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ABSTRACT

This national survey was conducted to examine institutions that offer graduate programs in education and to determine trends regarding master's degree programs. Three sources of information were utilized: (1) "Peterson's Guide to Graduate Programs in Business, Education, Health, and Law (Moore, 1979, 1989); (2) university catalogues from the 1980s; and (3) a survey questionnaire mailed to 664 U.S. institutions that offer such graduate programs. Results indicate, first, that the Master of Education (M.Ed.) is, by a narrow margin, the single most common master's degree title offered in schools of education. However, 45 percent of the institutions in the study offer the more traditional Master of Science (M.S.) or Master of Arts (M.A.) rather than the M.Ed. Second, previously obscure titles are becoming more prevalent such as the Master of Arts in Education (M.A.Ed.), Master of Science in Education (M.S.Ed.), and Master of Science in Teaching (M.S.T.). Third, research and statistics requirements are not significantly different for M.Ed. versus M.S./M.A. programs. The report concludes with a call for a national dialogue to strengthen the education profession by reducing the confusion that currently exists in its master's programs.
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The Growing Confusion Among Master's Programs in Education

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Abstract

The authors surveyed the 664 U.S. institutions that offer graduate programs in education and reviewed institutional catalogues during the past decade to determine trends regarding master's programs. Results showed that: (a) the M.Ed. is, by a narrow margin, the single most common master's degree title offered in schools of education, however, 45% of the institutions in the study offer the more traditional M.S. or M.A. rather than the M.Ed., (b) previously obscure titles are becoming more prevalent such as the M.A.Ed., M.S.Ed., and M.S.T., and (c) research and statistics requirements are not significantly different for M.Ed. versus M.S./M.A. programs. The article concludes with a call for national dialogue to strengthen the education profession by reducing the confusion that currently exists in its master's programs.

The Growing Confusion Among Master's Programs in Education

Few authors have addressed the significant problems associated with titles and requirements for education master's degrees even though the problem of Ph.D. versus Ed.D. degrees has been the focus of several recent studies (Andersen, 1983; Carpenter, 1987; Courtenay, 1988; Dill & Morrison, 1985; Moore, Russell, & Ferguson, 1960; Schneider, et. al., 1984; and Brown, 1990). Most extant literature on master's programs examines all academic disciplines rather than focusing exclusively on master's programs in education (i.e., Conrad, & Eagan, 1990; Glazer, 1986). The few authors who have addressed issues related to master's programs in education have limited their research to a single degree title, such as the M.A.T. (Coley & Thorpe, 1985; Clowes, 1990; and Kauss, 1988). Little attention has been paid to the much more common degree titles of M.Ed., M.A., or M.S.

Not only is there a dearth of current data on education master's programs, there is a growing chorus of contradictory voices calling for changes in teacher preparation. For example, Goodlad (1990) builds a case for extending teacher education to five-year programs that culminate in a baccalaureate degree; Clifford & Guthrie (1988) propose eliminating the baccalaureate but do not suggest an alternative degree title; and Johnston et al. (1989) advocate retaining the four-year baccalaureate. These suggestions by respected professional educators are appearing at the same time that state legislatures are passing bills that limit the number of undergraduate education courses prospective teachers can be required to complete.

How are schools of education responding to these mixed messages as they plan and implement master's programs? How do content requirements for master's programs differ from one degree title to another? Is the field beginning to coalesce around a single degree title, or are new titles continuing to emerge? What is the relationship between type of

institution and type of master's programs offered? Are research universities, for example, opting for the M.A. or M.S. over the M.Ed. while other institutions are moving toward the "education" degree titles?

Three sources of information were used to address the research questions: (a) *Peterson's Guide to Graduate Programs in Business, Education, Health, and Law* (Moore, 1979; 1989), (b) university catalogues for institutions offering master's programs in education, and (c) a survey questionnaire mailed to 664 U.S. institutions that offer such graduate programs. Using *Peterson's Guide* and institutional catalogues, researchers calculated the number of institutions offering various master's degree titles in education for both 1979 and 1989. Questions regarding program requirements were included on a national survey. Of the 664 survey questionnaires mailed, a total of 407 questionnaires were returned, constituting a 61% return rate. Preliminary analyses showed no systematic differences between respondents and nonrespondents.

Results

This section focuses first on the findings regarding master's degree titles and next on the program requirements for these degrees.

Master's Degree Titles

Table 1 shows the number of institutions during the past decade that offered various degree titles representing a master's degree in education. The list is limited to titles that are used in the general discipline of teaching and learning, rather than specific subject areas such as physical education, music education, or business education. If all sub-specialties are included, the list grows to nearly 100 master's degree titles--all offered in schools of education. As shown in the table, the M.Ed. is by a narrow margin the most popular master's degree title offered in schools of education. However, the M.A. and M.S. are close behind, with the M.S. increasing at a much faster rate during the past decade than the

M.A.: The number of institutions offering the M.Ed. increased by 27%, the M.A. by 19%, and the M.S. by 55%.

Table 1

Number of Institutions Offering Education Master's Degree Titles in 1979 and 1989

		1979	1989	Difference	% Change*
M.Ed.	Master of Education	244	309	+65	27
M.A.	Master of Arts	245	292	+47	19
M.S.	Master of Science	148	230	+82	55
M.A.Ed.	Master of Arts in Education	36	57	+21	58
M.S.Ed.	Master of Science in Education	65	99	+34	52
M.A.T.	Master of Arts in Teaching	94	102	+8	8
M.S.T.	Master of Science in Teaching	12	18	+6	-
Ed.M.	Master of Education	7	12	+5	-
M.S.E.	Master of Science in Education	2	13	+11	-
	Master of Special Education				
	Master of Science Education				
M.E.P.D.	Master of Education- Professional Development	4	5	+1	-
M.T.	Master of Teaching	1	1	0	-
M.I.	Master of Instruction	1	1	0	-
M.A.E.	Master of Arts in Education	0	5	+5	-
M.A.C.Ed.	Master of Arts in Continuing Education	0	1	+1	-
M.Sp.Ed.	Master of Special Education	0	1	+1	-
M.S.Sp.Ed	Master of Special Education	0	1	+1	-
A.M.	Master of Arts	1	0	-1	-

* Percent change is given for the six most commonly awarded degree titles.

The number of institutions offering the M.A.Ed. and M.S.Ed. also increased by over 50% during the past decade. The M.S.Ed. is beginning to rival the M.A.T. in popularity as a master's degree title, perhaps because the number of institutions offering the M.A.T. increased only slightly. Following the M.A.T. degree, there is a sharp decrease in the popularity of remaining titles; however, the table shows that some of the more obscure titles are also increasing in popularity. For example, the M.S.E. title was offered at only two institutions in 1979 but the offering to 13 institutions in 1989. In addition, as shown in the table, the field created four totally new titles during the decade and deleted only one.

Since the M.Ed., M.A., and M.S. are the most common titles offered by schools of education, further comparison of the proportion of institutions offering such degrees is essential to a full understanding of the issues regarding degree titles. Does the increase in the number of institutions offering the M.Ed. mean, for example, that schools of education are favoring that title for professional educators? Figure 1 shows that no such pattern is occurring. In fact, the percentage of institutions offering only the M.Ed. actually decreased slightly during the past ten years. The more traditional degree titles (M.A. and M.S.) continue to hold an important place in schools of education. If an institution chooses to offer only one type of degree--the traditional titles or the newer M.Ed., there is a much greater likelihood that the institution will opt for the traditional titles, since nearly half of all schools of education continue to offer only the M.A. or M.S.

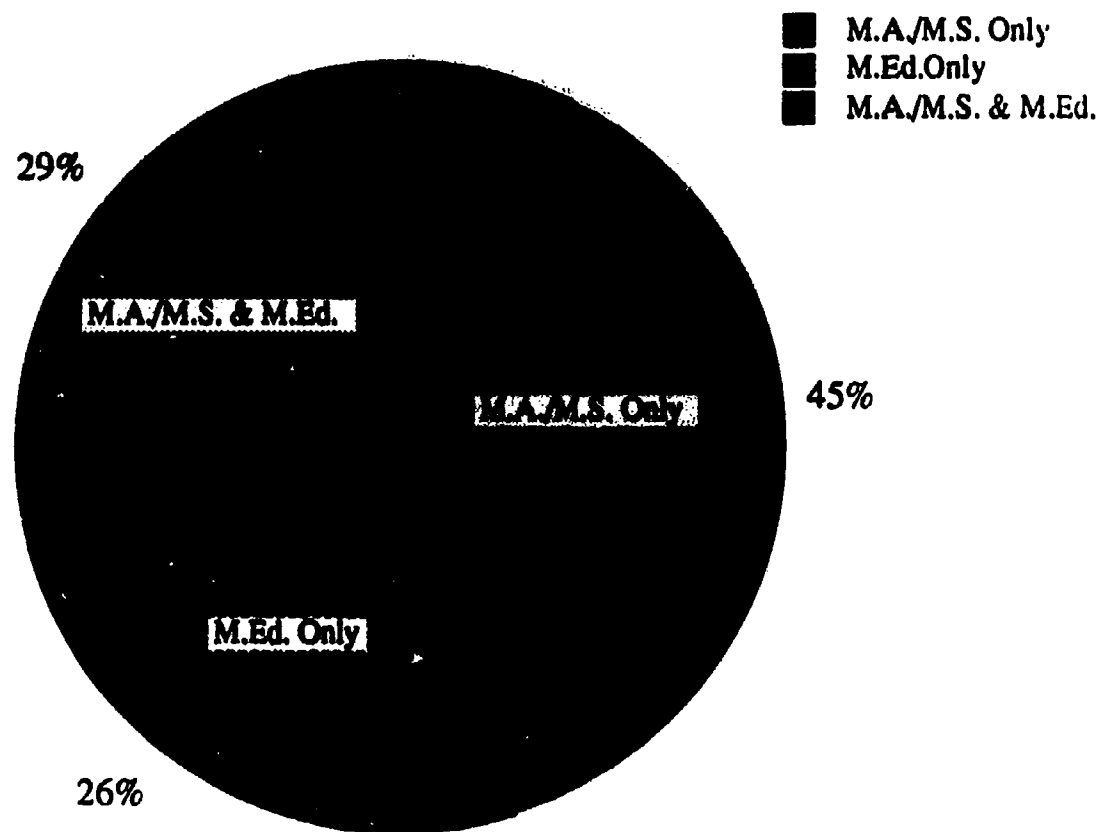


Figure 1. Percentage of institutions in 1989 offering only the M.S./M.A., the M.Ed., or both the M.S./M.A. and the M.Ed.

From this data, the question arises as to the relationship between type of institution and the specific degree titles offered. It would be easy to hypothesize that the research universities would be more likely to offer the traditional M.A. and M.S., while the comprehensive colleges and universities would opt for the M.Ed. Table 2 shows research and doctorate granting institutions are increasingly unlikely to offer the M.Ed. as their only master's degree title in education, but they are also increasingly unlikely to offer the M.A. or M.S. as their only title. The ten-year-trend has been to offer both the M.A. or M.S. and the M.Ed.--even for comprehensive colleges and universities. However, there are still

many more comprehensive institutions that offer only the M.A. or M.S. (141) than offer M.A./M.S. and the M.Ed. (86). As one might expect, the institutions that choose to offer only the M.Ed. are more likely to be comprehensive or liberal arts colleges than research or doctorate granting universities.

Table 2

Number of institutions offering M.A., M.S., or M.Ed. programs in 1979 and 1989.

Types of institutions	<u>M.A./M.S. & M.Ed.</u>			<u>M.A./M.S. Only</u>			<u>M.Ed. Only</u>		
	<u>1979</u>	<u>1989</u>	<u>Difference</u>	<u>1979</u>	<u>1989</u>	<u>Difference</u>	<u>1979</u>	<u>1989</u>	<u>Difference</u>
Research	25	38	+13	38	30	-8	16	8	-8
Doctorate Granting	25	33	+8	40	37	-3	21	11	-10
Comprehensive	42	86	+44	136	141	+5	89	92	+3
Liberal Arts	3	8	+5	21	35	+14	12	33	+21
Others	0	2	+2	9	6	-3	0	1	+1

Note: The numbers reflect only those institutions offering M.A., M.S., or M.Ed. degrees, not the total number of colleges and universities in each category.

Of particular interest is the growth and titling of degrees in the liberal arts colleges. In 1979 only 36 such institutions reported offering master's degrees in education, while in 1989 the number had more than doubled to 76. These are the institutions that tend to settle on only one degree title, possibly because they are smaller and offer fewer master's programs. But they are almost equally likely to settle on the more traditional M.A. or M.S. as they are the M.Ed.

Program Requirements

Those responding to the questionnaire in this study were asked to indicate whether their master's programs included certain major requirements, such as a master's project, a master's thesis, a written comprehensive exam, or an oral exam such as a thesis defense. Respondents were asked to specify whether all, most, some, or few of their master's programs required students to complete each of these tasks. Figure 2 shows that the most common requirement for a master's degree in education is a written comprehensive exam. Fully 77% of the respondents reported that all or most of their programs included this requirement. Master's projects are nearly as common as written comprehensive exams, with 76% indicating that all or most of their programs require the completion of some type of project.

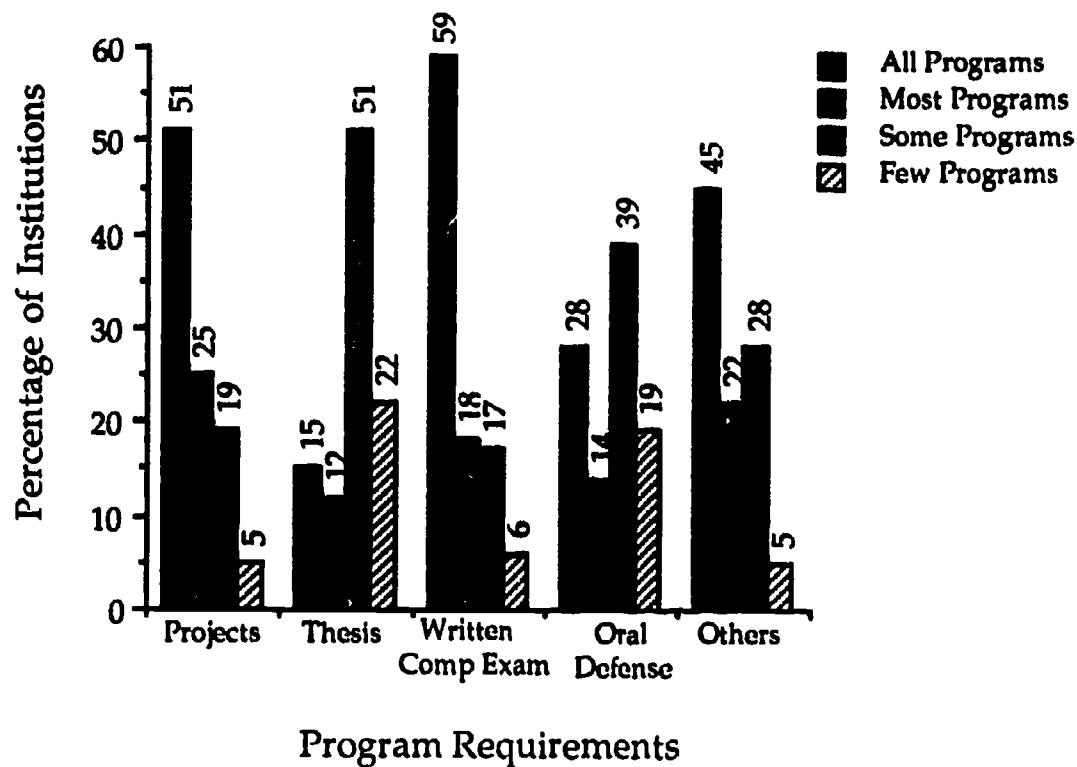


Figure 2. Percentage of institutions that include selected requirements for all, most, some, or few of their master's programs.

Given the number of institutions that offer only the traditional M.A. or M.S. the finding regarding the prevalence of the master's thesis was somewhat surprising. Only 27% of the responding institutions reported that all or most of their programs require a thesis. Although the questionnaire did not include further questions regarding the relationship between type of requirements and type of degree title, it is clear that many M.A. and M.S. programs require a project rather than a thesis, since nearly half of the institutions offer only the more traditional degree titles.

The oral defense appears to be required for some master's projects, but not for all. Only 42% reported that most or all of their master's programs require students to take an oral exam. Approximately one in five schools of education report that few of their programs require either a thesis or an oral exam.

Because the M.A. and M.S. are considered to be more research-oriented programs than the M.Ed. or M.A.T., it is important to know the differences in research competencies expected of students seeking each type of degree? Respondents were asked to indicate which of nine separate research competencies were included in the curricula for their master's degree programs. Degree programs were grouped into three categories: (a) M.A./M.S., (b) M.Ed./M.A.Ed./M.S.Ed., and (c) M.A.T./M.T./M.S.T. Data were analyzed using a chi square test of association with an alpha level set at $p < .05$. Two chi square tests were calculated, one comparing the competencies for the first two categories (M.A./M.S. versus M.Ed./M.A.Ed./M.S.Ed.) and the second comparing all three categories. The first chi square test showed that the prevalence of none of the nine competencies was significantly different for the M.S./M.S. compared with the M.Ed., etc. However, Table 3 shows that the percentages of programs requiring five of the nine competencies were significantly different when the three categories were compared. The

pattern in the table consistently shows that students who complete the M.A.T./M.T./M.S.T. are significantly less likely to have mastered "advanced naturalistic methods," "single subject designs," "advanced experimental design," "basic inferential statistics," or "educational measurement" than for students who complete the M.A./M.S. or M.Ed./M.A.Ed./M.S.Ed.

Table 3

Percentage of Institutions Requiring Research and Evaluation Competencies for Education Master's Programs

	M.A./M.S.	M.Ed./MAEd /MSEd	MAT/MT /MST	χ^2	DF	p
Conduct literature searches	94	92	86	4.6	2	.10
Basic Naturalistic Methods	71	69	62	2.3	2	.32
Advanced Naturalistic Methods	38	35	21	7.9	2	.01*
Single Subject Designs	51	55	38	7.1	2	.02*
Advanced Experimental Design	31	32	19	5.9	2	.05*
Basic Inferential Statistics	69	72	47	18.5	2	.01*
Advanced Inferential	24	22	13	4.7	2	.09
Product/Program Evaluation	47	57	48	4.8	2	.08
Educational Measurement	69	76	58	9.9	2	.01*

Table 3 shows that typically the M.Ed. is no less research-oriented than the more traditional M.A. or M.S., but that the M.A.T. does require less in the way of research

competencies from students. This finding is not surprising since the M.A.T. degree was originally developed specifically for students who already had obtained a baccalaureate degree in an arts and sciences major and wanted to obtain a teaching certificate. M.A.T. programs, at least those that first emerged, focused almost exclusively on teacher preparation, did not require theses, and thus did not include research methods courses.

Discussion and Conclusions

Fifteen years ago The Council of Graduate Schools found that including all academic disciplines there were more than 300 different master's degree titles being used in U.S. graduate schools (The Council of Graduate Schools in the United States, 1976). The authors of this report noted that differences in titles were often simply a result of a particular discipline adding its designation after the M.A. or M.S. (i.e. Master of Arts in Teaching or Master of Science in Engineering). The Council concluded that such designations were helpful neither to doctoral admissions committees nor to employers wishing to hire someone holding a master's degree. Two of the Council's recommendations bear repeating in the context of the present study:

- (i) the M.A. and the M.S. WITHOUT FURTHER DESIGNATION be the degrees awarded for completion of scholarly research and subject-teaching oriented Master's programs; and that the Master of Education, the Master of Business Administration, the Master of Music, etc. be the degrees for completion of professionally oriented programs;*
- (iii) the number of names used for Master's degrees and specialty designations be held to an absolute minimum. (p. 6)*

The results of the present study show that the education profession has moved in the opposite direction of that recommended by the Council of Graduate Schools. Not only has the number of education master's degree titles increased, but the degree titles that were relatively rare a decade ago are growing in popularity (i.e., M.A.Ed., M.S.Ed, M.S.E.,

M.S.T.) The field is certainly not moving toward the M.Ed. as the preferred degree title in education, since 45% of the schools of education are choosing to offer the M.A. or M.S. rather than the M.Ed. The data do show that the M.Ed. has become slightly more popular among institutions over the past ten years, but there is also evidence to show that institutions adding the M.Ed. are reluctant to discontinue the M.S. or M.A.

Possibly, the reason so many institutions offer more than one degree title is because schools of education often include a multitude of disciplines that relate only tangentially with education. With these "extra" disciplines come extra degree titles, one could argue. However, while this line of reasoning has some merit, it does not address the essence of the problem. For the data show clearly that even considering only those degree titles that focus strictly on teacher preparation, the field is still multiplying titles and popularizing rare ones. Also it is evident from institutional catalogues that many graduate schools offer different degree titles in the same sub-discipline. For example, a student interested in pursuing a special education master's program may be faced with selecting among the M.S., M.A., or M.Ed. at a single institution.

Some might suggest that the problem of multiplying degree titles is no problem at all. What difference does it make whether a graduate's diploma says, M.A., M.S., M.Ed., M.A.T., or M.--whatever? The transcript indicates the courses and competences covered in the degree, so why worry? There are at least three reasons to be concerned. First, the meaning of the degree is confusing when so many titles refer to similar attainments. If, for example, the M.Ed. designation actually meant that a student had completed a different set of requirements than the student with the M.S., there would be reason to have two titles. But as the data in this study show, requirements cannot be ascertained based on degree title alone. This does not necessarily mean that within a single institution requirements for the M.Ed. and M.S. do not differ in easily definable ways, but the data show that between institutions there is little, if any, consistency. The M.Ed. at one institution may require a thesis while the M.Ed. at another does not. The M.A. at one institution may require

courses in statistics and research design while the M.A. at another institution requires neither. With as much variance in program requirements within a single degree title as between two different degree titles, there seems little reason to multiply titles as if different letters following the "M" in master's degree actually meant that students had completed substantively different graduate programs.

Second, confusion in the meaning of a specific degree title is a problem not only for doctoral admissions committees and employers, but for the students and faculty involved in the program as well. When a school of education offers multiple master's degree programs in a single discipline, faculty and students may have difficulty distinguishing one program from another if requirements are similar.

Third, as long as schools of education multiply graduate degree titles and popularize rare ones, the stature of the field will suffer. Other professional schools have been more successful at coalescing around single titles than have schools of education. For example, schools of business typically feature the M.B.A. Subdisciplines in such business schools, such as accounting or organizational behavior, have also tended to offer single professional master's degree titles. Schools of social work have primarily adopted the M.S.W.

When a department, college, or school narrows its graduate programs and degree titles, the program itself tends to be strong. Rather than seven faculty in a department of educational studies attempting to offer three separate master's programs (i.e., M.Ed., M.A., M.A.T.), faculty should determine the type of master's program best suited for their needs and qualifications and eliminate those they may be less equipped to offer. By offering strong master's programs that carry consistent meaning to students, faculty, and employers, a department will strengthen itself, the college or school to which it belongs, and eventually the profession.

Program Requirements

Once the education profession begins to focus on a single master's degree title for a single subdiscipline, requirements for such a degree must still be defined. The data in the present study show little agreement regarding requirements for a master's degree in education. Master's projects are clearly more popular than theses, and written comprehensive exams are much more common than oral exams. However, even for those requirements--the ones with the strongest consensus among the schools--only slightly more than half of the institutions report requiring them for all master's students.

The situation is starkly different for doctoral programs in education. Even though the field of education has yet to settle on a single degree title (Ed.D. or Ph.D.), there is remarkably high agreement regarding the basic requirements for a doctorate in education (Andersen, D. G., 1983; Wong & Osguthorpe, 1991). For example, nearly all institutions (98%) report that they require a dissertation for either the Ed.D. or the Ph.D. Research competencies, such as those assessed in this study, are also more consistent for doctoral students than for master's students.

Unlike doctoral programs in education, master's degree titles and requirements have been influenced by forces in undergraduate teacher education. Although the present study did not attempt to assess reasons an institution chooses to offer a certain master's degree title or set certain program requirements, it can be easily inferred that the movement in teacher education toward programs that extend beyond the traditional baccalaureate is undoubtedly a factor. Even before the current call to extend teacher education beyond four years, schools of education struggled with the issue of accommodating the student who holds a baccalaureate degree in the arts and sciences but who wishes to obtain a teaching certificate. The M.A.T. degree was created in response to this issue. However, recent research has shown that even the M.A.T. has strayed significantly from its original

moorings--varying as much in requirements as any other master's degree in education (Clowes, 1990).

Extended teacher education programs pose significant challenges for both the integrity of the master's degree and the integrity of the profession itself. If, for example, an institution moves to an extended program and continues to offer the same teacher education curriculum as for the former baccalaureate program, should the institution award the graduate a master's degree? Other research has shown that as institutions extend their curricula, the resulting programs are more likely to terminate with a master's degree, rather than simply recommendation for teacher certification (Wong & Osguthorpe, 1991). The problem is exacerbated as institutions adding extended programs commonly continue to offer their baccalaureate programs; thus, those seeking a master's degree are enrolled in most of their courses with those seeking the baccalaureate. One questions what these students have "mastered" in the field of education beyond what is being concurrently mastered by the undergraduate.

Recommendations

The following recommendations are offered with the intent of reducing the confusion that currently exists over master's programs in education, strengthening such programs, and increasing the stature of the profession:

- Schools of education should assess their current offerings to determine if there are master's degree titles and programs that could be eliminated from their offerings. This is always a wrenching process, but it can help to focus a college, school, or department on the programs that faculty are best prepared to offer. At those institutions that currently offer more than one master's degree title in a single area of specialty (i.e., educational studies), faculty should be challenged to coalesce around a single title.

- Schools of education should review current requirements for their master's programs and question inconsistencies between programs--especially those carrying the same title. For example, do some M.S. programs in education require a thesis, while others do not? Can such discrepancies be justified? Is there a discernable difference between master's projects and master's theses? If not, why does one program require a project and another a thesis? Are there programs that require neither a project nor a thesis? Is there a convincing rationale for absence of such a requirement, or are faculty simply responding to the time constraints that thesis or project review places upon them?
- A national forum should be established in which the master's degree in education can be addressed. This forum might include representatives from the national associations, such as the American Association of Colleges for Teacher Education, the National Council for Accreditation of Teacher Education, the Council of Graduate Schools, or the Holmes Group, as well as a group of faculty and administrators from the broad range of schools of education that offer graduate programs. Such a commission could address issues related to the master's degree, gather more data--especially regarding the nature of how institutions make decisions concerning master's degrees in education--and develop a consensus-building process to assist schools of education in coalescing around a small set of titles or even a single master's degree title that will bring consistency to their programs and greater consistency and stature to the profession as a whole.

References

- Andersen, D. G. (1983). Differentiation of the Ed.D. and Ph.D. in education. *Journal of Teacher Education*, 36 (3), 55-58.
- Brown, L. D. (1990, April). A perspective on the Ph.D.-Ed.D. discussion in schools of education. Paper presented at the annual meeting of the American Educational Research Association, Boston, Massachusetts.
- Carpenter, D.S. (1987). On-going dialogue: Degrees of difference. *The Review of Higher Education*, 10(3), 281-286.
- Clifford, G.J. and Guthrie, J.W. (1988). *Ed School: A brief for professional education*. Chicago: The University of Chicago Press.
- Clowes, D.A. (April, 1990). Teacher education reform and the M.A.T. degree: A false promise? Paper presented at the annual meeting of the American Educational Research Association, Boston, Massachusetts.
- Coley, R.J. & Thorpe, M.E. (1985). A look at the MAT model of teacher education and its graduates: Lessons for today. Princeton, N.J.: Educational Testing Service (ED 272 457).
- Conrad, C. F. & Eagan, D. J. (1990). Master's degree programs in American higher education. In J.C. Smart (Ed.), *Higher Education Handbook of Theory and Research*, (Vol. 6). New York: Agathon Press.
- Courtenay, B.C. (1988). Eliminating the confusion over the Ed.D. and Ph.D. in colleges and schools of education. *Innovative Higher Education*, 13(1), 11-21.
- Dill, D.D. and Morrison, J.L. (1985). Ed.D. and Ph.D. research training in the field of higher education: A survey and proposal. *The Review of Higher Education*, 8 (2), 169-186.
- Goodlad, J.I. (1990). *Teachers for our nation's schools*. San Francisco: Jossey-Bass.

- Johnston, J.S., Spalding, J.R., Paden, R., Ziffren, A. (1989). *Those who can*.
Washington, D. C.: Association for American Colleges.
- Kauss, T. (1988). *The master of arts in teaching: An idea whose time has come, again*.
Washington, D.C.: Academy for Educational Development, Inc.
- Moore, H.E., Russell, J.H., & Ferguson, D.G. (1960). *The doctorate in education* (Vol. 2). Washington D.C.: The American Association of Colleges for Teacher Education.
- Moore, T.C. (1979). *Peterson's Guide to graduate programs in business, education, health and law*. Princeton, N.J.: Peterson's Guides.
- Moore, T.C. (1989). *Peterson's Guide to graduate programs in business, education, health and law, 23rd edition*. Princeton, N.J.: Peterson's Guides.
- Schneider, B. L., Brown, L., Denny, T., Mathis, B.C. & Schmidt, W. (1984). The deans' perspective on the status of doctoral programs in schools of education, *Phi Delta Kappan*, 65, 617-620.
- The Council of Graduate Schools in the United States (1976). *The master's degree*.
Washington, D.C.
- Wong, M.J. & Osguthorpe, R.T. (April, 1991). A national study of graduate programs in education. Paper presented at the annual meeting of the American Educational Research Association, Chicago, Illinois.