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ABSTRACT

There is a strong international trend for governments to move teacher training away from the universities into the schools. In effect, this is a challenge to the expertise and effectiveness of university-based teacher educators. This paper examines the role of fashions in research in the destruction of teacher educator credibility. Reflective teaching, the quantitative-qualitative debate, and challenges to a notion of commonsense reality springing from a range of sociological and philosophical theories are considered as more recent examples of fashionable research issues in teacher education. Reasons for fashions in education research considered include: pressures generated by the scaling down and closure of teacher education facilities in the United States and the United Kingdom; the advent of more journals, all competing for a buying and reading audience; attempts to judge academic worth through volume; and a tendency for academics to avoid lengthy research projects. The need for a more rigorous approach to research involving replication and transfer to natural classrooms is highlighted as well as the need for extensive trialling before new approaches are widely implemented. (Contains approximately 40 references.) (Author/LL)

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The Politics Of Fashion In Teacher Education Research And Practice

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.act: There is a strong international trend for governments to move teacher training away from the universities into the schools. In effect this is a challenge to the expertise and effectiveness of university-based teacher educators. This paper examines the role of fashions in research in the destruction of teacher educator credibility. Reflective teaching, the quantitative-qualitiative debate, and challenges to a notion of commonsense reality springing from a range of sociological and philosophical theories are considered as more recent examples of fashionable research issues in teacher education. Reasons for fashions in education research considered include: pressures generated by the scaling down and closure of teacher education faculties in the USA and the UK; the advent of more journals, all competing for a buying and reading audience; attempts to judge academic worth through volume; and a tendency for academics to avoid lengthy research projects. The need for a more rigorous approach to research involving replication and transfer to natural classrooms is highlighted as well as the need for extensive trialling before new approaches are widely implemented.

The strong international trend in English speaking countries to move teacher education out of the universities into the schools indicates clearly that governments have made decisions that the current practices in teacher education are ineffectual, not capable of meeting societal needs and that radical change is necessary. In effect, this movement of teacher education back into schools is a challenge to the expertise and effectiveness of university-based teacher educators which carries the message that there is too much theory and too little produced in the way of demonstrable, practical outcomes. For "outcomes" read graduating teachers who are effective as teachers and capable of conveying subject knowledge, skills and attitudes effectively to the next generation who will have to work in employment demanding more sophisticated knowledge and skills.

Throughout the 1980s there has been growing realization that the technological revolution has finally arrived. In the English speaking world, formal education education systems are being seen by as failing to produce the kind of citizen demanded by changes in society resulting from technology innovation and increased competitiveness. This is the message coming from business and politicians (see Mayer, 1992; Carmichael, 1992) but there are also changed and increasing expectations from parents and concerned citizens (see Kennedy, 1993). At the same time unfortunately research in education is revealing that many teachers do not have reasonable mastery of their subject specialities. Ultimately, the responsibility for the loss of economic power and relative world status in the English speaking world rests with the political and business leaders whose short term planning strategies are responsible for this (OECD, 1992). However there is

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ample evidence that the education systems are not producing school leavers who are in the main literate, numerate and capable of critical analysis and problem solving.

Existing educational systems appear to be catering adequately, possibly even well, for approximately 25% who go onto university. Even here though, there are periodic rumblings from academics that students at universities are lacking in effective communication skills. However, for the majority of students, that is those approximately 75% who do not go onto university, the systems are not catering well at all, either in terms of general education (e.g., see Sweet, 1993) or literacy.

Almost in inverse proportion to the seriousness of the problems concerning literacy and skilling of individuals, problems which demand solutions through increased, efficient action, academics in the area of education seem to produce theoretical articles concerning current fads and fashions. These articles appear light years removed from the practical needs of, not just Australia, but the the UK and USA. It is possible that there is a great difference between what is published in teacher education journals and what is happening in practical teacher training situations. However what is being published and discussed in teacher education circles is not such as to convince governments or the general public that teacher educators are capable of acting to solve the problems identified.

Fashion and the Current Rhetoric of Education

Fashion is by definition something which is transient and tends to leave no solid, lasting contribution. The functions it serves are to divert, amuse and also provide self-delivered ego massage to those who can be seen to be amongst the leaders of the fashionable movement. Those who perceive themselves as the fashion leaders can feel that they know better and are somehow better and more knowledgeable than the rest of society. These people can also develop a sense of mutual support from tribal identification which derives from the fashionable few being able to identify others who hold similar views or values.

Fashionable theories which are derived from a range of discipline areas other than education, and are very largely devoid of a solid foundation in fact or research basis in education, have proliferated with the speed of triffids in education over approximately the last decade. It is as if much of the specious reasoning and argument that undergirded the economic excesses of the English speaking world in the eighties has relocated into education. Rhetoric, that is theoretical argument simply for the sake of argument, seems to characterize much of what passes for informed scholarship and debate. Attacks upon scientific positivism and empiricism have meant that little if any theory is ever tested, even in terms of theoretical validity (see Maxwell, 1992).

Many of the current theories are patently lacking in relevance to the current social circumstances, lack a broader relevance to education beyond a categorization as

"critical theory" or "poststructuralism", and display such a lack of understanding of both teaching and learning, as derived from a pragmatic combination of psychological, philosophical and sociological perspectives and actual teaching experience, that is commonsense reality, that it is difficult to take them seriously. However, effectively countering some of the mischievous theories is difficult, on both social and logical grounds.

Attacking fellow academics is frowned upon. It is not considered polite or politically correct to point out like the little boy in the moral tale that the emperor has no clothes. Instead we are supposed to politely act out a charade that a range of theories which are of little relevance to classroom teachers, who perform a very difficult job, may have some relevance. We are expected to pretend that there is something wrong with us and our understanding if we cannot understand theories and see potential application even though they are totally irrelevant to educational practice. Fortunately democratically elected governments, who recognize a social and political crisis when they have one on their hands, have no compunction on blowing the whistle and removing beginning teachers from academia to saner hands. The sad thing is of course is that knee-jerk solution to base teacher education more firmly in the schools will only succeed in perpetrating more of the same through a process of enculturation when existing teachers have already been judged as inadequately meeting society's needs.

As a teacher who has become an academic, I am not alone in my doubts. Gage (1989), in a semi-satire, looked at the conflicting paradigms and stupidities of what was going on, where education was being neglected while the arguments raged over the dominance of paradigms. But as important as this article was, it raised barely a ripple of response so sure were academics that this formerly great education figure was out of touch with the times and that endless word bending must be a good thing. Erica McWilliam (1993) more recently has drawn attention to the current state of play in very subtle ways in an article entitled "'Post' Haste: plodding research and galloping theory". Her use of the acronym PMT, here for post-modernist tension, seems surely conceived with a tongue very firmly placed in a feminist cheek. In her article she has drawn attention to the confusion of often contradictory theory, with no established research practice to offer guidance through the turmoil, and also to the language that is frequently employed to frustrate communication and disguise the fact that theory has quite definitely outstripped any factual or supporting research basis.

Even once ethusiastic supporters of theoretical movements have come to have serious reservations. Zeichner (1993) recently has judged the current debate as not really contributing to any new direction or development. We seem to be in a fifties-early sixties time warp where concepts have been resurrected through updated rhetoric which is less meaningful. As Zeichner (1993) perceptively notes, the current participants seem to have no knowledge of the history of educational ideas and no real perspective on genuinely new developments as a result.

Typical of such a lack of historical perspective and factual basis for argument in education is the identification of Dewey as the originator of reflective practice by Copeland et al. (1993) amongst many others. If one is prepared to accept some of the currently fashionable philosophies from the new theoretical physics and chaos theories, which deny commonsense reality and certainty of any sort, and allow for a bit of rampant nationalism, it is possible that the Americans did colonize Ancient Greece. But I have reason to believe that the writings of Plato and Aristotle have a better prior claim on this. However here one must be especially careful as the conceptualizations of reflective teaching and practice are a veritable minefield of possible meanings.

Reflective Teaching/Reflective Practice, Action Research and Empirical Evidence of Efficacy

The generic terms "reflective teaching" or "reflective practice" cover a wide range of often incompatible philosophies and have generated much conceptual confusion (Tom, 1985; Calderhead, 1989). While the cluster of meanings may stem from diverse social, political, ideological and practical roots, given such confusion it is impossible to operationally define and standardize approaches for consistent, wide application to ensure tangible benefits. Diverse attempts to categorize different approaches (e.g. Tom, 1985), while they do allow the parading of current conflicting paradigms and theories of knowledge, are excercises in theorizing. Categorization doesn't necessarily result in any practical benefits only the satisfaction of generic, theoretical groupings. Even one of its most fervent proponents has come to recognize that reflective approaches are virtually meaningless as a basis for serious action (Zeichner, 1993).

The continuing preoccupation with reflective teaching and reflective practice is a case which it is important to analyse since it reveals so many of the shortcomings of current theorization. It is indicative of theory developed at the expense of research findings to substantiate and guide theory. This fashionable movement, centred on teacher thinking as a basis for practice and problem solving, has taken on the nature of a religion rather than a coherent theory. Devotees of this movement, as with religious faith, place feeling over and above logic and evidence that disproves their convictions.

While large numbers of descriptive and case studies have found that novice teachers and lecturers have responded favourably to use of reflective practices (e.g. see Kagan, 1992), there is little empirical evidence to support claims that reflective approaches are able to produce more effective teachers than conventional methods. Those empirical studies which have reported superiority of reflective treatments over conventional practices in the short term (e.g. Stoiber, 1991; Winitzky & Arends, 1991), have generally done so on the on the basis of stated intentions or attitudes, not demonstrated transfer of performance skills to the natural classroom. There is a huge gap between intentions and actual practice just as there is a long recognized distinction between knowing how to and actually

performing (Tolman, 1932). Failure to demonstrate the transfer of research findings from special settings to natural classroom settings is a recurring, serious problem in studies involving teacher behaviour change (Metcalf, 1992). Those few, published, empirical studies which have attempted to assess the effectiveness of teaching skills developed by reflective methods in the natural classroom have not revealed superiority of reflection over conventional training approaches (Wubbels & Korthagen, 1990; Gore & Zeichner, 1991; Chandler, Robinson & Noyes, 1991).

Also currently popular is action research which is directed towards active investigation of educational issues and seeking solutions to problems (Carr & Kemmis, 1986). Action research seems often to be inextricably linked with reflective practice writings and to take pride in the fact that it cannot be adequately defined except in the broadest terms (Grundy & Kemmis, 1988). It is thus a philosophy for action (i.e. Get off your backside and do something!), rather than any coherent theory. However, to date, no empirical evidence has been produced to demonstrate that action research, when compared with other conventional methods, results in superior teaching skills which transfer to or are developed in the natural classroom. In fact the results have been more than disappointing (see Gore & Zeichner, 1991). More importantly for the action research movement, McIntyre (1993) concludes from available research evidence that only a very small proportion of even experienced teachers develop the social critical skills and awareness that are central to action research in teaching theory, and many of the different approaches to reflective teaching. Again though, as judged by the numerous publications and conference papers, action research has many devoted adherents.

The historical parallels between reflective practices and action research with microteaching, which was once a hugely fashionable movement in teacher education despite lack of substantial, longer term research evidence to support the "committment" of its supporters, are somewhat frightening. With microteaching huge amounts of money were invested in time, effort, facilities, equipment and personnel on the basis of research which reported how much participants enjoyed the process. Short term benefits were found in the form of behaviour changes in the microteaching setting but until recently no research proved general, longer term changes of superior skills for beginning teachers which transferred to the natural classroom. Where these benefits have been shown to exist they have been derived from clear conceptualization, the development of materials to assist teaching skill development, and carefully scheduled practice programs with substantial elements assisting learning and behaviour changes (see Cornford, 1991). In short, intensive practical knowedge has been vital in attaining substantial benefits from use of microteaching with beginning preservice teachers.

The same pattern of wide scale adoption of reflective practices on the basis of faith, before there is any tangible, empirical evidence of benefit, has occurred as with microteaching. The irony is that for a movement which holds thinking and analytical processes as central tenets, the reflective teaching movement shows

little inclination to analyze teaching development as a serious process of developing skills. Such factors as practice and feedback, generalization and transfer, the role of individual differences as a source of variation and the fact that the much desired critical and moral development do not occur in a vacuum but as a result of modeling by significant others, for example teacher educators, are all but ignored. The importance of many of these factors was highlighted by Bandura (1977; 1986) many years ago but because Bandura's theory involves elements of behaviourist psychology in addition to cognitive elements, it appears to have been ignored in the current fashion for the cognitive.

The Anti-Empiricist Movement, the Quantitative-Qualitative Debate and Reflective Teaching

It is apparent that reflective teaching and action research are highly idealistic movements, which are reactions against many things, but particularly empiricism, scientific positivism and any attempt to quantify in objective ways. These prejudices permeate the literature in varying degrees of extremism and the emphasis is strongly upon cognition and problem solving divorced from specific teaching of practical performance skills. The notion of technical teaching skills as a basis for teaching development is attacked with a ferocity and labelled technocratic. Carr and Kemmis (1986) devote a whole section to the problems of scientific positivism, empiricism and its supposed failures.

In the reflective teaching literature it is not difficult to find specific instances of attacks upon empiricism and quantification which seem designed to support reflective practices no matter what. Gore (1987, p. 35), for example, states "the measurement of Reflective Teaching may be impossible using quantitative methods" while more recently Copeland et al. (1993, p. 355) have suggested that we should avoid the temptation "to attempt to verify the assumed positive relationship between reflectivity and teacher effectiveness".

Presumably we should remain with unobjective gut feelings and case studies with exceptionally limited generalizability and never engage in quantitative measurement so that we can never ascertain a real base or starting point and never be able to ascertain whether our objectives were ever achieved (see Tom & Valli, 1990). Reliable qualitative judgments cannot be made without some attempts at quantitative measurement. Issues of validity and quantification, and their underlying premises, if nothing else, attempt to introduce objectivity into the process. Validity moreover remains a key issue in the credibility of all research whether it be qualitative or quantiative (Maxwell, 1992). However the measurement debate has subsided somewhat as the the dichotomy is totally false and the relative positions have been overstated (see McGaw et al., 1993, p. 59.).

In turn the attacks upon quantitative measurement and the retreat from the empirical research tradition is an indication of the disregard for empirical knowledge and things external to the mind of the individual. The often hysterical

responses in the recent volume of *Review of Educational Research* to Wang, Haertel and Walberg's (1993a) use of meta-analysis to point out the value of empirical findings, even allowing for the limitations of this particular approach, is indicative of the degree to which rhetoric and emotion has outstripped logical analysis and reason in teacher education.

The Dominance of Cognitive Approaches

The philospher Kant's recognition of the importance of both *a priori* and empirical knowledge in effective cognitive functioning seems to have been disregarded in the present age of fashionable theorizing. Once again we are being plagued by the mind-body dichotomy which has bedevilled western thinking and since at least Descartes. Reflective teaching and other theories currently prevalent in education have elevated cognitive activities to a dominant position at the expense of external realities. It seems as if, in direct proportion to the literally mindless excesses of behaviorist psychology, cognitive psychology has gone to almost the same excesses by denying a role for the physical, either in terms of an external real world or physical action. The fact that Shulman's (1986, 1987) work on the importance of subject matter content in teaching should prove to be a revelation, is indicative of how far from commonsense and the real world of teaching teacher education has deviated.

The current disregard for empirical knowedge and the veneration of *a priori* knowledge indicates a serious inability to reconcile the roles of these two types of knowledge. It seems to be assumed that cognition is dominant in the generation of knowledge and appears before the experience of the external world and that this external reality is not necessary for effective human activity. This position is strongly at odds with the research of cognitivists like Piaget and Bruner whose accounts of child development and cognitive maturation clearly indicate that the external physical world is of great importance in stimulating cognition. In the case of Bruner, there is specific recognition that enactive modes, that is interaction with the physical, can continue of importance through maturity.

Though we tend to laugh at historical instances like the South Sea Bubble, tulipmania, and Cargo Cult behaviour and the recent economic excesses of the eighties, such instances are examples of where abstract ideas have not been clearly anchored to a commonsense reality. Abstract ideas can take on a life of their own and, while generally such theorizing is harmless, there is ample evidence in Rwanda and Serbia of how concepts not based in commonsense reality can lead to tragedy and the destruction of societies.

Many of the current debates have centred upon the nature of knowledge (see Tom, 1985). Epistemological approaches lead into the quicksand of verbal "it all depends upon what you mean by....." games to which there is no end as shades of meaning are scrutinized. Because meaning is constructed by individuals and effective communication involves shared meanings there are inevitably going to be

countless shades of meaning. As empirical knowledge has been removed from the game what remains is a hall of mirrors of relative values in which personal opinions of equal value are pitted against each other. It is a sophist's delight since the debate is never ending and no one can ever be proved wrong!

Lest it be thought the excesses have originated only from theories clearly of an epistemological, semantic, sociological or philosophical origin, this is not the case. Even theories in the area of psychology have been subject to the same cognitive excesses. Anderson's (1982) cognitive theory of learning is an example of the type of theory which has placed excessive value upon theoretical knowledge. While widely cited, it is almost useless in providing understanding to assist in meaningful skill learning. Anderson's allegiance to cognitive processes appears to have blinded him to the importance of practical performance and feedback, which in Glaser's (1991) view permit the testing of the theory. These problems become apparent when Anderson attempts to explain ways in which errors in proceduralization are recognized by the individual and removed from the schemas being developed (Cornford, 1993).

Many of the current theories such as chaos theory, critical theory and poststructuralism carry with them the same traps that Berkeley's theories did. Berkeley's philosophy held that the world that we observed was all the handiwork of a divine creator with everything we saw held in place by God just for our benefit. With many of these modern theories, as with Berkeley's theory, once we accept the underlying propositions then we are locked into that closed area defined by those initial propositions. It is then impossible to escape from within those propositions with conventional logic and language. The only way to counter such theories, and those which challenge a commonsense reality, is to look beyond the supporting propositions and to realize that while our senses do let us down on occasions, these same senses enable us to discover this deception.

Critical theory as espoused by Habermas and others, as well as the brand of action research disseminated by Carr and Kemmis (1986), are clearly policial theories designed to change society. They have as a basis class conflict. There is nothing new about this, but what is becoming evident is that these theories posit views derived from Marxism which cannot account for many of the ideas that are emerging in what has been called the new vocationalism. In this set of ideas, which are being disseminated by foreward looking business, trade union and political leaders and which have emerged largely from the cross-cultural comparisons of economically successful societies like Japan and Germany, workers are seen as being more highly skilled and autonomous and working much more in harmony with management in business and industry. In fact the vision as presented in the new vocationalism embodies many of the ideals of progressive education as expressed over the last century. This leaves these frankly political theories somewhat adrift from their basic assumptions.

No agreement has ever been found on the nature of knowledge or the nature of

the ideal society in the history of humankind and, given the history of irresolution of such arguments, no consensus is likely to emerge in the near future. The middle ages saw scholars spending millions of hours arguing about how many angels could dance on the head of a pin. Arguing about the guaranteed insoluble is parallel to this. Sadly, while academics in education engage in such debate around intellectual exercises, there is an acknowledged major gap and real need in the form of a theory which effectively accounts for the interrelationship of theory and practice in the learning of beginning teachers.

Errors in Generalization of Theories Beyond Their Original Context And Argument by Analogy in Education

Education is a discipline which is seen as interlinked with philosophy, sociology, and anthropology. However it is different in very substantial ways from these disciplines which generally involve the creation of theories which are explanatory, and which generally do not attempt to make predictive statements related to demonstrable, practical outcomes. Education, in contrast, is concerned with producing tangible, real effects through changed behaviour as an indication of learning and changed thinking skills. Teachers are held accountable for the real advances that their students demonstrate. This is in marked contrast to the effectiveness of sociologists and philosophers and the accountability that they are subject to. In view of this critical difference there is a need to scrutinize theories from these interacting discipline areas very carefully before there is an acceptance of theories derived from such sources into education.

Many theories are limited to explaining phenomena in a particular discipline area and it is not logical to assume that what has relevance in one discipline has equal value in another. For example, it is not by any means evident that poststructuralism or chaos theory has direct relevance for teaching or empirical educational research. By the same token it is not valid to argue through analogy without being demonstrate that underlying propositions are valid. It has become fashionable to cite chaos theory and others drawn from theoretical physics, but in fact it is very easy to demonstrate that there are severe limitations to generalizing and arguing by analogy from one area to another. We all know from atomic theory that matter is largely empty space. The test of whether you really believe this theory is to close your eyes and run full speed into a brick wall. After all we all know that matter is largely empty space don't we? Further, we know that all knowledge is constructed by individuals and that reality doesn't exist independently of the individual, or do we?

It can be argued that here is in fact a gullibility evident and a lack of conviction about education as a profession when so many theories without practical implication can invade the area of education, and be taken so seriously that they crowd out serious consideration of action to meet the needs of the society. It is time that teacher educators asked themselves a few serious questions. How many good teachers in secondary or primary teaching refer to the theories that are so widely

espoused in academic education journals? If not, why have they not developed the need? It is not acceptable to answer this in a patronizing way to imply that teachers don't know what is best for them, that only teacher educators know what is best for the society. Harold Benjamin's "The sabre-tooth curriculum" should be read regularly by university academics to puncture their god-status pretentions.

There are other relevant questions too. If many of the theories, such as critical theory, poststructuralism and the epistemological theories, are so important why is it that they have had negligible impact upon the other professions like law, engineering and medicine? Why is it that the journals for these other professional areas are not crammed with the same sort of theorizing if these theories are so important? Is it perhaps that academics in education are just gullible. The findings of a study by Jehng, Johnson and Anderson (1993) suggest that beliefs about learning are a product of the context in which they are cultivated. Perhaps it is a good thing that so few members of other professions read educational journals. If they did the reputation of academic educationists is likely to be even lower than it currently is.

Some Reasons for the Acceptance of the Fashionable Theories: The Historical Context of the Cognitive Excesses

There appear to be a number of historical reasons why the fashionable, overly cognitive theories and theoretical writings that have been criticized in this paper have become popular and proliferated. These include factors operating in relation to maintaining quality in teacher education, the pressures to ensure the economic viability of journals and the pressures within academic life to publish.

Reflective teaching/practice theories with their emphasis upon cognition became popular in Australia at about the same time that funding for field practice supervision, and indeed teacher education in general, started to tighten. It may have been a reaction of teacher educators to turn to cognitive means rather than a performance-based means of resolving this professional dilemma of trying to maintain quality with decreased resources. At the same time much of the educational literature was, and still is, emphasizing problem solving as the major teaching skill. Unfortunately, possibly because of these circumstances, there has been no substantial challenge to the cognitive skills side of teaching to restore some practical performance balance. This incidentally is not to deny the importance of cognition in teaching. However it is to argue that there is a need for a solid basis of technical teaching skills from which to make judgments, to implement practical action to solve problems identified action, to evaluate the success of the actions taken, and decide on any additional actions or modifications for more effective performance in the future.

Trends and fashions in the USA also appears to have influenced the adoption of reflective teaching/practice and excessively cognitive theories in Australia. We produce a relatively small amount of educational research, partially on account of

limited research funding, hence are always likely to be looking to more productive sources for ideas and findings. There will always be a tendency to imitate what other supposedly more knowledgeable sources are engaged in. This is modelling par excellence and one of the important means of disseminating fashions. Here in Australia we need to be more critical of models and selectively engage in research directly relevant to Australian educational needs.

Of relevance in understanding the fashionableness of overly cognitive theories and theoretical writing is the fact that the number of professional journals has proliferated over the last decade. While I have been unable to quantify this with hard statistics, despite attempts to do so, there are now certainly many more journals in education and related discipline areas than was the case fifteen years ago when nearly all professional journals were published by specialist professional associations on a cost recovery basis. The entry of professional publishers like Academic and Pergamon Press into the area has meant that there are now more journals. But with professional publishers there is also the need to make sales - and profits. In addition, there are now seen to be advantages in Australia, in terms of status and inter-university competition, for university education departments to be associated with editorship or publication of new educational journals. This too place pressures upon editors and publishers to achieve respectable circulation from a largely static (or shrinking) academic buying population. The tactic which has been relied upon in the consumer society has been to create fads and fashions, to manufacture opinion and subsequently sales. The middle, balanced position is usually not too exciting and doesn't result in sales. In the words of the immortal song from the musical "Gypsy", which just co-incidentally involves an old professional stripper giving advice to a neophyte to the game, "You've got to have a gimmick". Going over the top is one sure way to have a gimmick, even though a true expert will adopt a more balanced position.

The pressures for individual academics to publish have increased tremendously over the last decade as well. The growth in jounal numbers may also be a reponse to this. Currently publication has become a means of justifying academic existence: mere teaching is not sufficient. For example the Australian Federal Goverment via DEET has been busily collecting data on publications to decide on the distribution of research funding. However, not only is it now a matter of publish or perish, but the volume of publications, as opposed to quality, has become all important.

Not only is publication a means of being seen to be working but it may also be necessary for survival in an academic position. The fact that more lecturers are on contract, and are expected to churn out publications, also has obvious implications for the production of more theoretical writing. Then too the amalgamations and closure of numbers of teacher education institutions in Australia, the UK and the US has forced those in the more vulnerable areas of sociology and philosophy, that is the general education areas of teacher education, to fight for survival to be noticed and retained, or re-employed elsewhere. Also there have been closures and scaling down of Adult Education Departments in the US, with such areas tending

to employ more of those with sociological and philosphical backgrounds with little experience in other forms of teaching. Indeed the Adult Education areas was initially predicated on these sociological-philosphical areas to establish itself as a distinct entity separate from other forms of vocational adult education, which have been in existence much longer as a specialist education area.

The different requirements of empirical and theoretical writing and research also are also possibly important in helping to explain the dominance of the theoretical. Decent empirical projects to investigate major issues in a serious way may take years to conduct. Even smaller, half-way decent empirical research requires much time for initial planning, the conducting of research and the processing of results before the task of writing up commences. It is much easier in many ways to do literature reviews and regurgitate theory than engage in the challenge of solid empirical research. It is also probable that numbers of those who are staff in teacher education education departments now do not have formal qualifications in research methods nor the skills to conduct such research. It is not an unnatural human response to rubbish those things which threaten you particularly when there are language barriers as well as mathematical concepts which are challenging.

The Need for Recognition of Performance Elements and Sustained, Carefully Planned Empirical Research

The dominance of overly cognitive theories and the neglect of performance and the external, commonsense real world has not resulted in superior theories. Martin and Sugarman (1993) recently have pointed out that the conceptualization and the relationship between theory and research in education are inadequate even when more fashionable, descriptive types of research have been taken into account. They advocate a Galilean approach which more securely interrelates theory development with empirical findings.

At the moment one of greatest and most obvious needs in our society is the reconciliation of theory and practice in teacher education to establish more effective methods for teacher training. This appears only to be possible through recognizing the importance of skilled performance, that involves more than cognitive activity, and engagement in substantial empirical studies to assess effective training procedures, results from which need to have wide general applicability.

While the empirical tradition has certainly not had a huge success in influencing educational practice to produce more effective teachers, this may have had a great deal to do with the type of research pursued and the lack of attempts at dissemination to practitioners. In the past too, much of what was undertaken was dictated by the demands of editors for particular types of research design. There was a preference for single, one off studies and neglect of the need for replication by which findings are strengthened or challenged. A variety of other socio-political

variables too have been identified (see Cuban, 1990; Wang, Haertel & Walberg, 1993b) to counteract any possible benefits of empirical research in education. Politicians and educational administrators constantly demand quick fixes hence short term planning is the order of the day and education is continuously in crisis management mode. Funding grants are then used to pursue answers to the crisis. This in itself setting up the tendency to develop fashions in research to what are essentially yesterday's problems. Such short term management is now becoming more widely recognized as a problem affecting English speaking economies (OECD, 1992), but is clearly not just restricted to economic policy activities.

A paradigm for empirical research widely current when I first started to study education (see Hilgard, 1964) held that there were a number of stages that needed to be considered. The first of these involved the identication of particular forms of teaching-learning behaviour that seemed to hold promise. These variables then should be tried out in experimental conditions to ascertain whether indeed these varables were those truly operating in a causal relationship. Substantial findings should then be tried out on a limited scale in natural classrooms to ascertain the more general effectiveness before ultimately the methods/processes were introduced into the wider system and again assessed for effectiveness.

This gradual process involving considerable replication in educational research has never been widely followed anywhere in the world. There has been failure to develop effective research programs and to consistently pursue research and application jointly. One off studies, usually quite in isolation from other connected studies, are the norm. Few long term, coherent research programs are funded although those that have pursued consistent, carefully planned longitudinal studies have been recognized as important (e.g. Fels Institute studies into child development). Berliner (1991) has recently advocated the embracing of research involving complex systems approaching those which exist in real life and this recommendation seems in part a return to this earlier model which has never been implemented or given a chance to prove its potential effectiveness.

Pursuit of this earlier model, which takes into account both research and application, may have the potential to overcome the problems of dissemination of research findings back through the system to classroom teachers. It is finally becoming more widely recognized that we need to reconceptualize our approach to teacher training as of a very limited duration and develop substantial inservice education facilities. A linking of research and application through an inservice network would over come this problem as well as the credibility of researchers with classroom teachers.

Perhaps if teacher educators became involved in such long term, empirical research substantially related to theory development as suggested by Martin and Sugarman (1993), which is unspectacular and slow and anything but fashionable, but which does involve real intellectual challenges, then we may yet demonstrate our fitness to be the chief custodians of teacher education.

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