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# Knowledge and Mythology in Teacher Education

## Abstract

*It is argued that recent proposals to improve teacher education programs in Canada will not result in significant improvements because they are based upon a model of teacher education that is similar to an encyclopedia of mythology rather than an encyclopedia of knowledge. This model of teacher education is not likely to change in the near future unless more fundamental and massive proposals are adopted. Most faculties of education are probably unable, and unwilling, to implement such radical changes.*

## Résumé

*D'aucuns affirment que les récentes propositions visant à améliorer les programmes de formation des enseignants au Canada n'entraîneront pas d'amélioration significative du simple fait qu'ils sont basés sur un modèle qui ressemble plus à une encyclopédie de la mythologie qu'à une encyclopédie du savoir. Ce modèle ne devrait rien changer à court terme à moins que des mesures beaucoup plus draconiennes ne soient prises. La plupart des facultés des sciences de l'éducation sont sans doute incapables et peu désireuses d'appliquer des changements aussi radicaux.*

In Canadian faculties of education there has been a renewed interest in how the education of teachers may be improved. Recently, new initiatives have been proposed from an understanding of the historical developments (see Kerr, 1983; Patterson, 1979) and philosophical

perspectives on teacher education (see Hopkins, 1982; Miller & Taylor, 1984; Volpe, 1981; Wideen & Holborn, 1986). The proposed revisions in teacher education include such recurring themes as separating the practical aspects from the theoretical aspects, increasing the basic degree programs from four to five years, and increasing the length of practice teaching.

There is little convincing evidence that these proposals will improve teacher education, nor that they will improve the education of children, which is the ultimate aim. Rather, if one examines teacher education from a broader perspective one can see why there is little hope of improving teacher education without much more fundamental changes – changes which most faculties of education are probably unwilling and unable to implement.

### **Two Ideal Types of Teacher Education Programs**

Sociologists often use the concept of ideal types to discuss the nature of social institutions. An ideal type is intended to be a simplified and somewhat exaggerated image of reality. As such, it is recognized that reality is much more complex than the ideal type would indicate, but that it is a model of reality. Like all models, an ideal type may provide a simplified perspective which can help one interpret and understand reality.

In education, there seem to be two ideal types in the construction of programs. First, there is a Socratic model in which students work very closely with a great person and learn by participating in an extended apprenticeship. This model is often used in doctoral programs, particularly in European universities. Second, there is an encyclopedic model where students are provided with courses intended to complete their "circle of knowledge" (see Wegener, 1978, p. 48). This is the model that is generally used in both undergraduate and graduate university programs in Canada.

In the encyclopedic model there are also two ideal types – one is a model based upon an encyclopedia of knowledge, and the other is a model based upon an encyclopedia of mythology. The distinguishing characteristics of an encyclopedia of knowledge are the reliance upon rationality, the interrelationship of knowledge, and the acceptance of the belief that knowledge, obtained through rational procedures, may not be useful in the solution of practical problems (see Nisbet, 1971, p. 24; Wegener, 1978, pp. 90-126). Following through with this analogy, in an encyclopedia of knowledge each topic is based upon a rational and often scientific understanding of each specific issue, topics are cross-referenced, and there is little concern for the practical application of the information. In an encyclopedia of mythology, on the other hand, the distinguishing characteristics are the importance of tradition rather than rationality, the uniqueness of each piece of information rather than its conjunction with

other pieces of information, and the immediate usefulness of the information.

Thus, the information in an encyclopedia of knowledge is open to rational debate and revision on the basis of scholarly research (Nisbet, 1971, p. 32), while the information in an encyclopedia of mythology is not open to debate and revision (Becker & Barnes, 1961). From another perspective, in an encyclopedia of knowledge, opinion and knowledge are distinct, while in an encyclopedia of mythology, opinion (often from elders) and knowledge are indistinguishable. Furthermore, in an encyclopedia of knowledge, information and action are distinct, while in an encyclopedia of mythology, information and action are united. Becker and Barnes, in discussing the mythological thought of preliterate people, implicitly make this distinction in the following words:

... a large part of their thought is not expressed in words, much less in systematic theories, and even when they do give verbal expression to their social insights, proverbs rather than more thoroughly generalized abstractions are the rule. In short, their social thought must often be inferred from their conduct; it is usually concrete and implicit, it takes the form of pithy sayings arising from circumscribed experience rather than condensed formulas of universal applicability . . . . Concrete versus abstract with a vengeance! (p. 15)

### **The Reality of Teacher Education Programs**

Now that the ideal type of knowledge and mythology have been briefly discussed, the focus will be on teacher education programs in order to develop a better understanding of them. In this respect, this writer argues that the programs that he has been associated with over the past twenty-five years reflect the encyclopedia of mythology to a much greater degree than they reflect the encyclopedia of knowledge. This does not mean that teacher education programs are devoid of knowledge. Such a position is not tenable, but it can be argued that the overall ethos of teacher education programs is mythological. There are four types of evidence which support this claim.

First, members of most faculties of education do not publish, at a very high rate, scholarly articles in either education journals or in the journals of the disciplines that are the foundations of educational practice (see Arlin, 1978; Clifton & McDonald, 1984; Dreeben, 1970, p. 121; Kerr, 1983, p. 533; Schwebel, 1982). At the same time, there is little participation by professors of education in scholarly conferences (Clifton & McDonald, 1984), while there is usually much higher participation in practical conferences oriented towards school teachers (see Conant, 1963, p.

7). Additionally, members of faculties of education do not generally obtain as much research money as members of most other faculties, as is shown by statistics from various Canadian universities on the ranking of education in comparison with other units. Thus, for many faculty members in education, knowledge is not gained through research and scholarly inquiry, but is gained through experience and practice. In effect, faculty members in education have not generally internalized what Wallerstein (1969, p. 8) notes as an important part of the ethos of the university: "The work of the university is not peace by combat – intellectual combat," where the bullets are words and the missiles are scholarly papers.

Second, there is a very strong practical orientation in most programs for the education of student teachers. Many professors of education have noted that, in their view, practice teaching is the most important aspect of the education of student teachers (see Clifton, 1979; Lortie, 1975, p. 70-71), and a recent survey of education students at the University of Alberta notes that over 92 percent of them think that their practice teaching is a much more important aspect of their preparation than courses in the social scientific basis of education or even courses in classroom management (Nixon & Bumbarger, 1984). Moreover, there is a persistent and consistent disparaging of theoretical courses – history, philosophy, and sociology of education, for example – by professors of education, politicians, school administrators, student teachers, and teachers, and at the same time there is an idealization of courses in practical skills – courses in instruction and management (Dreeben, 1970, p. 126; Lortie, 1975, p. 74; Miller & Taylor, 1984, p. 333). As such, courses in faculties of education are often noted for being "mickey mouse" (Lortie, 1975, p. 160). This practical orientation alienates professors of education and student teachers from the intellectual roots of the profession and turns them towards the mythological aspects of the practice of teaching.

Third, there are many ritualistic aspects of teacher education that are not generally subjected to scholarly inquiry and debate. Perhaps the most pervasive is the ritual of writing lesson plans and the ritual of going out to practice teach. Students in faculties of education seem to be continually writing detailed lesson plans that few, if any, continue to write when they are bona fide teachers. Moreover, student teachers, professors of education, and teachers continue to believe in the importance of practice teaching even though there is some evidence that practice teaching is simply an exercise in survival that has little relationship to one's ultimate performance as a bona fide teacher (see Clifton, 1979; Emerson, 1986, p. 11).

Finally, a great number of courses are generally offered in faculties of education, and there is typically very little integration of these courses into coherent programs of study (see Clifton & Long, 1984; Hunt, 1978).

That is, there is little sense of the sequencing of courses so that they fit into a logically developed scheme that is consistent with the principles of curriculum construction taught by professors of education. An examination of the calendars for universities in Western Canada, comparing the organization of courses in the faculties of law and medicine with the organization of courses in the faculties of education, illustrates that the programs are much more highly organized in law and medicine than in education. Moreover, a large part of the organizational structure that is evident in teacher education programs seems to come from the requirement for certification imposed by the provincial departments of education.

As a result of the great number of courses that are offered and the loose organization of these courses into programs, student teachers, to a considerable degree, create their own education programs on the basis of such things as the time courses are offered, who teaches the course, when they must work at their part-time jobs, and perhaps the courses they think they may need to get a teaching position. Theoretically, at least, the loose organization of courses and the great diversity of courses that are offered in faculties of education suggest that knowledge is not perceived as being rational and interrelated but traditional and unique.

In essence, programs of study in faculties of education closely resemble an encyclopedia of mythology. There are a great number of courses that are loosely, if at all, interrelated with each other; there are a number of ritualistic practices which are not open to scholarly inquiry and debate; there is a very strong practical orientation in the programs; and there are few signs that the faculty members have internalized the value of research and scholarly inquiry which is the basis of an encyclopedia of knowledge and the ideal of the university.

### **The Future of Teacher Education**

There is little doubt that teaching is one of the most stressful and uncertain of all the professions (Dreeben, 1979, p. 79; Lortie, 1975, p. 134-161; Veenman, 1984, pp. 153-160). Within their classrooms, teachers find it stressful to deal with students who have great diversity in ability, interest, and motivation; also, they find it stressful to interact with students on the basis of universalistic principles while, at the same time, maintaining their concern for each individual. Teaching is a stressful profession, in part, because of the conflicting expectations of the teachers' instructional role and their socialization role – a role they are increasingly expected to perform.

With the advent of a number of recent trends in Canadian society, the amount of stress in teaching will no doubt increase. One observes increasing criticism of teachers in the public media (see Adelson, 1983;

Brimelow, 1983; Bruning, 1986; Kerr, 1983; Nikiforuk, 1984; White, 1984); new policies, such as family life education, mainstreaming, and multiculturalism which increase the demands upon teachers; and concurrently the **Canadian Charter of Rights and Freedoms** which will undoubtedly ensure that students gain rights and privileges they have not had before (see Magsino, 1985). These social factors will tend to increase the amount of stress upon teachers because of the uncertainty that they will bring into the negotiation between students and teachers. These changes will force teachers to deal with greater variability in students' attitudes and behaviour which, in turn, will ensure that teachers will have less confidence, rather than more confidence, in their interaction with students.

Nevertheless, the stresses and uncertainties of teachers are less than those of student teachers. Not only do student teachers have to face all the stresses and uncertainties associated with teaching (at least in their minds), but they must also face two additional stresses and uncertainties. Specifically, they face the stress of knowing that, for a variety of reasons, their program is far from adequate in preparing them for a teaching career (see Dreeben, 1970, pp. 116-156; Sarason, Davidson, & Blatt, 1986, pp. 97-116; Veenman, 1984, p. 147), and they face the stress of knowing that there are relatively few teaching positions available, and those that are available are far from ideal.

Uncertainty causes stress which is likely to be exhibited in two ways. First, it is likely to be exhibited in the changing patterns of negotiation within university classrooms. Stress increases the affiliation of students. As such, student teachers who are under considerable stress are much more likely to interact with each other, develop social cohesion, and ultimately engage in joint action directed towards reducing their stress (Albas & Albas, 1984). When student teachers are under stress, professors are much more likely to face a unified group of emotionally volatile student teachers than when they are not under stress. That is, these student teachers are more likely to become antagonistic towards both their professors and the courses which they perceive, at least in part, as causing their discomfort. Moreover, the basis of this antagonism is more likely to be emotional than rational.

Second, student teachers who are under stress are likely to search for other ways to help them face their situations. There is some evidence which suggests that when people are under stress they often engage in magical rituals as a way of mitigating the stress. Malinowski (1954), for example, has illustrated how Trobriand Islanders use rituals to help them face the uncertainty of fishing in the unsafe seas, Albas and Albas (1984) have illustrated how university students use rituals to help them face the uncertainty of final examinations, and many others have noted that religious ceremonies become much more salient to people who are chronically ill.

Thus, the increased uncertainties faced by student teachers will probably result in united action directed towards their professors and courses, and an increased concern for magical rituals. When professors are faced with hostile student teachers, they are likely to seek ways of mitigating the stress which results from the uncertainty of such interaction. One obvious way for professors to mitigate their stress, and to be seen as serving the needs of their student teachers, is to inflate the grades that the student teachers receive in their courses. In fact, an examination of the average grades received by students in education and students in arts and sciences at several Canadian universities illustrates that education students have substantially higher grades than arts and science students. In a related situation, Taylor and Miller (1985, p. 112) report very high, and very positively skewed, grades for the evaluations of student teachers' practicums. Specifically, the average grade was 186.99 out of 225 (83%) when judged by the cooperating teachers and 169.08 (75%) when judged by the faculty consultants.

In this respect, professors of education (and perhaps even cooperating teachers) seem to attempt to deal with both their own uncertainty and the uncertainty of their student teachers by distributing grades so that fewer student teachers fail and a larger percentage obtain higher grades. The inflation of grades reduces the negotiation between student teachers and their professors by reducing, for the student teachers, the uncertainty of their success in courses. Inadvertently, the inflation of grades is also an implicit recognition, by both professors and student teachers, that the information passed on in courses is more myth than knowledge. If the information were knowledge it would be much more meaningful to make distinctions on the basis of quality, while if the information is myth it is much less meaningful to make such distinctions. This happens because the real test of a myth is in its application to a particular situation, and since there are a great variety of very complex teaching situations, neither professors nor cooperating teachers really know what will ultimately work for particular student teachers in their own classrooms.

The second and related way of dealing with the situation is that professors of education may bend even further towards the demands of their student teachers and make their courses even more relevant. Relevant courses will appeal to the ritualistic needs of the student teachers so that they will at least think that they can deal more effectively with the uncertainties of their present and anticipated situations. In this respect, the talismanic phrase is "the needs of student teachers." Thus, there will be increased pressure from student teachers, as well as from professors who want to meet the perceived needs of their student teachers, to create additional courses designed to meet increasingly specific and practical needs. For example, where once there was one course on the teaching of reading in elementary schools, there will become a number of courses directed towards

specific needs, such as reading for emotionally disturbed pupils, reading for ethnic minority pupils, and reading for Native Indian pupils.

There will also be greater pressure for more practical courses at the graduate level. This will happen because more teachers have completed their undergraduate degrees and they desire the increased salary that results from additional years of study and, at the same time, they also want to deal more effectively with the specific uncertainties they face on a day-to-day basis in their own classrooms (see Hargreaves, 1984). These graduate student teachers are more likely to take courses on a part-time basis, and they are more likely to register in departments and programs that they see as offering very practical and very specific programs. Thus, these graduate student teachers are not as committed to knowledge as to the increase in salary and the solution of practical problems. Their basic commitment is to the mythology of teaching rather than to its intellectual basis.

Moreover, these graduate student teachers are likely to request, from their professors, more specific courses in practical areas. They may request individual reading courses or they may request, through their teachers' union, more specific programs directed towards specific problems. In fact, a recent analysis of the graduate calendar at the University of Manitoba illustrates that in Education there are approximately 3.6 times the number of graduate courses on a per faculty member basis, as for faculty members in Arts and Science, and at the University of Saskatchewan there are 1.9 times the number of graduate courses, on a per faculty member basis, in the College of Education, as for faculty members in the College of Arts and Sciences. Moreover, at the University of Manitoba, some faculty members in Education have "supervised" fifteen individual reading courses, besides their regular nine hours of teaching, while other faculty members have taught fifteen courses, which is approximately two and one-half times the normal teaching load. This may happen because both the professors and their graduate student teachers see themselves as dealing with specific practical situations and specific ritualistic behaviour. Conversely, they do not see knowledge, or a liberal education (see Wegener, 1976), as being either necessary or important.

The more professors of education extend themselves into more practical areas, the less they will likely know about these areas, and consequently the more likely they will rely on ritualistic behaviour and the less likely they will be rigorous in evaluating their student teachers' work. This is because the professors will really know very little about the specific situations since their information has been gained through experience rather than through research and scholarship. Moreover, professors of education will not have had the same experience as their student teachers. As a result, student teachers will often think that they know more about the practical



situations in schools than do their professors (which may be correct in many cases), and this will depreciate the professors' authority and increase the potential for courses to be seen as "mickey mouse." Grades will likely become even more inflated, and student teachers will likely seek even more practical courses, which their professors will be even less able to deliver satisfactorily. At the same time, professors will be even less sure of themselves and they will attempt to decrease their stress by engaging in more ritualistic behaviour and further inflate the grades of their student teachers. This will lead professors and their student teachers further away from the encyclopedia of knowledge, which is the ideal of the university, and further embed them in the encyclopedia of mythology.

### **New Policies are Necessary**

From this perspective, the changes being proposed by faculties of education, such as separating the practical aspects of teacher education from the theoretical aspects, increasing basic degree programs from four to five years, or increasing practice teaching from six to 18 weeks, are simply perfunctory. Ultimately, it will make very little difference. What is needed is a revolution in which faculties of education, as well as those institutions and individuals which support them, change their conception from mythology to knowledge. The attitudes, behaviour, and values of the "Enlightenment" must become disseminated throughout the society and must specifically become internalized by all those involved with education.

From this perspective, there is little use in attempting to improve teacher education programs from inside faculties of education, or even from inside universities. Outside intervention is necessary to break the vicious circle so that both teacher education and the education of children are improved. Political parties in government must appoint ministers of education who ascribe to the encyclopedia of knowledge, and opposition parties must appoint "shadow-ministers" who hold similar dispositions. Members of parliament, who have been school board members, teachers, superintendents of school, or professors of education, should not normally be considered as suitable candidates. If they have been marginally successful in any of these occupations, there is little doubt that they have already been beguiled by the encyclopedia of mythology.

Following this, there are three policies that must be implemented. First, ministers of education must initiate a critical examination of all teacher education programs. This examination must be conducted by people who have been proponents of the encyclopedia of knowledge. Ministers must then encourage universities to establish more rigorous programs for the education of teachers. In order to do this they must persuade senior administrators in universities to act as if teachers' education is the mandate

of the total institution, rather than the mandate of just a faculty of education.

Second, ministers of education must change their policies for the certification of teachers. Interim and permanent certificates must not be awarded to people simply because they have been recommended by faculties of education, or because they have taken additional courses at either the undergraduate or graduate levels. Likewise, departments of education must revoke the teaching certificates of incompetent teachers. Certification must be based upon demonstrable knowledge and skill through assessment procedures which are independent of faculties of education.

Finally, ministers of education must establish policies and provide funding for the support of educational research of high quality. In this respect, it is important that faculty members in education compete with other researchers for these funds. At the same time, faculties of education, school boards, and private schools must be encouraged to participate in educational research in order to improve their educational programs and to affirm that knowledge and practice are based upon research and scholarship.

### Conclusion

These proposals are designed to begin weaning the educational community, particularly faculties of education, from the encyclopedia of mythology to the encyclopedia of knowledge. It is suggested that without such policies, the concern for practical courses and programs will continue to degenerate into a vicious circle leading faculties of education further into the encyclopedia of mythology and further away from the encyclopedia of knowledge. This will happen because the appropriate attitudes, behaviour, and values, on the part of professors of education, student teachers, teachers, and school administrators, have already been initiated into this encyclopedia, the encyclopedia is easy to read and understand, and it has ritualistic suggestions which are perceived as being practical. Moreover, professors of education are, on average, an aging population, and as they grow older they will probably become even more conservative in their mythological beliefs. At the same time, academic freedom, enshrined in collective agreements, and the fact that many of these older professors will have attained the status of "full professor" (without having substantial publication records) means that there will be a considerable amount of license for professors to maintain and disseminate their myths.

Senior administrators of universities, professors of arts and sciences, and university students often claim that many professors of education, as well as their student teachers, are not very intelligent or they are lazy (Schwebel, 1985). This is not true. These professors and their student

teachers work extremely hard, but they are steeped in the world of mythology rather than in the world of knowledge. As such, they simply cannot help believing in the encyclopedia of mythology. What is required is a revolution in the faculties of education that would be of similar magnitude as the revolution from Newtonian physics to quantum physics.

At the same time, one continually hears proclamations from professors of education that they are in fact knowledgeable and that they do follow *The Scientific Basis of the Art of Teaching* (Gage, 1978). As such, one may be fooled into thinking that the encyclopedia of knowledge, as the basis for university programs in education, is slowly but surely being adopted. There is little evidence to support such optimism. The encyclopedia of knowledge is not adopted by proclamations, but by research and scholarship; that is, the encyclopedia of knowledge is sanctified by engaging in the intellectual combat that is the basic value of the university. The reality is that most faculty members and student teachers in faculties of education are working in a "pre-Enlightenment" stage where myth has precedence over knowledge, where opinion is knowledge, where knowledge (opinion) must be practical, and where tradition has precedence over scholarship. As such, these people do not understand the concepts of "research" and "scholarship" even though they use the words in a ritualistic manner.

## REFERENCES

- Adelson, J. (1983, July). How the schools were ruined. *Commentary*, 45-54.
- Albas, D.C., & Albas, C.M. (1984). *Student life and exams: Stresses and coping strategies*. Dubuque, IA: Kendall/Hunt.
- Arlin, M. (1978). Quality and impact of scholarly journal publication in Canadian faculties of education. *Canadian Journal of Education*, 3, 1-18.
- Becker, H., & Barnes, H.E. (1961). *Social thought from lore to science* (Vol. 1). New York: Dover.
- Brimelow, P. (1983, September 19). What to do about America's schools. *Fortune*, 60-64.
- Bruning, F. (1986, April 21). An education system under siege. *MacLean's*, 11.
- Clifton, R.A. (1979). Practice teaching: Survival in a marginal situation. *Canadian Journal of Education*, 4, 60-74.
- Clifton, R.A., & Long, J.C. (1984). Toward a conceptualization of teacher education. In P. Grimmett (Ed.), *Research in teacher education: Current problems and future prospects in Canada* (pp. 10-20). Vancouver, BC: University of British Columbia, Centre for the Study of Teacher Education.

- Clifton, R.A., & McDonald, N.G. (1984, January). Research in Canadian faculties of education: Another look. *CSSE News*, 9, 3-7.
- Conant, J.B. (1963). *The education of American teachers*. Toronto: McGraw-Hill.
- Dreeben, R. (1970). *The nature of teaching: School and the work of teachers*. Glenview, IL: Scott, Foresman.
- Emerson, G.J. (1986). Ten common assumptions about teaching: Reflections on Taylor and Miller. *Canadian Journal of Education*, 11, 9-19.
- Gage, N.L. (1978). *The scientific basis of the art of teaching*. Glenview, IL: Teachers College Press.
- Hargreaves, A. (1984). Experience counts, theory doesn't: How teachers talk about their work. *Sociology of Education*, 57, 244-254.
- Hopkins, D. (1982). The problem of change in Canadian teacher education. *The Canadian Journal of Higher Education*, 12, 17-31.
- Hunt, D. (1978). In-service training as persons-in-relations. *Theory Into Practice*, 17, 239-244.
- Kerr, D.H. (1983). Teaching competence and teacher education in the United States. *Teachers College Record*, 84, 525-592.
- Lortie, D.C. (1975). *Schoolteacher: A sociological study*. Chicago, IL: University of Chicago.
- Magsino, R.F. (1985). *Teacher and pupil rights: Prospects for change?* Unpublished. St. John's, Newfoundland: Memorial University, Department of Educational Foundations.
- Malinowski, B. (1954). *Magic, science, and religion*. New York: Doubleday.
- Miller, P.J., & Taylor, G.D. (1984). The theory-practice relationship in teacher education: Need there be any? *The Alberta Journal of Educational Research*, 30, 332-340.
- Nikiforuk, A. (1984, September). Why our teachers can't teach: The sad state of a profession that is short changing our kids. *Quest*, 35-40.
- Nisbet, R. (1971). *The degradation of the academic dogma: The university in America, 1945-1970*. New York: Basic Books.
- Nixon, M.T. & Bumbarger, C.S. (1984). Prospective teachers: Views of programs and needs. *The Alberta Journal of Educational Research*, 30, 226-237.
- Patterson, R.S. (1979). History of teacher education in Alberta. In D.C. Jones, N.M. Sheehan, & R.M. Stamp (Eds.), *Shaping the schools of the Canadian West* (pp. 192-207). Calgary, AB: Detselig.
- Sarason, S.B., Davidson, K.S., & Blatt, B. (1986). *The preparation of teachers: An unstudied problem in education*. Cambridge, MA: Brookline Books.
- Schwebel, M. (1982). Research productivity of education faculties: A comparative study. *Educational Studies*, 13, 224-239.
- Schwebel, M. (1985). The clash of cultures in academe: The university and the education faculty. *Journal of Teacher Education*, 36(4), 2-7.
- Taylor, G.D., & Miller, P.J. (1985). Professional course work and the practicum: Do good students make good teachers? *Canadian Journal of Education*, 10, 105-120.
- Veenman, S. (1984). Perceived problems of beginning teachers. *Review of Educational Research*, 54, 143-178.

- Volpe, R. (1981). Knowledge from theory and practice. *Oxford Review of Education*, 7, 41-51.
- Wallerstein, I. (1969). *University in turmoil: The politics of change*. New York: Atheneum.
- Wegener, C. (1978). *Liberal education and the modern university*. Chicago, IL: University of Chicago.
- Wideen, M.F., & Holborn, P. (1986). Change and survival in faculties of education. *Interchange*, 17, 33-47.
- White, M.I. (1984). Japanese education: How do they do it? *The Public Interest*, 76, 87-101.

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