NTE, however, has not been used to predict success in terms of classroom competence in a teacher education program.

Del Schalock (1979) points out that it is important that each institution examine its own programs since almost all schools of education attract particular, unique populations of students and prepare teachers for particular populations of schools. The institution needs also to differentiate between the various kinds of teachers they are preparing (*e.g.*, elementary versus secondary) since each program may differ from each other in terms of requirements, curricula, faculty, and so on, and because the characteristics of persons entering various teaching fields and the demands of these fields differ (Schalock, 1979).

From another standpoint, that of policy, it is important that certain essential questions be answered. Should the NTE continue to be substituted for an approved waiver program if those who enter teaching via the NTE are less competent in the classroom than those who complete the program? Or, conversely, should institutions of higher education (IHEs) continue to develop approved waiver programs if students completing them are not as successful in the classroom as those who pass

the NTE? A related question is how many students elect to demonstrate subject matter competence with the NTE and how many with approved waiver programs? Since these questions have important implications for policy in general and for institutional decision-making in particular, they need to be addressed.

Method

Description of the Program

The study reported took place in the School of Education, University of California, Riverside (UCR), for the years 1990-91 and 1991-92. There are four teaching credential programs: Multiple Subjects (elementary), Single Subject (secondary), Bilingual/Crosscultural Emphasis (Spanish), and Special Education Specialist (Learning Handicapped and Severely Handicapped). Students apply for and are admitted to one of the four programs. The Multiple Subjects and Single Subject programs are fifth-year programs of professional education. The Bilingual/Crosscultural Emphasis credential and Special Education Specialist credentials (Learning Handicapped and Severely Handicapped) are two-year programs; one-year of course work may be completed before beginning supervised student teaching. It should be noted that the Multiple Subjects and Single Subject programs are the oldest in the School of Education and that the Bilingual/Crosscultural Emphasis Credential Program was recently reinstated and was in its second year of operation during the years selected.

Description of Admission Requirements

California has enacted much legislative reform of teacher education, including (1) the requirement of an undergraduate major in an academic discipline and the elimination of an undergraduate major in education; (2) demonstration of subject matter competence by passage of the NTE or completion of an approved "waiver" program; (3) requirement of a fifth year of study; (4) passage of a basic skills test (California Basic Educational Skills Test—CBEST); (5) establishment of a non-governmental body for the accreditation of teacher education programs (*i.e.*, a CTC-appointed panel); (6) certification based on assessment of candidate competence; and (7) supervision and evaluation of induction year of entry into the profession. Additionally, the CTC requires that students have GPAs comparable to those required in other areas of graduate study at the institution. For this reason, the School of Education adopted a GPA of 3.0 for admission, with students having GPAs below 3.0 being eligible with special considerations. In addition to GPA requirements, passage of CBEST, and passage of NTE or completion of an approved waiver program, candidates must submit three letters of recommendation and a statement of purpose. It should be noted, further, that this institution is a campus of the University of California. The master plan for enrollment in California basically calls for the University of California to admit the top 12 percent of high

Program Paths

school graduates. The graduate programs, including credential programs, also attract the most academically capable students.

Data Source

Data was collected from 327 student teachers enrolled in a fifth-year program of teacher preparation at UCR. Data was obtained with respect to gender, ethnicity, passage of NTE or waiver program, overall GPA, and university supervisor's and cooperating teacher's final evaluations. It should be noted that the NTE used for this study was the Core Battery (for elementary candidates) and the subject matter

Table 1

specialty area (for secondary candidates). There have been changes since 1992 with the NTE such that elementary teachers must now pass the Multiple Subjects Assessment for Teachers (MSAT) or the Specialty Area and Content Area Performance Assessment (CAPA) test for secondary teachers. [Note: Single Subject candidates now need to pass the PRAXIS examination (Professional Assessment for Beginning Teachers).] Data collected was for the years 1990-91 and 1991-92. Gender was male or female. Ethnicity was as indicated in Table 1. Grade point average was classified into five categories where the highest possible GPA was 4.0;

(Table 1—Continued)

Program Paths

2.50-2.99; 3.00-3.24; 3.25-3.49; 3.50-3.74; and 3.75-4.00. Subject proficiency was judged as passage of NTE or completion of a waiver program.

Rating Scales

Students' success in the program was judged by both the university supervisor and the district cooperating teacher on rating scales used to evaluate performance in student teaching. Scores range from 1=Low to 5=High. The rating scales were developed to ensure that student teachers were all evaluated on the same criteria; that constructive feedback could be given to the students by the university supervisor and cooperating teacher after they were observed teaching; and that success in teaching, as reflected in the rating scales, did demonstrate teaching competence as defined by the institution, the CTC, employers in the field, and the collective judgment of the faculty. The majority of the supervisors are experienced, are trained in using the rating scale, and meet regularly to discuss the program and program requirements, including the rating scale. The University requires that district cooperating teachers complete the rating scale at the end of the second and third quarters so that student teachers have an opportunity to know how their cooperating teacher is evaluating their performance and so that more than one professional judgment is obtained on this important measure of teaching competence. It should also be noted that this kind of rating scale is frequently used in research on student teaching success (Bunts, 1994).

The rating scale is used by UCR because it is directly related to areas of competence in teaching performance as defined by the institution, the supervisors, other faculty, K-12 school personnel, and the CTC. The three areas of the rating scale are as follows. The first, **Teaching Competence**, consists of knowledge of subject matter, knowledge/use of basic skills, quality of planning, ability to motivate students, classroom control, use of teaching techniques, and attention to individual differences. ["Classroom control" is categorized under "Teaching Competence" to emphasize the importance of, and the relationship between, classroom control and student learning.] The second, **Classroom Management**, consists of personal appearance, voice and speech, enthusiasm for teaching, vitality for teaching, dependability, and poise. The third area, **Relations with Others** (e.g., students, parents, and school personnel), consists of tolerance of others' opinions, harmonious work with others, ability to accept criticism, and rapport with students.

Description of the Students

Twenty-five percent of the student teachers were male; 75 percent female. Sixty-nine per cent were Caucasian/White; 31 percent non-Caucasian/non-White. One hundred ninety students were in the Multiple Subjects (elementary) Program; 100 were in the Single Subject (secondary) Program; 14 were in the Bilingual/Crosscultural Emphasis (Spanish) Program; and 24 were in the Special Education Specialist Program. Complete data were not available for one student so that student

was omitted from all data analyses. Cooperating teachers and supervisor final evaluations were available for 254 students, so analyses requiring these evaluations were limited to these students. Overall, 37 percent of the students demonstrated subject matter proficiency by completing an approved waiver program while 63 percent demonstrated proficiency by passing the appropriate NTE. Fifteen percent had GPAs between 2.50 and 2.99; 27 percent, GPAs between 3.00 and 3.24; 23 percent, GPAs between 3.25 and 3.49; 22 percent, GPAs between 3.50 and 3.74; and 12 percent, GPAs between 3.75 and 4.00

Results

I conducted an analysis to determine how various student teacher attributes contributed to their classroom competence as judged by their cooperating teacher and University supervisor. An analysis of variance using the general linear model was performed, with the dependent variable being the combined score of the cooperating teacher and the University supervisor on the final quarter evaluation of the student's classroom competence and the independent variables being gender, ethnicity, GPA, and NTE/waiver. [The third quarter ratings were used since they reflect the student's competence immediately before the end of the program. Although it is possible to analyze cooperating teachers' and supervisors' ratings separately, there are differences in the total number since some evaluations were not returned.] The cooperating teachers and supervisors' evaluations were moderately highly related (.60958). There were no significant difference in third quarter scores (n=253 complete ratings) for gender [$F(1,253)=.08$, $p>.05$]; for ethnicity [$F(10,253)=1.56$, $p>.05$]; for waiver versus examination [$F(1,253)=1.18$, $p>.05$]; or for grade point average [$F(4,253)=1.34$, $p>.05$].

Additional analyses were conducted to determine if there were differences in the GPA of students depending on whether they passed the NTE or completed a waiver program or if there were differences between programs of those taking the NTE or completing a waiver program. There were no significant differences in the GPA of students depending on whether they passed the NTE or completed a waiver program, $\chi^2(5, N=325)=4.66$, ns. There were no statistically significant differences between the number of students taking the NTE or completing a waiver program for students in the Multiple Subjects, Bilingual, or Special Education Specialist credential programs. However, significantly more students in the Single Subject program demonstrated subject matter competence through completion of a waiver program than in the Multiple Subjects program or the Special Education specialist program, $\chi^2(3, N=325)=13.17$, $p<.001$.

Conclusion

It may be concluded that success in teaching at the conclusion of this program is not an effect of gender, GPA, ethnicity, or passage of NTE versus completion of

Program Paths

waiver program. It may be concluded that significantly more students obtaining a Single Subject credential (secondary) than a Multiple Subjects (elementary) or Special Education Specialist credential demonstrate subject matter competence by completing a waiver program than by passing the NTE.

There are significant implications from these conclusions. Waiver programs are developed at this institution by both the School of Education and the academic departments. The programs must be approved by the CTC following a predetermined course of study within each major. Developing the programs and obtaining approval for each of them is a very time-consuming process. If, as the results of this study suggest, there is no difference in successful completion rates of the program between those who demonstrate subject matter competence by passing the NTE or by completing a waiver program, then this institution and others may wish to examine the feasibility and/or other reasons for design and approval of these programs. Academic departments frequently feel that many of the requirements for the major are demanded through the waiver program and that a measure of their autonomy has been removed when and if they adopt the waiver requirements as basic requirements for the major. They should note, however, that secondary teachers use the waiver programs as a vehicle more than elementary or special education teachers, who primarily use the NTE. The institution may have other reasons for establishing waiver programs, such as early recruitment of potential teachers.

It is notable that the percentage of non-white/non-Caucasian students at this institution is well above the national average (30 percent versus 10 percent). This enrollment pattern reflects the demographics of the area, since the state of California is now approximately 50 percent White/Caucasian and 50 percent non-White/non-Caucasian. The profile of students at this institution is different in other aspects, as well. With respect to gender, there are more men enrolled in the elementary and bilingual/crosscultural programs than the national average (33.7 percent and 42.9 percent respectively, versus 20 percent). Students appear to be entering a specific program because of interest in working with that credential program, not because they do not qualify for another program. Although the elementary teaching programs have more women than men, a higher percentage of men is enrolled on the average than nationally. Men and women elect to satisfy subject matter competency requirements through completing an approved waiver program or passing the appropriate NTE, and the path they select is not related to GPA.

It should be noted that this study examined the short-term success of the student teachers (e.g., the use of the rating scales at the end of student teaching quarters). There is continued need to evaluate the validity and reliability of such instruments and to address the relationship of variables, including those used in this study, with long-term teaching success as well as variables associated with teaching satisfaction, such as staying in the profession. It is possible that long-term success and/or satisfaction is associated with completion of a waiver program versus passage of the

NTE, and longitudinal studies are needed to examine the effect of student teacher characteristics, success in student teaching, and long-term success and satisfaction.

This study has again demonstrated a lack of predictive ability of GPA. However, it has significantly added to the research literature by examining student profiles related to waiver programs versus NTE and comparison of student profiles across programs. Policy questions are clear: What are admission requirements supposed to do? What is the relative cost of these requirements in terms of students' money and IHE personnel time? Is there a better way to evaluate potential for success in the classroom? If so, what is it?

References

- Ayers, J.B. (1988). Another look at the concurrent and predictive validity of the National Teacher Examinations, *Journal of Educational Research*, 81 (3),133-137.
- Bunts, A.B. (1994). Affective and academic variables as predictors of success in student teaching. *The Teacher Educator*, 30 (1), 22-27.
- Demetrulias, D.M., Chiodo, J.J., & Dickman, J.E. (1990). Differential admission requirements and student achievement in teacher education. *Journal of Teacher Education*, 41 (2), 66-72.
- Freeman, D.J., Martin, R.J., Brousseau, B.A., & West, B.B. (1989). Do higher program admission standards alter profiles of entering teacher candidates? *Journal of Teacher Education*, 40 (3), 33-41.
- Grant, W.V., & Eider, L.J. (1982). *Digest of education statistics 1982*. Washington, D.C.: U.S. Department of Education. National Center for Educational Statistics. Office of Educational Research and Improvement.
- Guyton, E., & Farokhi, E. (1987). Relationships among academic performance, basic skills, subject matter knowledge, and teaching skills of teacher education graduates, *Journal of Teacher Education*, 38 (5), 37-42.
- Holmes Group. (1986). *Tomorrow's teachers: A report of the Holmes Group*. East Lansing, Michigan.
- Lanier, J.E. with Little, J.W. (1986). Research on teacher education. In M.C. Wittrock (Ed.), *Handbook of Research on Teaching* (3rd Ed.). New York: Macmillan Publishing Company. 527-529.
- National Education Association. (1982). *Status of the American public school teacher, 1980-81*. Washington, D.C.: National Education Association.
- Pigge, F.L., & Marso, R.N. (1990a). Academic, affective, and personal attributes of successful student teachers. *The Teacher Educator*, 25 (4), 2-10.
- Pigge, F.L., & Marso, R.N. (1990b). Academic, affective, and personal attributes of successful student teachers. *The Teacher Educator*, 26 (1), 231-31.
- Schalock, D. (1979). Research on teacher selection. In D.C. Berliner (Ed.), *Review of Research in Education* 7, 364-417.
- Schlechty, P.C., & Vance, V.S. (1981). Do academically able teachers leave education? The North Carolina case. *Phi Delta Kappan*, 63, 106-112.
- Stedman, C.H. (1984). Testing for competency: A Pyrrhic victory? *Journal of Teacher Education*, 35 (2), 2-5.