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ABSTRACT

The level of agreement among principals and teachers concerning the certification competencies needed by beginning teachers was studied, and an effort was made to determine the level of preparation or experience at which the competencies are mastered. Twenty-seven principals, 27 elementary school teachers, and 5 secondary school teachers from Alabama responded to a questionnaire about teaching competencies. Forty-nine principals, 22 elementary school teachers, and 17 secondary school teachers from Pennsylvania also responded to the questionnaire, which identified 30 competencies that had been compiled from the certification standards of both states. Respondents indicated their levels of agreement with the competencies a practitioner needed to be certified and indicated the level at which these competencies were achieved (undergraduate, graduate, or inservice programs). There was no significant difference between responses from the two states. Prospective educators who graduate from teacher education institutions in either state would probably meet the expectations of both groups. More importantly, principals in both states appeared to use similar perceptions to assess teacher competence. There were some differences in the perceptions of the points at which competencies would be mastered. Three tables present study findings. (SLD)

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Importance and Attainment of Teacher Certification Competencies
As Perceived By Principals and Teachers

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Abstract

In most states, teacher certification competencies are drafted by the state departments of education, and taught by the faculty in colleges or schools of education. It is assumed that most, if not all, of the competencies are attained when the student completes the bachelor's degree in education. However, writers in the professional literature are unsure of the professional development level (undergraduate, graduate, or in-service programs) where the competencies are fully achieved or whether the competencies are necessary for effective instruction. Therefore, this study attempts to determine the level of agreement among principals and teachers concerning certification competencies needed by beginning teachers, and the level of preparation or experience when the competencies are mastered.

Introduction

Teacher preparation programs use state adopted teacher competencies to prepare and assess prospective educators (Alabama State Department of Education, 1990; Sutton, 1987). It is assumed that most, if not all, of the competencies are attained when the student completes the bachelor's degree in education. Many teachers and principals recognize that the attainment of some basic competencies are acquired through graduate classes, inservice programs, or actual classroom teaching (Clark, et. al., 1985; Hoffman & Roper, 1985). Therefore, it may not be necessary for a beginning teacher to attain all of the competencies at the undergraduate level to be an effective teacher.

In most states, the competencies are drafted by the state departments of education, and taught by the faculty in colleges or schools of education. Usually, principals and classroom teachers are not involved in drafting or deciding upon the competencies that should be attained by beginning teachers. However, principals, unlike professors or state department personnel, are charged with the task of evaluating on a yearly basis a teacher's classroom competence. Likewise, teachers are applying daily the professional competencies in their classroom settings.

A review of the professional literature confirms the belief that researchers are unsure of the level where teaching competencies are fully achieved. Some studies report an uncertainty about the relationship of certification standards with effective teaching (Carneige Commission, 1986; Feistritz, 1984; Norton, 1989; Steinmiller & Bell, 1989; Taebel, 1990). Lederman (1992), chairperson for the board of the American Association for the Advancement of Science, contends that teachers merely mark time, and are not competent to

teach computer instruction, science experiments, and mathematics instruction.

Some writers agree that it is not acceptable for the instructor to merely have acquired knowledge of a particular area; instead, the instructor must demonstrate competency in the skill areas measured. The desirable characteristics and skills must be field tested, revised, and retested before they can be identified as critical competencies for successful teaching (Craft-Tripps, 1990; Kritsonis, 1993). Finally, Jacobson and Pecheone (1991) suggest that beginning teachers regardless of educational levels need time and classroom experience to enhance their instructional roles. In summary, writers attest to the fact that some teacher competency goals are achieved or developed beyond the undergraduate level.

The professional literature affirms the need to examine teacher competency attainment beyond the level of the undergraduate program. In some cases, researchers are unsure of the level where the competencies are fully achieved or whether the competencies are necessary for effective instruction. More importantly, principals and teachers have not been involved in determining or identifying the competencies which are necessary for certification. Since principals are expected to determine the effectiveness of their teaching staff, and teachers are expected to demonstrate these competencies, their participation in formulating the competencies can be significant. Therefore, this study attempts to determine the level of agreement among principals and teachers concerning certification competencies needed by beginning teachers, and the level of preparation or experience when the competencies are mastered.

Major Objectives:

1. What is the percentage of responses by principals and classroom teachers from the

- states of Alabama and Pennsylvania for the agree, uncertain and disagree categories concerning the state mandated competencies of prospective teachers?
2. Is there a statistically significant difference in agreement between principals and teachers concerning the state mandated teaching competencies required of prospective teachers in Alabama and Pennsylvania?
 3. What is the percentage of responses by principals and classroom teachers from the states of Alabama and Pennsylvania for the undergraduate, graduate, and inservice program categories concerning the level where the state mandated competencies for teachers should be required?
 4. Is there a statistically significant difference in agreement between principals and teachers concerning the level of program (undergraduate, graduate, inservice) that the state mandated teaching competencies for the certification of prospective teachers are achieved?

Methodology

Sample

Fifty teachers and fifty principals from the states of Alabama and Pennsylvania were randomly selected for this study. Twenty-seven principals and 32 teachers from the state of Alabama returned the questionnaires. Of the Alabama principals, 21 are in elementary schools, and six are in secondary schools. Also, 19 of these 27 principals came from city/urban schools while 8 came from county/rural schools. Of the 32 Alabama teachers, 27 taught in elementary schools while 5 taught in secondary schools. Twenty-eight Alabama teachers came from city/urban schools, and 4 came from county/rural schools.

Forty-nine principals and 39 teachers from the state of Pennsylvania returned their questionnaires. The number of principals was 29 from elementary schools and 20 from secondary schools. Fourteen of these principals represented city/urban schools while 35 came from county/rural schools. There were 22 elementary and 17 secondary school teachers from Pennsylvania who returned the questionnaire. Twenty-one teachers identified their school setting as city/urban, and 18 identified the county/rural setting.

Instrument

The subjects in this study were sent a questionnaire by mail, and asked to return it in a self-addressed stamped envelope. The questionnaire identified 30 competencies that teachers should be able to demonstrate in order to be certified. The 30 competencies were compiled from certification standards that appeared to be similar in documents from the Alabama and Pennsylvania State Departments of Education.

Respondents were asked to indicate the level of their agreement, uncertainty, or disagreement on the competencies needed to be certified. In addition, respondents were asked to indicate the level of professional development (undergraduate program, graduate program, or in-service program) where teachers achieve the certification competencies. Finally, four final questions were included to gather information about grade levels taught or supervised, years of teaching or administrative experience, highest academic degree, and the type of school setting.

Data Analysis

Responses concerning the degree of agreement and the identification of program from the Alabama and Pennsylvania principals and teachers were tabulated for each of the 30

items. The data were analyzed using SPSS/PC+ Statistics 4.0 (Norusis, 1990). A frequency assessment was performed to give an overall or descriptive profile of the data. The responses by the principals and teachers from Alabama and Pennsylvania are reported by a percentage of frequency for each item in the agreement category and for each item in the program category. A two-by-two multivariate analysis of variance (MANOVA) was used to determine the extent that differences between responses from the two states and from the two groups would be statistically significant. The probability level of $p < .05$ was used to determine statistical significance.

Results and Discussion

The rates of return for the questionnaires were 27 Alabama principals (54%), 32 Alabama teachers (64%), 49 Pennsylvania principals (98%), and 39 Pennsylvania teachers (78%). The tabulation of agreement responses for each of the 30 items shows that the Alabama and Pennsylvania principals and teachers generally agree that these competencies should be used to certify teachers. The only competency that Alabama and Pennsylvania principals and teachers did not support as a necessary skill for certification was item 27 (converse in a language other than English). Eighteen percent of the Alabama principals, 6% of the Alabama teachers, 22% of the Pennsylvania principals, and 20% of the Pennsylvania teachers felt that teachers needed this competency in order to be certified.

Insert Table 1 about here

In essence, the high percentage of agree responses from these four groups supports the

competencies that are mandated by the individual states of Alabama and Pennsylvania. The fact, that principals and teachers in these states were not involved in the collaborative identification of these competencies, did not adversely affect the endorsement of these certification competencies. In addition, the competency which requires teachers to converse in a language other than English may lack support from principals and teachers because they have a more provincial view of this competency. If teacher education programs begin to prepare prospective educators for a more global and international society and for classroom instruction with children from other nations and cultures; then this competency will need to be re-considered and endorsed by principals and teachers.

When the respondents were asked to select the program (undergraduate, graduate, or inservice) where these competencies should be achieved, the undergraduate program was selected for many of the 30 competencies. Items #1 (select long range goals), #15 (explore new teaching methods), #17 (support written local and state board policies), #19 (make instructional decisions beyond teacher's manual), and #21 (promote cooperation between school and community) did not receive better than 70% of the respondents selecting the undergraduate program.

Insert Table 2 about here

All of these competencies imply a practical experience or "on the job" situation for these skills to be explored and achieved. Undergraduate students do not have many opportunities to cooperate with parents of elementary school children. This may be a

consideration for inclusion in the undergraduate's teacher preparation experience. Also, school board policies, alternative teaching strategies, and decisions beyond the teacher's manual are concepts that are not appreciated or comprehended at the undergraduate level. Finally, item #27 (converse in a language other than English) had a majority of "no response" because the respondents did not feel that this was a necessary competency for certification. Therefore, it did not need to be achieved at any of the three programs.

Two of the four research questions for this study focused on whether there would be statistically significant differences among Alabama and Pennsylvania principals and teachers concerning the agree, disagree and uncertain categories and the undergraduate, graduate, and inservice program categories? The results from the MANOVA failed to reach statistically significant differences on agreement. The results from the MANOVA for programs (undergraduate, graduate, inservice) failed to reach statistical significance for effect of state by role interaction and for effect of role (principal and teacher), but did reach statistical significance for effect of state. The univariate analysis identified item #1 (select long range goals), item #17 (support written local and state board policies), and item #30 (speak and write clearly, correctly, and coherently) with significant differences between the sample from Alabama and the sample from Pennsylvania. For each of these three items, the Alabama principals and teachers selected the undergraduate program more often than the principals and teachers from Pennsylvania.

Insert Table 3 about here

Although state departments of education determine the standards and competencies for certification, the results of this study reveal that there is no significant difference between the states of Alabama and Pennsylvania. Prospective educators who graduate from teacher education institutions in either of these states would probably meet the expectations of teacher certification for both state departments of education. More importantly, principals would be assessing teacher performance with similar perceptions of teacher competence. In regard to "selecting long range goals," "support written local and state board policies," and "speak and write clearly, correctly, and coherently," the Alabama principals and teachers would expect these skills of prospective educators to be achieved at the completion of their undergraduate program. Principals and teachers in the state of Pennsylvania would view the achievement of these skills during graduate or inservice programs.

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Table 1. Percentage of responses for the three categories of agree, uncertain, disagree by Alabama and Pennsylvania Principals and Teachers

COMPETENCIES	Alabama Principals (N=27)				Alabama Teachers (N=32)				Pennsylvania Principals (N=49)				Pennsylvania Teachers (N=39)			
	D	U	A		D	U	A		D	U	A		D	U	A	
1. select long range goals	0.0	7.4	92.6		0.0	3.1	96.9		0.0	10.2	89.8		2.6	2.6	94.9	
2. compose measurable objectives	0.0	3.7	96.3		0.0	3.1	96.9		0.0	2.0	98.0		0.0	2.6	97.4	
3. identify appropriate instructional strategies	0.0	0.0	100		0.0	0.0	100		0.0	0.0	100		0.0	0.0	100	
4. select instructional materials and equipment appropriate for the objectives	0.0	0.0	100		0.0	0.0	100		0.0	4.1	95.9		0.0	2.6	97.4	
5. design effective evaluation techniques	0.0	0.0	100		0.0	6.3	93.8		2.0	2.0	95.9		0.0	0.0	100	
6. design appropriate time frames for the lesson	0.0	0.0	100		0.0	3.1	96.9		0.0	2.0	98.0		5.1	5.1	89.7	
7. orient students to the lesson	0.0	3.7	96.3		0.0	6.3	93.8		0.0	4.1	95.9		2.6	2.6	94.9	
8. provide learning activities in logical sequence	0.0	3.7	96.3		0.0	0.0	100		0.0	4.1	95.9		2.6	0.0	97.4	
9. interact with students in a professional manner	0.0	0.0	100		0.0	3.1	96.9		0.0	2.0	98.0		0.0	5.1	94.9	
10. use questions effectively to promote thinking	0.0	3.0	100		0.0	0.0	100		0.0	2.0	98.0		0.0	0.0	100	
11. use curriculum guides or courses of study when planning lessons	0.0	0.0	100		0.0	12.5	87.5		0.0	6.1	93.9		2.6	15.4	82.1	
12. accommodate student learning differences	0.0	7.4	92.6		0.0	3.1	96.9		0.0	4.1	95.9		0.0	0.0	100	
13. provide guided reinforcement or practice	3.0	3.7	96.3		0.0	3.1	96.9		0.0	4.1	95.9		0.0	0.0	100	
14. assign appropriate at-home activities	0.0	7.4	92.6		3.1	3.1	93.8		0.0	12.2	87.8		2.6	5.1	92.3	
15. explore new teaching methods	0.0	0.0	100		9.4	3.1	87.5		2.0	2.0	96.0		0.0	0.0	100	
16. use alternative strategies to re-teach lesson	0.0	0.0	100		0.0	0.0	100		2.0	4.1	93.9		0.0	2.6	97.4	
17. support written local and state board policies	0.0	14.8	85.2		6.3	6.3	87.5		2.0	14.3	83.7		2.6	28.2	69.2	



Table 1. Percentage of responses for the three categories of agree, uncertain, disagree by Alabama and Pennsylvania Principals and Teachers

COMPETENCIES	Alabama Principals (N=27)			Alabama Teachers (N=32)			Pennsylvania Principals (N=49)			Pennsylvania Teachers (N=39)		
	D	U	A	D	U	A	D	U	A	D	U	A
18. measure systematically student's progress	0.0	0.0	100	0.0	3.1	96.9	0.0	6.1	93.9	0.0	5.1	94.9
19. make instructional decisions beyond teacher's manual	0.0	0.0	100	0.0	6.3	93.8	4.1	4.1	91.8	0.0	0.0	100
20. report achievement and progress to students, parents, and professional staff	0.0	0.0	100	0.0	3.1	96.9	0.0	2.0	98.0	0.0	0.0	100
21. promote cooperation between school and community	0.0	0.0	100	6.3	0.0	93.8	0.0	10.2	89.8	0.0	0.0	100
22. progress through learning activities with minimal loss of instructional time	0.0	0.0	100	0.0	3.1	96.9	0.0	4.1	95.9	2.6	5.1	92.3
23. maintain rules and procedures for student conduct	0.0	0.0	100	0.0	0.0	100	0.0	2.0	98.0	0.0	0.0	100
24. use disciplinary strategies to control student conduct	0.0	0.0	100	0.0	3.1	96.9	0.0	4.1	95.9	0.0	5.1	94.9
25. present accurate and current subject content	0.0	3.7	96.3	0.0	0.0	100	0.0	4.1	95.9	0.0	0.0	100
26. respond knowledgeably to student questions	0.0	0.0	100	0.0	0.0	100	0.0	6.1	93.9	0.0	5.1	94.9
27. converse in a language other than English	29.6	51.9	18.5	59.4	34.4	6.3	38.8	38.8	22.4	35.9	43.6	20.5
28. relate to students with special physical needs	3.7	3.7	92.6	3.1	6.3	90.6	0.0	14.3	85.7	0.0	5.1	94.9
29. provide students with opportunities for cooperative learning	3.7	3.7	92.6	6.3	3.1	90.6	0.0	8.2	91.8	0.0	2.6	97.4
30. speak and write clearly, correctly, and coherently	0.0	0.0	100	0.0	0.0	100	0.0	4.1	95.9	0.0	0.0	100

Table 2. Percentage of responses for the three categories of undergraduate, graduate, and inservice programs by Alabama and Pennsylvania Principals and Teachers

COMPETENCIES	Alabama Principals (N=27)			Alabama Teachers (N=32)			Pennsylvania Principals (N=49)			Pennsylvania Teachers (N=39)		
	U	G	I	U	G	I	U	G	I	U	G	I
	1. select long range goals	81.5	11.1	7.4	78.1	9.4	12.5	59.2	20.4	20.4	64.1	25.6
2. compose measurable objectives	92.8	3.7	3.7	81.3	12.5	6.3	81.6	10.2	8.2	89.7	10.3	0.0
3. identify appropriate instructional strategies	88.9	3.7	7.4	90.6	6.3	3.1	81.6	6.1	12.2	89.7	10.3	0.0
4. select instructional materials and equipment appropriate for the objectives	92.6	3.7	3.7	84.4	3.1	12.5	77.6	10.2	12.2	84.6	7.7	7.7
5. design effective evaluation techniques	77.8	18.5	3.7	78.1	9.4	12.5	59.2	20.4	20.4	79.5	15.4	5.1
6. design appropriate time frames for the lesson	88.9	0.0	11.1	90.8	3.1	6.3	89.8	6.1	4.1	79.5	12.8	7.7
7. orient students to the lesson	100	0.0	0.0	93.8	3.1	3.1	95.9	2.0	2.0	89.7	2.6	7.7
8. provide learning activities in logical sequence	96.3	0.0	3.7	90.6	0.0	9.4	89.8	4.1	6.1	76.9	12.8	10.3
9. interact with students in a professional manner	92.6	0.0	7.4	90.6	6.3	3.1	85.7	2.0	12.2	82.1	7.7	10.3
10. use questions effectively to promote thinking	88.9	3.7	7.4	90.6	3.1	6.3	81.6	6.1	12.2	88.7	7.7	2.6
11. use curriculum guides or courses of study when planning lessons	77.8	7.4	14.8	81.3	0.0	18.8	71.4	6.1	22.4	76.9	10.3	12.8
12. accommodate student learning differences	63.0	11.1	25.9	71.9	18.8	9.4	73.5	8.2	19.4	82.1	7.7	10.3
13. provide guided reinforcement or practice	77.8	3.7	18.5	64.4	3.1	12.5	81.6	2.0	16.3	84.6	12.8	2.6
14. assign appropriate at-home activities	85.2	0.0	14.8	71.9	3.1	25.0	81.6	4.1	14.3	82.1	7.7	10.3
15. explore new teaching methods	40.7	18.5	40.7	31.3	15.6	53.1	32.7	28.6	38.8	53.8	30.8	15.4
16. use alternative strategies to re-teach lesson	63.0	7.4	29.6	75.0	6.3	18.8	60.4	8.2	22.4	71.8	15.4	12.8
17. support written local and state board policies	63.0	7.4	29.6	71.9	3.1	25.0	38.8	28.5	34.7	41.0	38.5	20.5

Table 2. Percentage of responses for the three categories of undergraduate, graduate, and inservice programs by Alabama and Pennsylvania Principals and Teachers

COMPETENCIES	Alabama Principals (N=27)			Alabama Teachers (N=32)			Pennsylvania Principals (N=40)			Pennsylvania Teachers (N=39)		
	U	G	I	U	G	I	U	G	I	U	G	I
	18. measure systematically student's progress	85.2	7.4	7.4	87.5	3.1	9.4	77.6	18.3	6.1	87.2	7.7
19. make instructional decisions beyond teacher's manual	77.8	18.5	2.7	68.8	9.4	21.9	57.1	26.5	16.3	69.2	17.9	12.8
20. report achievement and progress to students, parents, and professional staff	81.5	3.7	14.8	73.1	6.3	15.6	73.5	8.2	18.4	74.4	15.4	10.3
21. promote cooperation between school and community	70.4	0.0	29.6	56.3	3.1	40.6	55.1	20.4	24.5	61.5	5.1	33.3
22. progress through learning activities with minimal loss of instructional time	77.8	3.7	19.5	62.5	9.4	28.1	79.6	8.2	12.2	84.6	7.7	7.7
23. maintain rules and procedures for student conduct	81.5	0.0	18.5	84.4	3.1	12.5	79.6	4.1	16.3	89.7	2.6	7.7
24. use disciplinary strategies to control student conduct	77.8	3.7	18.5	81.3	3.1	15.6	79.6	4.1	16.3	89.7	0.0	10.3
25. present accurate and current subject content	81.5	3.7	14.8	75.0	3.1	21.9	81.6	6.1	12.2	87.2	10.3	2.6
26. respond knowledgeable to student questions	92.6	3.7	3.7	90.6	0.0	9.4	75.5	12.2	12.2	87.2	10.3	2.6
27. converse in a language other than English	25.9	22.2	22.2	12.5	15.6	6.3	34.7	24.5	14.3	64.1	15.4	17.9
28. relate to students with special physical needs	77.8	7.4	14.8	62.5	18.8	18.8	61.2	20.4	18.4	84.6	5.1	10.3
29. provide students with opportunities for cooperative learning	81.5	0.0	18.5	71.9	3.1	25.0	77.6	6.1	18.3	89.7	2.6	7.7
30. speak and write clearly, correctly, and coherently	100	0.0	0.0	96.9	0.0	3.1	87.8	0.0	12.2	89.7	10.3	0.0



Table 3. Multivariate Analysis of Variance for Responses On The Agreement and Program Categories By Alabama and Pennsylvania Principals and Teachers Concerning Thirty Certification Competencies.

Categories	Wilks Lambda Values	Error D.F.	p
Agreement:			
Role	.81	118	.35
State	.81	118	.40
Role By State	.85	118	.73
Program:			
Role	.86	115	.93
State	.65	115	.003
Role By State	.82	115	.63