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The *JOURNAL OF THE INTERNATIONAL SOCIETY FOR TEACHER EDUCATION (JISTE)* is published as a service to those concerned with global teacher education. It serves as a forum for the exchange of information and ideas related to the improvement of teacher education. Articles focus upon concepts and research which have practical dimensions or implications and applicability for practitioners in teacher education. The Journal limits its articles to those in which ideas are applicable in multiple social settings.

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Secretary General's Message

When I was a student at teachers' college my mentor, Alton Greenhalgh, challenged me and my fellow student teachers to be lifelong learners when he warned us that, should we cease to be good students, we would cease to be true teachers. The concept of the teacher as a leading learner in the classroom has been adopted in the New South Wales School Leadership Strategy and applied to the role of school principal who is regarded as the leading learner in the learning community.

Programs to train teachers and school executives to be leading learners and not merely managers are being implemented as part of school renewal efforts. In these programs teachers and principals are conceived as people who model team and individual learning and understand the social context in which schools operate. They challenge the status quo and the assumptions upon which decisions are made. They are critically reflective, analyse complex issues and design appropriate responses. They are good communicators and effective managers and, while facilitating leadership qualities in their colleagues, they nurture knowledge, understanding, judgement and wisdom. They build visions of what might be.

In the schools of the future there will be an unrelenting focus on restructuring learning and teaching. The notion of the school principal as the leading learner in the learning community is explained by Senge (1990) as follows:

"Leadership exists when people are no longer victims of circumstances...It's not about positional power; it's not about accomplishments; it's ultimately not even about what we do. Leadership is about creating domains in which human beings

continually deepen their understanding of reality and become more capable of participating in the unfolding of the world. Leadership is about creating new realities."

Leadership derived in this way is more durable than that based on one's position in a hierarchy. It will be democratic and professional.

Once again congratulations to the authors and editors for a further issue of JISTE and the leadership they are showing in sharing their ideas for better teacher education.

Warren Halloway

Editors' Message

It is an exciting time to be a teacher educator in our world. Increasing demands for teachers and concerns about the quality of practitioners in the profession present challenges for each of our societies.

This issue of the Journal of the International Society for Teacher Education demonstrates how we can learn from the experience of others who work in different educational contexts as we seek responses to the challenges we each face in our own environment. In reading these articles it becomes clear that we are part of a global profession in which the ideas and experiences of colleagues in other societies have direct application to our own work.

The articles by Drakenberg and Neufeld help us reflect on the mental constructs we form to describe what we do through discussion of metaphors in both theoretical and concrete terms. McDonald and van der Horst introduce us to the circumstances of instruction in a dynamically changing society, South Africa, in which past expectations of students and schools are meeting the realities of the present and future needs of the society. Moraes and Ramos present a model for integrating research into the pre and inservice instruction of teachers that has demonstrated value and application in many schools and universities.

Testing what we are doing and determining effective practice is an important aspect of our work ^ and one too often overlooked in the every day task of fulfilling requirements of our positions. The two articles of Moroz and of Sinclair ^ Woodward present us with valuable insights into our instructional practice and model processes for assessing the value of other procedures we use.

Warring's article presents a rationale for certification of teacher educators ^ using criteria that would be met by all authors in this journal as they have demonstrated the qualities and values associated with being professional teacher educators. This concept deserves further investigation as an aspect of the continuing professionalisation of teacher education.

We, as editors, continue to be part of an exciting enterprise that offers a forum through which teacher educators from around the world share with and learn from each other. The articles in this Volume 3, Number 2 of JISTE clearly demonstrate both the value of this endeavor and the dedication and professionalism of teacher educators in our world.

George A. Churukian
Corey R. Lock
Craig Kissock

Problems facing the professional teacher: Curriculum Texts and Their Metaphors in the Scandinavian Countries.

Margareth Drakenberg

The Scandinavian countries of Denmark, Norway, and Sweden have, since the advent of comprehensive education in the 1960s, experienced a reconstruction resulting in three to five curriculum changes. Swiftly of change and the confusion's of faltering reforms seem to have penetrated the industrial countries all over the world and have left many researchers, educators and others, with the recurrent question: why do not curriculum changes lead to the kind of education that was intended? To analyse curriculum, to understand the metaphors, their cores of considerations as well as their hidden assumptions found in our curricula is important, not only for teachers but also for student teachers and their educators. The purpose of this study is to clarify: what messages are the most recently edited Scandinavian curricula giving?

INTRODUCTION

There has recently been a growing interest in curriculum analysis which can be carried out along different lines and here focus is on curriculum analysis by means of its metaphors and the understandings they convey to its readers. This way of analysing curricula was introduced by Drakenberg (1995a; 1995b) and was found to be fruitful. All curricula seem to have both a manifest meaning and some "hidden" (Jackson, 1968) ones. There are, however, different kinds of hidden qualities and; therefore, the effect of the hidden curriculum on people

other than learners themselves is of prime importance, for instance, in understanding effects of curriculum changes. In this paper I have focused on this "hiddenness" as it is important to decipher the double or multiple meanings of guidelines encountered in the curriculum.

WHAT IS A METAPHOR?

Metaphor has recently become of multidisciplinary interest and has taken a place also at the core of education. Leino and Drakenberg (1993) found that due to the theoretical approach, the problem of double meaning, and consequently of hidden meaning, is dealt with very differently.

Starting from the interaction theory (Black, 1962) the hidden meanings are things said about something that are masked by a more manifest meaning. Following this approach to metaphor, the analyst's interpretation is an attempt to show that beyond the obvious things a metaphor is about, it is also about something else, something deeper, something masked - intentionally or unintentionally - by the authors of the curriculum.

Leino and Drakenberg (1993) showed that due to theoretical approach, definitions of metaphor were varying and thus, universal criteria were impossible to arrive at. Therefore, they accepted a "working" definition saying that metaphor is: "that figure of speech whereby we speak about one thing in terms of which are seen to be suggestive of another" (Soslake, 1985; p. 15).

Departing from such a definition it is, however, very seldom, for metaphors are encountered in texts or in questionnaires asking students, or others, about their metaphors. In this paper, as in my earlier studies on curriculum text metaphors (Drakenberg, 1995a; 1995b), a definition built on Searle (1988) is used. Thus, *a word or a*

sentence having some suggestive connotations in common with another word or sentence is considered a metaphor.

METHOD

In this paper metaphor is used as a tool of analysis, based on the notion that such an analysis will come to grips with the "hidden messages" and underlying assumptions involved in curriculum texts; for Norway Laereplan 1994, for Denmark Laeseplaner 1995, and for Sweden Läroplan 1994.

Analyses of the curricula have meant scrutinized reading of each curriculum, marking each metaphor and analysing their diverse meanings. The selection of metaphors is based on their frequency in the curricula, and in the curricula from Denmark and Norway the metaphoric words are to be found in the text, it is just to count them. In the Swedish curriculum the metaphors are not found that easily. Here I have analyzed the text and grouped words and sentences, having similar meaning, into categories. Then I tried to find metaphors suitable to these categories. The different approaches are due to the fact that the curricular texts in Denmark and Norway are written in running text, while the Swedish curriculum is written using short telegraphic sentences, as a shopping list. Although only the most frequently used metaphors in each curriculum text will be presented here, this approach gives an overview of the messages each curriculum conveys to its readers.

RESULTS

Denmark: Laeseplaner 1995

The Danish curriculum 1995 is described as guiding. It is totally 152 pages and written as running text. The suggestions given are said to form the basis for locally developed curricula. Following the definition of metaphor suggested in this paper, a large number of

metaphors are found, and here, the metaphors *context* and *training* will be dealt with.

Context *Sammenhaeng*

The Minister of Education emphasizes, in the Curriculum introduction, the importance of wholeness and context. The Danish curriculum uses a specific word, *sammenhaen*, independent of the implicit differences in interpretation, for instance, the differences between relation/connection, coherence and association. For instance, the languages Danish, English, German, or French, here the curriculum emphasizes *sammenhaeng* between oral presentation, written presentation and reading. It is also upon the teacher to show the *sammenhaeng* between wholeness and its elements as well as "the language's *sammenhaeng* with culture and literature" (Table 1).

Table 1: Frequencies of the different interpretations of the metaphor *sammenhaeng* in the Danish curriculum 1995.

Metaphor	as relation	as coherence	as association
Frequency	23	5	10

This variability and confusion in how to interpret the metaphor *sammenhaeng* could be the result of political compromises but it is, on the other hand, a very typical manner of speaking used in the curriculum texts. This manner could throw a teacher off his/her guard by emphasizing a teacher role as navigator and facilitator, indicating a large proportion of autonomy, in particular as the curriculum demonstrates quite another understanding of teaching and the role of the teacher. The teaching of each subject is dealt with in detail and

here we often encounter constructs like 'the teaching must include ...,' 'the teaching must cover the following...,' etc. The content areas are also described in detail. The free reins, given initially, are thus taken back and the teacher is described as somebody who carefully plans and makes the content clear before disseminating the knowledge to his/her students.

This way of presentation urges upon an image of the basic building blocks creating the student's knowledge and accordingly an image of unchangeable, basic, and solid facts. This curriculum is, according to the Minister of Education, "the central part of the ballast children and youngsters shall bring with them into the next millennium" (Laeseplener 1995; p. 7). Consequently, the Minister of Education is presenting double messages in his introduction to Curriculum 1995.

Training (*Inove/Opove*)

Learning is the activity most often associated with students' work in school. In the Danish curriculum 1995 learning (*indlaering*) is found only once. Instead *indove* or *opove* is used, constructs comparable to training or practice rather than learning. They are often found in connection with 'skills in' or 'confidence in', for example, "the students (*skal opove*) must train their skills at..." (Laeseplener 1995; p. 18) or "speed and confidence at ... (*skal opoves*) must be trained" (Laeseplener 1995; p. 21). In particular *opove* is often used. The prefixes (*ind-* and *op-*) are here of great importance and they give these constructs (*indove/opove*) a very specific interpretation of the learning activities. Regarding *indove* the suggestible image is that something has to be moved from somewhere (the teacher or the textbook) into the students. Additionally, if you *indove* something you have to start from scratch while to *opove* something assumes you have some basic skills which need to be further practised. No connotations of reframing

or reconstructing earlier trained skills are hinted at. The construct rather alludes at an "add-on" procedure resulting in increased faultlessness. On the other hand, both constructs, just as training or practice, give an impression of doing things all over, time and again, in order to reach a certain level of acceptance or perfection.

To me, the Danish curriculum (Laeseplener 1995) is a somewhat unusual document as the two most frequently used metaphors undermine each other. On one hand, there are ambitions, initially, to emphasize *sammenhaeng* (context, coherence or connections) to achieve wholeness. On the other hand, this ambition is taken back, demonstratively, by the training metaphor (*inove/opove*) and a manner of writing being very imperative and mandatory. It gives the impression of something finished. Views of learning and of teachers (and teaching) are old-fashioned, having its roots in behavioristic theories of learning and very little space of action is left to the local schools and their teachers. This manner of writing, giving detailed prescriptions, was a surprise, particularly as the tendencies lately have been to write curricula in a very vague and overall manner. Thus, the Danish curriculum 1995 seems in many ways to run contrary to international trends.

Norway: Laereplan 1994

The most recent revision of the curriculum was carried out in order to comply with recent trends in society. This curriculum contains overriding aims and general outlines, and according to the definition of metaphor used in this paper the following three metaphors were the most frequent ones: learning (*opplaering*), collaboration (*samarbeide*) and upbringing (*oppfostring*) (Table 2). Only the first two will be dealt with in this paper as the third metaphor will be considered elsewhere.

Table 2.: Frequencies of the most often used metaphors in the Norwegian curriculum 1994.

Metaphor	Learning	Collaboration	Upbringing
Frequency	87	30	26

The Norwegian curriculum 1994 is divided into seven main areas of objectives (chapters), presented in a very general and indistinct manner, needing locally developed curricula to get subject-related information about what is going on in the schools. Such curricula are prepared.

Learning (*opplaering*)

"The goal of learning is to prepare children, adolescents and adults to encounter the tasks of life and to master demands together with others" (Laereplan 1994, p. 5). This introductory words in the Norwegian curriculum stress, in particular, the metaphor learning (*opplaering*) which deeply penetrates this curriculum text. The metaphor *opplaering* can be considered to mean about the same as the English word learning. In many ways this concept is vague. In this curriculum, however, "opplaering" is viewed as a wholeness which is divisible into smaller bits and pieces. This view of knowledge, as separate pieces, is common also among student teachers (Drakenberg & Leino, 1998).

It is interesting to focus on the prefix *opp* in *opplaering*. By stressing the prefix this word's interpretation easily changes into the English word training, indicating that the way students are when they start school is not good enough, they have to be trained into something else. Consequently, the leading task of school is to help the students learn up to specific grade standards typical for each subject area. The

prefix in *opplaering* also demonstrates an assumption of *opplaering* as something you can not do on your own. You are always dependent on somebody else (a teacher, a trainer) who can show you how to fit into the predesigned models.

Collaboration (*samarbeide*)

Another metaphor often encountered is *samarbeide* (collaboration) for mutual goals, resulting in students becoming world citizens. The "key" to accomplish the world citizen is collaboration. But in the curriculum, collaboration is given an idealistic approach. In reality, collaboration often means bringing together students and/or teachers having diverse experiences and ideologies, as well as unclarified expectations regarding each other. Often these issues are left in the private realm, and thus they can undermine the foundation of collaborative efforts. In this curriculum, little is said about whether collaboration will be preplanned or have accidental occurrence. Collaboration between which parts will result in a world citizen? Is the inauguration of collaboration a "hidden" tool of power concealing the assertion that what is decided in school is the best (for the student), independent of students' own or parents' saying? Due to multiple interpretations and hidden assumptions, collaboration is a metaphor that also serves political purposes (Drakenberg, 1995b).

This analysis of dominant metaphors reveals that the Norwegian curriculum is a coherent document. Other metaphors, not so frequent are of minor importance considering the main message given by this Norwegian curriculum

Sweden: Läroplan 1994

Reviewing the three curricula for comprehensive school (1962; 1969; and 1980), mandated in Sweden since the 1960s (Drakenberg, 1995b), it was found that all curricula had an excess of metaphors

contradicting each other. The short telegraphic style, used in Curriculum 1994, elements a mixture of metaphors in one and the same sentence, but it does not exclude metaphors - rather the contrary.

Curriculum 1994 sets the individual in the forefront and the individual student's growth and development are emphasized. Characteristic of Curriculum 1994 is also the division of aims into objectives, at which instruction is aimed, and objectives, stipulating the basic level of knowledge the students have to obtain. Both these characteristics have influenced which metaphors to be used. The emphasis on the individual facilitates the use of the *growth* metaphor while focusing the objectives, and in particular different kinds of objectives, paves the way to the *efficiency* metaphor in this curriculum text.

Table 3.: Frequencies of the three most dominating metaphors in Curriculum 1994.

Metaphor	Growth	Efficiency	Society
Frequency	58	53	51

Most often we encounter the metaphor *growth*. In the 1994 Curriculum, with the *growth* metaphor, the focus is on the individual pupil. It emphasizes the liberation of the pupil from rote learning, recitation and textbook authority. The *efficiency* metaphor, on the other hand, emphasizes distinct goals, careful planning and rote learning. Consequently, these two metaphors counteract and oppose each other. The *society* metaphor is a supplement added due to political reasons. It has emerged out of a concerted attempt, in the early 1970s, to design schools as mini-societies. The society alluded at in the 1994

Curriculum is a multicultural one. The *society* metaphor, however, stays in a world of its own, neither supporting nor reconstructing other metaphors encountered in the curriculum.

The result of this analysis is that none of the metaphors used has come to dominate the scene and thus, showing no directions or central points whatsoever. Maybe that is the whole idea! Having such a document as a general framework makes the locally developed curricula necessary.

DISCUSSION

In this paper some metaphors in the most recently published Scandinavian curricula have been discussed. Being a Scandinavian citizen, texts from the different Scandinavian countries are easily read, because the languages are very similar.

Researching metaphors is, however, very complicated and marred with problems. Some of them are very obvious, for instance, in collecting student teachers' metaphors on various school-related issues (Drakenberg & Leino, 1998) a recurrent and intriguing question is "What is a metaphor?" Many researchers (Bullough & Stokes, 1994; Johnston, 1994) have noticed student difficulties in producing salient metaphors. A way out of this predicament could be to consider metaphors at different levels of abstraction, which is suggested as a solution to the different ways of understanding image (Calderhead, 1988). Three levels of abstraction may be identified: a high level, a medium level, and a low level. For a declaration of the appropriateness of these levels to metaphors, Drakenberg and Leino, (1996).

The results in this study are first, to see the effects reached in various curricula, owing to the metaphors the curriculum designers have chosen and second, to see how the chosen metaphors interact with each other. By analyzing the most frequently encountered

metaphors in the recently published Scandinavian curricula, we could see what happens when two or more metaphors are combined in a text: how some metaphors can strengthen each other while others can undermine each other; how the combination of metaphors can emphasize or counteract the intentions of curriculum designers.

In the present work I have considered curriculum analysis to be a task for the professional teacher. Research on teacher professionalism (Tickle, 1989; Oja, 1989; Nias, 1989) shows it is not until the autonomous stage of teacher development that the teachers can "tolerate and cope with the inner conflict that arises between conflicting perceptions, needs, ideas and duties" (Oja, 1989; p. 121). Such a late concern about contradictions and assumptions hidden in curriculum emphasize the importance of introducing curriculum analysis via metaphors in the teacher education programme to familiarize student teachers with the double or multiple meanings so typical of curricular texts. Early introduction to this way of curriculum analysis will facilitate the coping with the controversies and conflicts embedded in the curricula.

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A Critical Look at Metaphor in Teacher Education Research

Jonathan Neufeld

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... in any field of study not yet reduced (or elevated) to the status of a genuine science, thought remains the captive of the linguistic mode in which it seeks to grasp the outline of objects inhabiting its field of perception (White, 1973, p. xi).

Figurative language maintains significant status as a topic for educational research, especially as this research relates to teacher education. In this paper, I take a critical stance toward a certain mode of linguistic figuration in literature which examines the learning process of teachers. In so doing, I suggest that researchers may be captivated by a form of "transcendentalism." Through a brief historical sketch, I show how figured speech has been suppressed in favor of clear, rational explanation. I argue that this historical drive for logical clarity is maintained in analyses of teacher education which employ metaphor as a tool for understanding the learning process with logical clarity. This may be due to researchers' desire to unify teachers' consciousness with an objectively conceived world of practice. I outline various theoretical perspectives on metaphor, before concluding with the elaboration of an alternative perspective based on Nietzsche. His perspective may offer the possibility of theorizing direct contact with practice without transcendental mediation as traditionally understood through metaphor.

Metaphor: A Brief History

The use of metaphor in curricula reaches back to ancient Greece. "Metaphor" is rooted in the ancient Greek *metapherein*, which may be translated as "transference"; and it shows up in modern Greek as *metaphora*, which may be translated as "a vehicle of transport." Thus metaphor may be seen as a vehicle that enables transference between the process of experience and its articulation through language. Until the mid-twentieth century, transference between experience and its articulation was the subject of much debate by the philosophical tradition rooted in Aristotle -- a debate that has been problematized by Christian and positivist perspectives on language.

Johnson (1980) wrote that the late twentieth-century interpretation of metaphor is directly connected to the first extended treatment of the subject by Aristotle (384-322 BC). Aristotle defined the use of metaphor as a poetic art by which the poet provided knowledge through reflective intuition (from Latin, *intueri*, to look upon). In his *Poetics*, Aristotle wrote: "Metaphor consists in giving the thing a name that belongs to something else; the transference being either from genus to species, or from species to genus, or from species to species. (trans. 1941, 1457b). This definition separated metaphor from a more literal truth, and this has complicated its value for the last 2,300 years (Johnson, 1980). Since Aristotle, the drive for precise articulation has set up the dichotomy of accurate versus inaccurate knowledge as mediated theoretically through metaphor.

Like Aristotle, Cicero saw metaphor as a misuse of words and as a diversion from precise meaning. Latin rhetoricians valued metaphor chiefly as a linguistic ornamentation subservient to other words involved in the setting out of argumentative proofs (Johnson, 1980). Johnson added that medieval rhetoricians furthered this derisive

interpretation of metaphor. They referred to metaphor as a stylistic device devoid of serious philosophical argument. Their opinion came about while attempting to establish the authority of biblical scriptures. This attack was reinforced by a rising European monastic tradition that emphasized the outward expression of what were coming to be understood as intuitive truths of the soul. The scriptural bases for this orientation were biblical commandments against bearing false witness (Exodus 20:16; Deuteronomy 5:20; Matthew 19:18) and truth-telling specifically (Matthew 5:37).

The derisive attitude towards figurative expressions, as a deviation from orthodox meaning, remained in the philosophical tradition of Europe and North America until the present century (Johnson, 1980). It was reinforced during the seventeenth century when the foundations for ontological certainty began to shift from the unified sacred power of a monotheistic god to the unified secular power of human consciousness. Rationalism and Empiricism fueled this negative sentiment. Hence, while Descartes esteemed eloquence, and loved poetry, he felt both were underrated gifts of nature rather than fruits of study. Those who reason most cogently, and work over their thoughts to make them clear and intelligible, are always most persuasive, even if they speak only a provincial dialect and have never studied rhetoric (Descartes, in Sallis, 1989, p. 28). John Locke added that figurative language which moves passions produces wrong ideas and that it is to be wholly avoided (Locke, in Sallis, 1989, p. 28).

Toulmin (1990) noted that between 1600 and 1700, philosophy began to pursue universally valid answers by developing a distinct separation between rationality/logic and rhetoric/emotions. According to this distinction, a "good reason" for correct practice had to be universally justified by logical methodology. According to Toulmin,

from the seventeenth century onwards, a linear method ensured that philosophical validity was dependent upon the internal relations of logical arguments. The rhetoric of figural language was disdained in philosophical arguments, as it was considered imprecise, misleading, and therefore not graspable as dependable knowledge. Such a philosophical context fed an early Anglo-American enthusiasm for logical positivism, which only enhanced hostility towards figurative language. Logical positivism assigned "meaning" to propositions that could be given a truth value that corresponded to "reality" (i.e., a body of verifiable propositions; Sallis, 1989). In its quest for truth, positivism rendered the metaphorical nature of rhetoric meaningless.

It was for Rousseau and the later German Romantics to revive an interpretation of metaphor which sought to incorporate some limited relationship between emotionality and philosophical argument. According to Rousseau, truth may be a function of reason but "tropes" (from the ancient Greek *tropos*: "a turning") are primordial, as they are linked to the passions. It was Rousseau's recommendation, however, that such passions were to be sublimated into reason through proper education. While tropes were primordial for early learners, instruction was to lead them to self-conscious reason. Figurative language was the first to be born but it had no truth value. Proper meaning was discovered with the assistance of reasoning (Rousseau, in Sallis, 1989, p. 29). The relative importance that Rousseau placed on tropes was transmitted to nineteenth century German philosophy. In Hegel's view, a turn of phrase (a "trope") referred to a strategy for structuring an explanation. It served, therefore, a structural function and required the presence of (a) a judging subject, (b) that of which the subject makes judgment, and (c) a relationship between judging subject and judged object (Hegel, 1983, pp. 347-348). The interaction of subjective and

objective realms mediated through metaphorical vehicles creates a new meaning which is distinguishable from the original idea as subjectively perceived. Hegel's methodology for a science of consciousness provides a foundation for popular contemporary theories of metaphor which are part of a long heritage intended to unite the intuitive subject with the objectively conceptualized world. These are transcendental, as they theorize processes of thought which fly above the perceived world and are mediated through a concept of metaphor-as-vehicle for thinking and acting.

Theoretical Perspectives on Metaphor

Black (1979) isolated theoretical variants of metaphor theory, two of which might be classified as theories of similitude. The "substitution theory" treats metaphor as a compressed simile. For example, "John is a wolf" would be understood to mean that John demonstrates human ferocity and is labeled by observers to be "a wolf" by exaggerated consequence. A "comparison theory" would merge literal meanings, intending to show relevant similarities between two unrelated contexts: John's life and the life of a wolf. In this case, "John is a wolf" would refer to actual characteristics which John may share with a wolf; he is therefore, "similar" to a wolf in certain specific ways. Beyond substitution and comparison, the "interaction theory" is one which mixes dissonant contexts which may be in verbal opposition. Through substitution or comparison, the integrity of John, as a distinctive context, and "wolf" are maintained. Through interaction, the incompatibility of John and "wolf" is recognized but novel attributes are implied and accepted by joining these seemingly incompatible contexts through the generation of marginal meanings. Shapiro & Shapiro (1976) provided additional categorization to this synthesis based upon the distinction between metonymy (from *meta*,

indicating change; and *onyma*, a name) and metaphor. With substitution or comparison, a metonymous hierarchy of signata (i.e., "John" and "wolf") are maintained to attribute enhanced meaning while in the case of metaphor, this hierarchy breaks down into novel, hybrid meanings. In metonymy, therefore, the external contexts of "John" and "wolf" is emphasized to embellish a description of John's characteristics. Metonymy indicates a part-whole relationship. When part of John's behavior demonstrates "wolfishness," we may be tempted to exclaim, "John's a wolf!" But a binary opposition is maintained between John and the animal. With metaphor, however, internal relations of the signata are merged and mutated, as metaphor emphasizes interaction between two contexts and is, therefore, a more powerful figure of thought. A confusion can thereby be invoked as to whether John is, in fact, fully human or whether he may be a wolf in some respects. It is this refigurative power which intimidated medieval scholars and positivist scientists. It is also this power of metaphor which provides opportunities for analyses of teacher education for, as researchers argue, learning to teach does involve mutation of self-imagery.

One of the most influential of contemporary interactional perspectives on metaphor is that proposed by Lakoff and Johnson (1980). They argued that metaphor is essential for interaction between what they call conceptual "gestalts." In the case of educational research, traditional practices originating in the gestalts of travel or biological growth would thus be understood to interact with the gestalts of learning to teach in a school. Lakoff (1992b, p. 8) specializes in the study of conceptual systems -- the largely unconscious systems of thought that determine how we think. Metaphor, in this analysis, enables correspondence across conceptual

domains, typically from concrete spatial domains to more abstract domains (p. 22). The study of metaphor, therefore, can yield to the researcher a sort of dictionary of the unconscious. Lakoff assumes that there is an unconscious metaphorical language that functions separately from the body and its passions (Lakoff, 1992a). Since there is no way to get conscious control over the unconscious, Lakoff advises that we be aware of the components of our metaphorical systems and what they entail (1992a). Adopting this advice, Sfard (1998) recommends examination of the guiding metaphors (i.e., acquisition and participation) which are used to represent the abstract domain of learning and cautions against overly depending on just one in favor of the other.

Metaphor in Teacher Education Research

Bullough and Stokes (1994) identified several angles of research, most of which converge with regard to the preparation of teachers and all of which are concerned with how the latter identify themselves as pedagogues. These angles are "images of self," "self-narratives," and "personal metaphors." Bullough and Stokes began by saying that metaphors can be used to represent and to reconstruct problems, and this assumes an implicit knowledge that needs to be made explicit. In other words, subconscious images form pre-understandings (Bullough & Stokes, 1994) upon which conscious practice is based. According to Bullough and Stokes, one of the most abstract of these implicit metaphorical images is the preservice candidate's conception of him/herself as a teacher. The concrete experience of learning to teach requires a coherent self-image, and this develops through socialization into the profession. Citing Lakoff and Johnson (1980), Bullough & Stokes argued that metaphors unify diverse experiences. They insisted that "a large part of self-understanding is the search for appropriate

metaphors that make sense of our lives” (Bullough, Goldstein, & Holt, 1984, pp. 232-233).

A related angle of metaphor and teacher development research studies to the role of metaphor in teacher socialization (see Carter, 1993; Connelly & Clandinin, 1988). Self-narratives are one of the main ways of articulating images of the self in a purposeful and coherent fashion. Metaphors shift the emphasis from internal "vision" to external "voice," thus enabling teachers to "see" themselves through language and to create a self in that image (Collins & Green, 1990). Beyond the creation of a personal identity, metaphors are also instrumental in the construction of conceptual images of students and colleagues (Bullough & Stokes, 1994)

An important part of educational development, therefore, assumes that inner poetry must be translated into reasonable speech before it can be considered legitimate. Metaphor is a vehicle which unifies experience, assigns a narrative coherence to our lives, and leads to a concept of community by enabling one to identify with others. In short, metaphor is a rhetorical vehicle for conveying a unity to the disparate nature of experience and this coherence takes place transcendently above or beyond mundane experience.

Clearly, the theory of metaphor most useful to teacher development research is the one that treats metaphor as a vehicle for unifying two separate realms (e.g., the conscious with the subconscious, the internal vision with the external voice, etc.). Whether educational development refers to preparation (for life, work, war, etc.); initiation (Peters, 1965; Oakeshott, 1975; e.g., into a community through the teaching of its values, practices, and rituals); liberation (Freire, 1971; from alienation or cultural domination, ignorance, and/or prejudice); and/or guidance (Schimmel, 1975), it is to be rationalized through a methodology

which unifies conceptual gestalts. Metaphor is the communicative vehicle between external stimulus and internal synthesis. As Sford (1998) recommends, it befalls researchers to locate, analyze, and sharpen this link to the extent of deciding which metaphors might be the most effective link toward a unity of experience.

It might be useful, given this suggestive drive toward transcendental cognition, to investigate a Nietzschean perspective on metaphor (1995) which does not mandate such strategies of reflective unification. This investigation may open paths of thinking whereby practice could be accessed and expressed in more direct terms without the necessity of some theoretical vehicle of mediation. Until Nietzsche, the theory of metaphor depended on interpreting human essence as a transcendental entity (a soul, a mind, or a consciousness) that has the power to produce and to manipulate knowledge. Thinking, as articulated through interactive reflection, amounts to the metaphorical equivalent of feeling, intuitive seeing, and speaking or acting; first, the object of desire is perceived; it is visualized internally; then the abstract is vocalized and implemented in practice. It is taken for granted that the teacher is a conscious, thinking agent capable of accomplishing these tasks, and that metaphors facilitate transference between the conscious and subconscious realms. Such a presumed theoretical structure requires the constant theoretical refinement of strategies which seek to unify these two realms, as was evident in Hegel and more recently in Lakoff and Johnson.

According to Nietzsche, we imagine the existence of other things by analogy to our own existence; in other words, anthropomorphically and with unlogical projection (Stack, 1994, p. 4). Knowledge, in this perspective, comprises primarily socially determined conventions that require customary metaphorical signs which are enhanced and

embellished poetically. Over a period of time these linguistic habits become canonical and even obligatory in describing practices. Language, therefore, cannot be expected to correspond to lived experience accurately and metaphor cannot be expected to be a dependable vehicle for authoritative knowledge. There is no transcendental intuition where experience is processes and from which it is expounded. In reference to Johnson's (1980) history of metaphor, it is clear that Nietzsche was attempting to counter the long heritage which has marginalized rhetoric and emotions from the generation of truth claims. Under Nietzsche's analogic mode of thought, metaphors are not involved in transference between meaning gestalts but rather spring from a protosynthesis of sensations at a more primordial level of motor and emotional consciousness (Sallis, 1989, p. 45). From a research perspective, then, it is not the cognitive exercise of sense-making which would concern us, so much as the degree to which we can incorporate our bodies' fundamental relationship to the earth. Nietzsche's anthropomorphic mode of thought is affective and egocentric even when it is "trained" to pattern itself according to social rituals, which include academic research methodologies. In this hyper-organic perspective, metaphor still bridges a gap, but the chasm is not between consciousness and the theoretically conceived objective world. Metaphor is not a vehicle which drives toward rational clarity. It is the totality of all figurative rhetoric and springs from a more basic and self-evident connection between the body's needs and passions and the earth to which it is inextricably connected. Language merely perpetuates a conceptual schemata that abstracts, simplifies and incorporates fallacious identities (Lakoff & Johnson's "gestalts") for pragmatic use. Researchers seem to be very concerned with organizing and legislating the features of this schemata rather than confronting the

body's passions directly and their relationship to the teaching and learning process.

Learning to teach may be necessarily a pragmatic challenge, but the quest for authoritative, unified knowledge of that process may be elusive. I will dare to suggest, in conclusion, that researchers' desire to articulate accurately teachers' knowledge of learning and refine teaching practices through the correct analysis of metaphor cannot be fulfilled. Such a desire is as old as the abstract concept of metaphor as the streamlined vehicle of consciousness. It descends from an arrogant desire to somehow grasp and then control the flux of experience. A less arrogant relationship to experience may produce novel perspectives on learning to teach, but at this point of writing I am unaware of such a perspective in literature dealing with teacher education.

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The Challenge: To Restore a Culture of Teaching and Learning in South Africa

Ria McDonald

Helen van der Horst

The aim of this article is to expose the reader to examples of current educational practices in South Africa and to illuminate educational principles which need to be concentrated upon in order to restore a culture of teaching and learning in South Africa. It will take a lot of dedication and energy to improve South African education. Many of the educational principles which are needed to restore a culture of teaching and learning are not necessarily found in complicated or new academic theories, but rather in a commonsense approach and sensitive response to the basic needs of pupils.

INTRODUCTION

Many schools in South Africa present teaching-learning situations very far removed from the ideal. The aim of this article is to expose the reader to examples of current educational practices in South Africa (with reference to mass education provided by the government especially with a view to educating disadvantaged black children) in order to indicate the practicalities of teaching involved in many South African schools. The authors shall concentrate on government schools in the previous Department of Education and Training as they represent the majority of schools for whom teachers are trained at the University of South Africa (UNISA). These are the schools in which black children received their schooling during the apartheid era.

THE PROBLEM

During the apartheid era in South Africa the salient feature of South African education was the existence of different school systems which catered for the different racial groups, Whites, Blacks, Coloureds, and Indians (Grové, 1992). Financial imbalances in the apportioning of educational resources contributed to an unequal distribution of educational resources to members of different race groups. As a result "Black" education was of an inferior quality. Black teachers were less qualified than their White counterparts, buildings and other facilities were substandard and education in Black schools was unsatisfactory, characterised by poverty and lacking in quality (Grové, 1992).

The culture of teaching and learning in a large number of schools in South Africa therefore all but disappeared (Isaac, 1996). This problematic state of affairs can thus be related to the struggle period in South African politics (pre-1994 election) when the Black youth were involved in the political struggle and boycotted classes to demonstrate their views against apartheid government and apartheid education. According to Isaac (1996) this impoverished culture of teaching and learning currently manifests in two ways:

- A large number of learners do not attend school regularly, preferring instead to hang around in the streets, simply playing or partaking in pursuits such as crime or drug taking;
- Of those learners who do attend school, an alarming number have little enthusiasm for schoolwork, preferring instead to flout authority, disrupt classes and present work of a low standard.

THE CURRENT SCHOOL SITUATION

Students registered for the Higher Education Diploma (Postgraduate) at UNISA (a distance learning institution with approximately 120 000 registered students) are required to complete a number of assignments in which various aspects pertaining to the practical school situation are discussed (McDonald, 1997). These answers must be based on direct observation of lessons and school activities at the schools where they do their teaching practice. A number of worrying trends or schooling practices are identified. A few unabridged examples (Higher Education Diploma Students, 1996/1997) from different schools in different provinces follow:

Example 1: Student A reports as follows:

While attending classes with one particular class at the government school I found them unteachable and rude in one class, and sitting dead quiet in the next period with a stricter teacher. The first teacher had given up, decided her duty extended merely to giving the lesson, which she did amidst total chaos and immense noise levels. All but a few pupils totally ignored her. The second teacher kept them quiet and working, but everyone hated the class - she was totally authoritarian and gave them no freedom" and

The headmaster commanded no respect, and was manipulated by pupils. Freedom was seen as the pupils' right to express themselves, and priorities were somewhat misplaced in my view: there was a major incident where the headmaster punished half the school for not wearing blazers in the corridors, whilst it was common knowledge that many pupils were drunk over the weekend and attending less than acceptable clubs. It was also somewhat difficult for me to take

the Deputy Headmaster seriously when he was discussing the problem of smoking whilst puffing away himself. The pupils' (unsolicited) opinion on the subject was total disdain.

The same student had the following experience at another school:

The difference lies in the fact that boundaries are defined and adhered to,which makes it much less confusing, especially for teenagers who are already trying to sort out so many aspects as they start toward adult life.

Example 2: Student B writes the following about a school with a matriculation pass rate of 20% in 1996 and 11% in 1997:

Due to the general lack of discipline it was impossible to get all the pupils into the class until 20 or 30 minutes had passed. It might sound strange, but this is also the reason why many teachers do not teach at all on a Thursday or on a Friday. During the first two class periods the problem is that many children are still arriving from afar. They walk to school and the schools are sometimes far from their homes or they just start off late. During the last two periods the problem is again that the pupils run away and classes are only one third to half full. On a winter's day all the children (and often the teachers too) rather sit outside in the sun than inside in their classrooms. Often eight to ten teachers (out of a staff of twenty-four teachers) would be shirking their duties and rather sit outside against the wall of the library than teach inside. The rest of the pupils also are often all on the playground. They either sit around or play soccer in the dust. Many windows have been vandalised and broken: and it is therefore cold in the classrooms. Doors have been ripped out to be used as firewood...

and

Nobody brought any books, nobody did any homework, nobody really cares. At first I found it extremely difficult, and I thought that I must surely be the worst teacher on earth. Today I know that it is the same in all classes. The children simply do what they want to. Especially the older children simply get up and wander out of the classrooms when they feel like it.

There are many more examples of cases where very little teaching occurs as the pupils are undisciplined and the teachers have given up.

Some problem areas in current educational practice in South Africa

Many of the assignment answers which students submit contain the same type of information. It is abundantly clear that many schools have similar problems. The main problem area relate to the fact that there is a lack of discipline and furthermore, poor management. The problems with discipline appear to originate at the highest levels of school management. As discipline is not encouraged or enforced, the teachers are not encouraged to exert or expect disciplined behaviour. They themselves are not self disciplined and ultimately the pupils do not learn self-discipline or responsibility. The result is a total lack of any work ethic (Van der Horst & McDonald, 1997). The solution to this problem is not easy to implement. How does one motivate learners who previously had licence to express their disapproval of education to change their attitudes towards taking their studies seriously? How do you infuse teachers with a work ethic if they have become used to a culture of non-teaching?

AN EXAMPLE OF A SCHOOL WITH A TEACHING AND LEARNING CULTURE

In an attempt to provide an answer, another South African school is used as an example, for although the above problem areas appear to represent the norm, there are schools where there is success in the sense that there is proper management, discipline, teachers are qualified and dedicated, pupils learn effectively and even excel, even though their socio-economic and other circumstances may not be ideal. Reasoma Secondary School in Soweto can be cited as such an example. It achieved excellent matric results during the past few years: in 1995, 98%; in 1996, 99% and in 1997, 97% (Ntutela, 1998). The word reasoma can be translated as "we are working". This is indeed the case at this school. The school emblem is thus aptly that of a busy bee.

Reasoma Secondary School is situated in Protea North in Soweto, a huge township close to Johannesburg. It was founded in 1991 (during the height of the political struggle) under the principalship of a strict disciplinarian but believer in democratic values. Her main educational philosophy was to motivate the pupils to be self disciplined and self-reliant. The founding parents, pupils and teachers were all dedicated to the ideal of establishing a seat of learning in Soweto where learning would occur unhampered by external political activities and turmoil. The pupils who attend Reasoma Secondary School come from the immediate area (15% from this fairly stable middle-class area), approximately 30% come from a nearby squatter camp where poverty is rife and the rest from typically underprivileged areas in Soweto.

When the school was founded the first practical principle that was applied was the locking of the school gates in the mornings (to keep the pupils in and to keep the activists and criminal element out). This simple measure may seem trivial to educationists not conversant with the South African situation, but it represented a symbolic return to disciplined environment. Corporal punishment was applied to

latecomers and to pupils who were not neat in dress. This was accepted by the parent body and the learners as they wished to restore discipline in their teaching-learning environment. Corporal punishment has now been abolished by law. The school is still characterised by consistent follow-up measures. Learners are reprimanded and punished for coming late, dressing untidily and not completing schoolwork (these measures do not apply in the majority of South African schools). Since corporal punishment is no longer allowed (South Africa Department of Education, 1997a), the learners now have to do manual labour such as cleaning the bathrooms if they disobey the school rules. According to the principal and teachers, their pupils accept this modus operandi as they know that it is for their own good. They know that even if they have to be chivvied, at the end of the year they will be able to walk away with a pass mark that they have earned.

In 1997 the school already had 1207 pupils, 127 of whom were matriculants. The teaching corps comprises 42 teachers, all of whom are qualified to teach their respective subjects. What struck us upon meeting the teachers is that they are all enthusiastic, extremely hardworking and dedicated. With the current rationalisation the school will stand to lose 7 teachers, but the principal informed us that if all the empty rooms were also used to accommodate classrooms (an extra 300 pupils) they would be able to retain the present teaching staff. These empty rooms mainly comprise a totally inadequate library or media centre and a very inadequate laboratory.

The school is an ordinary unimaginative government building built for utility. The grounds are extensive but there is very little in the line of grassed areas or even shade; there is no hall. The pupils have their daily assemblies in the brick quad. These assemblies set the tone for their learning and activities for the rest of the day. The pupils and

teachers have prayers and sing spiritual songs. A motivational talk is given each morning. Thereafter classes start, there is regular instruction, regular homework, continuous assessment takes place and there are regular follow-up tests. The result is consistent and sustained learning and good examination results.

The crux of Reasoma's success is effective democratic governing. It started with the shutting of the school gates at a time when pupils were roaming the streets during school hours. All the stakeholders in the school agreed that in order to be effective certain measures would have to be applied at the school. At first, there seemed to be an emphasis on extrinsic measures. Rules were made and follow-up procedures were planned. Gradually these extrinsic measures have however kindled intrinsic motivation. The teachers know that only they themselves are responsible for their instruction and that nobody else can be blamed for poor teaching. The pupils know that they are entitled to good instruction and they expect it. There are thus mutual expectations of delivery.

AN ATTEMPT TO ADDRESS THE CURRENT PROBLEMATIC ISSUES IN EDUCATION IN SOUTH AFRICA

The University of South Africa endeavours to train teachers to apply principles such as those mentioned above. South African teacher training institutions need to concentrate on certain basic aspects in their courses:

Increasing basic subject knowledge and language proficiency of teachers, as well as classroom management skills:

It has been proved time and again that teachers who have few disciplinary problems are masters of their subjects and are excellent classroom managers. Classroom management actually reflects the ability of the teacher to teach while creating an environment which is

conducive to the pupils' learning. When classroom management is working well, it is almost invisible and when it isn't, disorder and disruption of learning are obvious. But successful organisation and management are not simple processes of setting down rigid rules and insisting on conformity to them. It is rather a well developed and flexible plan of operation. Successful classroom organisation and management are multifaceted processes that establish a classroom order that can be maintained while class goals, contexts and events continuously shift. The Further Diploma in Education on Educational Leadership (FDE) and the Bachelor of Education (BEd) Specialisation in Educational Management provides a management perspective on the restoration of a culture of learning. In these courses themes that are dealt with include ways of achieving school excellence, managing the internal and external environment of the school, personnel issues, improving interpersonal skills and legal aspects such as human rights in education and pupil discipline. No teacher who lacks basic subject knowledge can teach without disciplinary problems. A good command of the teaching subject is actually a prerequisite for successful discipline.

Apart from the traditional Pregraduate Content Courses, or the subject Didactics courses of the Higher Education Diploma (HED), UNISA has recently introduced a number of Further Diplomas in Education to meet this need. The FDE's in the scarce subjects such as mathematics, general science and English are examples. For example, in the FDE (English), which comprises an intensive study of content and methodology, the aim is to increase communicative ability, improve reading, writing and study skills, develop an awareness of pupils' needs and enable teachers of English to respond sensitively and

appropriately to those needs, thus making them more proficient, knowledgeable and effective teachers of English.

Guidelines for effective large class teaching: cooperative learning as a teaching strategy

A major problem in our schools is the class size. It appears that under the present government class sizes will only increase. Teacher training institutions must gear their courses to provide possible ways of dealing with large classes. In a number of courses at UNISA, for example in the degree course Bachelor of Primary Education (BPrimEd), the degree course Bachelor of Secondary Education (BSecEd) and in the HED course, cooperative learning is now included as an instructional design that can be applied in large classes.

Cooperative learning stimulates peer interaction and pupil-to-pupil cooperation in the process of fostering successful learning by all (Van der Horst & McDonald, 1997). It thus focuses on cooperation, self-discipline and motivation among individuals in the group. Positive interdependence is the key to successful cooperative learning. The two main aims of cooperative learning can be described as:

- improving pupil understanding and skills in the subject being taught and
- developing cooperative group skills and gaining appreciation of the different individuals and cultures found in the classroom.

These aims are in line with the philosophy behind the new South African curriculum, Curriculum 2005 (All on board for curriculum 2005, 1998).

Reflective practice

All teaching must be done responsibly and effectively. Reflective practice is essential in this regard. This aspect now receives attention in

the BPrimEd, BSecEd and HED (see references) courses. Teachers need to develop a disposition to question what they do. They need to develop techniques of inquiry into their teaching, and skills of reflection that provide a logical, non-threatening gateway into reflection on the broader moral, ethical or political issues that they deal with in their teaching and which ultimately have serious consequences for the social fabric of society (Van der Horst & McDonald 1997).

SYNTHESIS

In this article the reader was exposed to a few examples of educational practice in South Africa. It will take a lot of dedication and energy to improve South African education. We quote the principal of Reasoma Secondary School when she says: "Let us bring some of the old values into our society". Many of the educational principles which are needed to restore a culture of teaching and learning are not necessarily found in complicated or new academic theories, but rather in a commonsense approach and sensitive response to the basic needs of pupils. Old fashioned values such as hard work, dedication, repetition or drill, perseverance, follow-up, planning and self-discipline are required within a learner-centred teaching environment.

Curriculum 2005 has the following vision as its point of departure:

A prosperous, truly united, democratic and internationally competitive country with literate, creative and critical citizens leading productive, self-fulfilled lives in a country free of violence, discrimination and prejudice (South Africa

Department of Education, 1997b; Preface).

The new curriculum will however only achieve its outcomes if applied wisely and carefully, with due recognition of basic educational principles such as motivational discipline and sound organisation.

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The Use of Research in Teacher Education

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This paper presents and defends the argument that the involvement in research of student teachers as well as of teachers already formed, is a strategy of professional development and of improvement of teacher education. Some theoretical background is presented on why and how to use research in teacher education and some categories based on empirical data on the effects of the involvement in research of student teachers are presented. The intend is to argue in favor of an integration of initial and continuous education of teachers with research as a way to improve teacher education.

Introduction

This paper intends to discuss the use of research in teacher education. The subject is treated mainly in view of the preparation of teachers in the scientific areas. The work consists of two parts. In the first we present a discussion of some theoretical background for the use of research in teacher education. On the second we present some results obtained on the involvement of student teachers in different ways to introduce them to the research process. The first part of the paper is directed to answer the following question: Why and how to use research in the teacher education? On the second part of the text we address the question: What are some effects that can be obtained in teacher education as a result of students' involvement in research?

Along the discussions we intend to defend the thesis that the involvement in research is a strategy of professional development and

of improvement of teacher education, helping to overcome the technical rationality and to improve teachers' autonomy.

Why and how to use research in teacher education

Research in teacher education can be justified based on four types of arguments: as a formative principle, as a principle of quality construction, as knowledge construction and as a form of construction of an epistemological understanding.

First, research in teacher education fulfills a formative principle. In this sense it may help in the construction of autonomy and competence of the teachers and student teachers that engage in it.

Second, research may help in the construction of quality in education. Demo (1994) argues that the improvement of the quality of teachers' education and of teaching in general demands the use of the research. According to this author, only someone that produces knowledge is prepared for a quality teaching.

Knowledge construction has been associated more and more to the students' involvement in independent and autonomous investigation activities, assuming the teacher mainly a mediating function (Pozo, 1996). That may be reached through the use of research as a teaching methodology.

The last argument of an epistemological nature. The effective comprehension of epistemological matters, be it on the nature of knowledge or on the nature of science, is made possible and is intensified through living situations of science and its processes, which means involvement in research.

The four arguments for the use of research in teacher education, as a formative principle, as a principle of quality construction, as knowledge construction and as a form of construction of an epistemological understanding seem to be

tightly related to a large part to the theoretical background that underlies most of the new approaches do the improvement of teaching and learning. We understand that they apply specially to teacher education. But, how to do this?

How to use research in teacher education? Stated in a simple way the use of research in teacher education can be done in two ways: *initiation to research and research as practice.*

As an initiation we support the idea that research should be present in the formation of teachers along the whole courses, in all disciplines. At the same time, the prospective teachers should have opportunities for involvement in research groups, meeting teachers already working in schools, mainly through action-research.

Inside their courses, the students could be involved in research in the following situations: in the development of the contents of the disciplines; in the development of methodological and teaching subjects; and in focusing subjects of reality and school context.

When referring to research as practice we are emphasizing mainly the research groups and in a particular way the action-research groups. The possibility of involvement in these groups may be a unique opportunity of professional development in all areas, specially in teacher education.

It is well accepted today that the teacher education is a continuous process. The formation of a teacher is never ended. The teacher is in permanent formation. It is also largely accepted the idea that the continuous formation of teachers is a process that requires an intense participation of the teacher himself. The education of a teacher is a process of individual and group construction in which the involvement in research is essential.

Effects of the involvement of student teachers in research

The empirical evidence on the effects of the use of research in teacher education comes from student teachers in undergraduate courses. The analyses, descriptions and interpretations were built on information collected on a group of participants involved in different types of research.

Perception of the course

-valuing of students' roles

-conception of a more curriculum

-change in course perception

-feeling as part of the

-more positive idea

-more objective and perception of the course

-amplification of perspectives

Table 1: Categories of students' growth through the participation in research

General categories	Sub-categories	Indicators	
Learning in general	-conceptions of learning	-conceptions on learning instruments, spontaneous testimonies from students in seminars and in informal contacts with student teachers.	The categories were built on data from interviews, evaluation and informal contacts with student teachers. Table 1 synthesizes the categories that emerged from the analysis: <i>learning in general, personal development, relationship teacher/student and student/student and perception of the course.</i>
	-epistemological aspects	-learning as construction	
	-autonomy	-relationship theory/practice	
	-self-concept	-nature of knowledge	
Personal development	-self-organization	-epistemology of science	Table 1 also presents the main subcategories and some of the indicators classified in each category. Let us now examine each one of these categories.
	Integral and critical - growth	-autonomy and responsibility	
		-autonomy and freedom	
Teacher/student and student/student relationships	-relationships with teachers and administration	-self-concept and self-esteem	In this category are classified the students' manifestations on how they perceived the influence of the participation in research on their understanding on how learning occurs, as well as on the way they perceive science and its forms of action. Two main aspects emerged in this category: <i>conceptions on learning and epistemological aspects.</i> One of the ideas the students point out that they had before their involvement in research was that of learning as centered in the knowledge that is in the books and in what the teacher transmits. After their involvement in research the students got to understand that learning is dependent on their action, on solving problem and daily challenges.
	-changes of attitudes in classrooms	-self-concept and leadership	
	-group work valuing	spirit	
		-to assume risks	
		-self-organization and learning	

A math student teacher describes an interesting change in this sense:

In my opinion the involvement with the research project was fundamental. I, for example, didn't know the sector of the library that contains the periodicals. Many student teachers don't know it either. Sometimes we do not know the resources the university has and how to use them. As my project is to organize articles about education in mathematics, I was able to perceive that there was another source of knowledge, besides the library. I never had gone there and it was only in this way that I perceived how much this is valid for us. Even my colleagues that also didn't know about these resources ended up knowing. Then that is a fact for us to notice that a lot of times we are alienated seeking things in the same places. The involvement in the research helped us to have this contact.

The student teachers before their involvement in the research, coinciding with what research data have been pointing out for the majority of teachers and students, present an empiricist conception on learning, that is, that knowledge is imposed on the student from the outside. The involvement in research helped to build a new way of conceiving learning, valuing the activity and participation of the students, leading to a comprehension of learning as construction, in which the learner structures his knowledge.

Another student from a physics course shows how she modified her conception on learning, specially through the acquisition of a new meaning for the error in the learning process:

I think that what was of most value for us was to perceive that suddenly, if something goes wrong, we may go back, we may repeat until we get what we want. When we go to the

laboratory and somebody already prepared the experiment, the work is half done already, we go there and usually everything goes all right. But it is not exactly the way things happen. Somebody had to prepare the experiment. He had to make some adjustments or measure something, until the students could go there and conduct the experiment in the laboratory. I understand that what was of most value for us was that, if suddenly something goes wrong, we ought not to give up. We shall search until we get to the correct result. It is important also the experience we take with us, something we may use. But, when we start the involvement in a research project it is something different and we start to give it value. We get to search more. It is something in which you get more interested in. I think that the experience of inventing something, to try to discover what went wrong, is more important than the experience in the classroom. It is important and makes us feel better.

The involvement in research helps also the students to understand in a new way the relationship between theory and practice. The students state that, before their involvement in research, they had a conception of a theoretical teaching and of a practical teaching. They understood that in the theory classes theory was learned; in the laboratory classes the practice was learned. Through their involvement with research the students start to notice better the dialogue between theory and practice, a construction process in which the subject theorizes in a straight relationship with practice.

This new form of conceiving the relationship between theory and practice occurs so much in the specific contents of each area, as well

as, and perhaps mainly, in teaching practice matters, as is emphasized by a student teacher of physics:

This project that we developed was very important because it gave up in some sense the emphasis on the theoretical part that we see in the disciplines of physics and we apply it. After setting up the experiments, after constructing, you will be able to pass this to other people. I think that when you teach another person you learn twice. Then it is very gratifying to teach something to another person and to see that she did understand. This learning I will take with me for the rest of my life.

But it is also interesting to verify that in some situations it is in the practical involvement that the student teacher gets to notice the true value of the theory, just as highlights another physics student:

I would also like to highlight the growth in theoretical terms that the project permitted me. I think that for taking advantage of a practice you need to have a theory, you need to have a good theoretical background. As we from physics, and also those from mathematics, take some disciplines with engineering students, frequently there are flaws in some contents, some subjects that should be given. Then the involvement in projects can get deeper in specific contents giving better direction and more background to teach them. This gives us more confidence to teach those subjects and this is very important. Even for our own practice this is important. How can you teach to somebody else something that you don't know theoretically for yourself?

In a second aspect examined in this general category of learning the students pointed out changes in their conceptions on the nature of science and on how scientific knowledge is constructed. Before the

students had a perception of knowledge ready done and finished, which is in agreement with their conceptions on science, understood just as a product. Due to their closer involvement with concrete situations of scientific research the students were able to understand the imperfections and irregularities of knowledge, building an image of the dynamics and incompleteness of the scientific knowledge, starting to conceive a model of science as process and as product. They got to understand better that science is a human enterprise and therefore fallible and requesting constant revisions.

This category related to the conceptions on learning has direct relationships with other categories that emerged from the students' talk. This especially happens with the second category, personal development.

Personal development

In this category are integrated the students' references on different aspects related to their own development: *autonomy, self-concept, self-organization and integral and critical growth*. These sub-categories present specific aspects on personal development.

In relationship to autonomy the students emphasized their growing in terms of responsibility and freedom. This autonomy manifests itself through a more responsible and critical participation in the classroom. The students state that, in general, in the classroom, on the one side they ask very little, for shyness; on the other side they ask everything to the teacher, because they take him as the unique source of knowledge. In contrasting their experiences in the classroom after being involved in research, some students state that, sometimes they don't ask everything to the teacher in the classroom, because they try to get the answers by themselves first. In case they don't find the answers they seek the teacher to discuss the case. Other students start

to discuss more the contents with their teachers, because they lose their fears and because they also recognize the teacher's and their own incompleteness. In these sense the students demonstrate that they get more responsible and autonomous.

The students state also that, before their involvement in research, they were not autonomous. They only made something or had some attitudes when requested. They were afraid of taking decisions. The students depended on the teacher for everything. But, the involvement in research helped the students to develop their autonomy. They perceived that they were capable to take certain decisions without fear. In the research process they go on their own to search articles and research methodologies because the problems need to be solved. Besides this the students develop responsibility with their own and with relationship to the group.

Before, some students thought they could not do certain things or to occupy certain spaces in the institution. They didn't know how to request materials to the employees. Because they believed they didn't have these space, they said that the institution didn't give it to them. They discovered the access to special rooms and equipments. Today they request materials to the employees with easiness. This also made them feel more free in the classrooms and with less fear to face specific situations. They acquired an autonomy with responsibility.

A chemistry student highlights the diversity of experiences that the research provided and how this interfered in his autonomy:

I am growing a lot through the research group meetings. But I got still more excited because several activities came besides these. The involvement in the group facilitated a diversity of other forms of interaction: participation in seminars, attending classes in schools, evaluating science fairs;

the easier access we have to the teachers; the resources we are closer. We are more autonomous to move around and to know what the university offers. Then there is a summ of activities that is enriching our experience. This helps to prepare us as professionals and in our construction as future teachers.

Autonomy is tightly related to self-concept and to self-esteem. The integrated development of these aspects seems to be significant for many students involved in research with their teachers. Before this involvement several students present a low self-esteem in relationship to their power to influence; are insecure; do not believe in their potentials. But, afterwards, they develop a leadership. They feel more secure in relationship to their colleagues and to their teachers.

The development of autonomy and of self-esteem also reflects on a broadened capacity of self-organization and on a rational use of time. Some students manifested that they were apprehensive in relationship to the scholarships they were invited to, because they imagined that their grades would go down. They didn't know about schedules, imagining that the research activities would take too much time. The grades increased and they adapted easily to schedules or they adapted the schedules to their own time. The students learned to be better organized and to make a better use of their time.

Finally, there appeared also a global, interdisciplinary and critical development. Some students pointed out that before their involvement in research they felt no motivation to improve in other areas. Some referred their laziness to learn English. After, they looked for learnings in other areas like computer science, foreign language, statistics, instrumental analysis, etc.

Others still stated that, for many students the course consists only of attending classes and studying for the tests. For those involved in

research the course becomes a dialogue among what is worked in the class and what is developed in the research activities. The student becomes more critical in relationship to the subjects in which he doesn't see meaning.

In this sense it is interesting to present a testimony of another chemistry student:

I also need to state the consciousness about becoming a teacher I constructed through the project. I participated in meetings. We went to a meeting for chemistry teachers. We gave classes, participated on projects and in research. I believe that never in my life I would have gotten conscious if I had left the course just with the teaching practice in the last semester. Everything is very gradual. It is not something that you do just in one semester. The real changes take place over a long time and these changes are those that are important. And we have to get conscious that we cannot stop.

According to the students' statements there are no doubts that the involvement in research is a singular opportunity of development, not only through the contact with the teachers but also with colleagues, as we describe in the third category, *relationship teacher/student and student/student*.

Relationship teacher/student and student/student

The student teachers that get involved in research in their courses demonstrate significant changes in their relationships with teachers and with colleagues. The relationships with teachers and with the administration get closer; there occur changes in attitudes in the classroom in terms of action and participation; the students increase their value of the team work, being able to understand the importance of the contribution of each one in a group. Those are some aspects

discussed in the category *relationships teacher/student and student/student*.

The closer relationship with the teachers and the new attitudes in the classroom appear when the student perceives changes in his way to relate with them. Before their involvement in a type of work closer to the teacher, the students perceived their teachers in a higher plan. They had the perception that the teachers had a complete knowledge of everything. Starting from their involvement in research the students perceive that the teacher also has doubts. Sometimes the teacher also doesn't know. Through the discussions in research appear the limitations of the teacher. The student-researcher starts then to question with more ease and to question himself, transferring also this attitude to the classroom.

This appears clearly in the testimony of a chemistry student:

The involvement in the project helped me to grow in several ways, in the process of living together with the teachers in a more informal way. It helped to know that they also have problems in giving that class and that they also have difficulties; that the class will not always be so wonderful. Specially because sometimes they also have problems at home. The teacher also has to overcome his difficulties and take his responsibilities with the students. This makes us think before we assume this teacher attitude. This helps us to think that also the teachers are vulnerable as ourselves. How will we act as teachers? We students know how to criticize, how to complain, but we ought also to have an understanding of teachers' perspective; that they are as human as we are.

In normal class conditions the students get intimidated in front of the teachers. When they get nearer through the research groups, the

students feel more intimate and they start to face their teachers as people like them.

This feeling doesn't occur only in relationship to the teachers that do research with them, but also with the administration staff and other teachers. Before, the students in general, didn't know their teachers. They also didn't have any intimacy with directors and coordinators. After their involvement in research they talk with them all. They have an improved relationship with the administration, giving them more confidence. They feel as part of a group, belonging to a team.

All this tends to produce significant changes in attitudes in the classroom and in relation to the course as a whole. Some students admitted that before they only paid to study. Because of this they only complained that no opportunities appeared. Through the involvement in research they changed their attitudes trying to take the maximum profit of their course. Other opportunities appear because the students become better known.

From this emerges the possibility to see the course in a new way, a more positive and concrete way. One student states that in spite of having opted for a course in chemistry, for being chemist or teacher, there were many doubts in relation to the professional future. He had doubts on what he really wanted to do in professional terms. The involvement in research seems to help to solve some of these problems and to have a deeper involvement in the course. One student affirmed that before she wanted to finish her course in the shortest time, to take her diploma and go, without knowing where. Today she doesn't want to finish her course in a hurry, but she wants to go slowly so to take advantage and learn more.

Finally, there is something more in relationship to group activities. The students, before their involvement in research felt that, when

involved in group work, there was not really a team work. The participation in research groups, an activity usually done in groups, helped the students to understand how a group works. The periodical meetings with colleagues and with teachers constitute a team work in which learning is continuous and effective. Besides that, the students have to get results and learn to work according rules. They learn to accomplish what is expected from them by the group.

This new form of conceiving the relationships with colleagues, through an involvement in situations with high motivation, appears in a testimony of a student of physics:

There is an important thing that we are developing in the projects of construction of low cost materials. When we are constructing these materials, we come to the university on Saturday mornings and stay until late. Two Saturdays ago, we left at 8 p.m. Sometimes we violate numbers, but we feel that we did something wrong and this is important. We try to construct a spring and measure a constant. How? The value cannot be that! Go back! Then you see that there was something wrong and you discovered it. This is important because you are learning by yourself, there, in the discussion with your colleagues. This is very important. You don't stay there only in the academic. You don't just copy. Living together is excellent. And the teacher knows how to mediate the process. It is very gratifying to participate.

In the sense of establishing better relationships among students, this doesn't happen only inside the courses. Specially in the perspective of teacher education with an interdisciplinary view, it is important to know colleagues from other courses and their forms of thinking and acting, as emphasizes another student:

Another thing that I found of big value was of being able to live together with other students from the courses of math, physics, biology and science, because if I didn't participate in this project I would be in contact only with people in chemistry; I would not get to know people from other courses.

The improvement of the relationships between teachers and students and among the students themselves is a by-product of the involvement of the students in research. These new relationships also facilitate a new view of the course, more professional and able to make the student take more profit of the course he takes. This will be discussed in more details in the category of *perception of the course*.

Perception of the course

The changes in the perception of their courses happen mainly through the increased value of the role of the students in the learning process, through the construction of a more positive view of the courses and the ability to perceive new possibilities in them.

The participation in research helps the students to construct a richer and more dynamic curriculum in the classroom, with more participation in the class activities. If before, the involvement in the curriculum is perceived as something static, and it is understood that for having success in the course it is important to be in the classes and to study for the tests, after the involvement in research the curriculum is understood as something dynamic. The student understands that he learns not only in the disciplines with the teacher, but that to be successful his active involvement is essential.

The testimony of a physics student is significant in this sense.

My participation in the project was of vital importance in the course I am taking. At the time I was invited to participate in the project I was bored about my course. Theory, formulas,

little practice, my fault of course, because I didn't involve myself anymore. I cannot transfer this to my teachers. But I didn't have interest to go farther any more. When I entered the project everything changed. I started to involve myself in the organization of the laboratory. When I arrived at the end of 1996 there was almost nothing there. The shelves were empty. Today if you go in there, you need to take care in walking, because there is a lot of material on the ground. There is no room anymore, such has been the amount of materials that have been acquired. For me this has a great meaning because I have an opportunity to see the application of this with students, be them student teachers or teachers already working in schools.

If before, they expected that some teachers mark their presence in the courses and that the quality of the courses just depended on the teachers, after passing through the research experience, some students believe that it is they that have to mark their presence and also that the quality of the courses depend on themselves. In this way occurs an increase in the value of the students' role in their courses.

Simultaneously occurs also a broadening of the perceived perspectives in relationship to the courses. If before some students thought of taking only the teacher education course, the research activities raised other possibilities, as the possibility of following the chemistry course, without living the idea of teaching. In this sense, what seems to have most influenced was the support of the teachers and the fact of being able to see them as friends.

However, perhaps the opposite movement was more significant. Several students that had a limited and negative view of the course that prepares teachers; from the involvement in research projects related to

teaching they changed significantly this perception, as demonstrates a testimony from a student:

For me it was also great because I entered the course without not even thinking in going into a class as a teacher. Actually It was not what I wanted. But now, with the project I am completely impassioned and I don't think to change my course. I want do teach and the project helped me a lot in this, because with the workshops, with the involvement in the schools, I am able to see how will be our reality in the future and this is important. Because, before, for me a teacher was that, in the classroom an only that. And it is not exactly so.

There is a lot that is changing.

More than this, the experiences in research facilitated the broadening of limits of learning in a wider sense. If before they perceived that the amount of knowledge was limited by what was treated in the classroom or for what was demanded by the teacher, or still, by the recommended and used bibliography, now, after being involved in research they understand that the amount of knowledge to be acquired is limitless. The felt needs are what will guide the necessary learnings. But in this route of searches, many other knowledge will be elaborated by the students. This is clear in the testimony:

I see that, as a student from the first semester, I grew up a lot to now, but I know that I have much more to grow. And it is this learning that I have with the teachers a work with. That it is not because you have a certificate that you know everything. You have to be always learning because otherwise you die. The maturation process as student developed a lot. It has been very good.

The present category demonstrates how the involvement in research helps the students to modify their perception in relationship to the students' roles in the course, in the sense of a deeper participation. It also helps them to perceive the courses in a wider way, being able to see new possibilities, and that in a general way helps them to extend the learning limits in the courses in a very significant way.

Final considerations

Thus, we consider the involvement in research an important educational alternative to break with the traditional teaching, at all levels, promoting the quality of education, so much in its formal sense as political.

We conclude this discussion reaffirming the position that the involvement of student teachers in research is one of the forms to overcome the technical rationality and of developing the autonomy in the educational work, so much inside the formation courses as in the educational practice in the schools.

Finally, we leave a challenge to the teachers working in teacher education courses, in the sense of the search for alternatives directed to the use of research with student teachers, preferably involving elementary and secondary teachers, because this might be a way to improve the formal and political quality of our teacher education courses. The integration of the initial formation with the continuous education of teachers, through research, seems to be a promising avenue for the future in the process of teacher education.

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The Impact of Primary Teachers' Preferences and Social Studies Backgrounds on Students' Attitudes Towards Primary School Subjects

Wally Moroz

Abstract

The findings from a survey of 143 teachers and their 3,828 students provide an insight into teacher and student preferences for learning areas in primary schools. The study also examines the social studies backgrounds of Western Australian primary school teachers. The findings show that teacher/student perceptions of the learning environment are divergent, teachers have a poor social studies background and few have intentions of undertaking postgraduate study in the learning area. Teachers are unaware of the perceptual gap in their classroom. The demands of every day classroom practice inhibit teacher creativity and encourage a conservative approach to teaching, which is not valued by the students.

Introduction

A major and long-standing concern for social studies educators, recognised in the literature, is the limited range of instructional practices utilized (Moroz and Baker, 1997; Moroz, 1996; Cuban, 1991; Hornstein, 1990; Armento, 1986; Goodlad, 1984; Fancett and Hawke, 1982; Shaver, Davis, and Helburn, 1979). The findings repeatedly suggest that most teachers “do” social studies in a similar way: that is, they use teacher-centred strategies rather than child-centred strategies and it seems that this, more than the content, is what annoys the

students about the subject. Cuban (1991, p. 204) describes these findings along with the low status accorded to the subject as one of two “enduring patterns” in social studies classrooms. Teachers tend to repeatedly use whole-group instructional practices, recitation, textbooks, note taking, worksheets, pictures and diagrams and, occasionally, audiovisual materials. Computer use, small group work, interactive activities, and excursions, which are so much more time consuming, are used infrequently (Hopkins, 1997; Berson, 1996; Clark, 1992; Vockell, 1992; Northup and Rooze, 1990).

This paper presents findings on the impact of teacher preferences, their social studies background and teaching strategies on the attitudes of students toward social studies and provides an insight into the overall classroom environment in government primary schools.

The Western Australian Study

Reports by Moroz (1996, 1998a, 1998b) shed some light on the impact of teacher background, qualities, competencies and teaching strategies on teachers’ and students’ attitudes toward social studies in government primary schools. The Moroz studies sought information from the key stakeholders in the classroom, teachers and their students. 3,828 students and their 143 teachers from 30 Western Australian government primary schools completed questionnaires. All teachers and their students from the middle and upper classes (Years 4, 5, 6 and 7) at the selected schools were included in the survey. Respondents were from twenty-one Perth metropolitan schools and nine country schools. The schools ranged in size from fewer than 100 to more than 700 students.

Teacher background

The gender and age characteristics of the respondent group reflect those of primary school teachers in Western Australia. Sixty-five

percent of primary school teachers are female and there is an ageing teaching population with an average age of 44.

The teachers surveyed had a diverse range of teaching experience. Country teachers, as expected, had significantly less teaching experience than metropolitan (with 72% having up to ten years teaching experience compared with 71% of the metropolitan teachers having ten or more years).

Almost 70 percent of metropolitan teachers commenced teaching before the introduction, in 1981, of the *Social Studies K-10 Syllabus* (Education Department of Western Australia, 1981). Almost two-thirds of country teachers commenced teaching after its introduction.

The teachers were asked to indicate if they had completed at least a semester unit of undergraduate or postgraduate study in one or more of the social sciences. The largest proportion had studied sociology (44% of metropolitan teachers and 37% country) and social psychology (32% and 27%), while the smallest had completed work in Asian studies. Political science, economics and world history were neglected areas of study.

The majority of metropolitan teachers (56%) and their country colleagues (62%) had completed neither a major nor a minor in social studies as part of their undergraduate studies. Of the remainder 30 percent had completed a minor rather than a major in social studies.

Forty-six percent of the metropolitan teachers felt that their teacher education in social studies had been “good” to “excellent”, a third regarded it as “adequate” and one in five regarded it as less than adequate. Thirty-one percent of country teachers felt that their teacher education in social studies had been “good” to “excellent”, 45 percent regarded it as “adequate” and almost a quarter less than adequate.

Only 10 percent of metropolitan teachers (16% country) had completed postgraduate work in social studies. An additional 12 percent (18% country) claimed they intended to do so. The majority of teacher respondents had completed either a diploma or a bachelor degree in teaching. None had completed a masters or doctoral degree.

Very few teachers had participated in social studies professional development over the past five years, apart from 45 percent of metropolitan teachers and one third of the country teachers who received “some” professional development at the school level.

Current situation

Just over 20 percent of metropolitan teachers (19% country) currently taught Year 4 classes, 15 percent taught Years 5, 6 or 7 in non-mixed classes (42% country) and 36 percent taught mixed year-level classes (38% country). Forty-one percent of metropolitan teachers (and 32% country) had class sizes of 31 to 35. Thirty four percent of metropolitan teachers and 52 percent of the country teachers taught classes of 26 to 30.

Just over 23 percent of the metropolitan teachers indicated that they taught social studies an average of once per week throughout the term of the survey. Over half (52%) taught two lessons per week and almost one-fifth (18%) took three social studies lessons per week.

Seventy-five percent of the metropolitan teachers had one or two classes of social studies per week. Country teachers generally taught more social studies lessons per week than did their city colleagues with 88 percent indicating two to three lessons per week with the same class.

Over sixty percent of all teachers continue to use the Social Studies K-10 Syllabus (1981) as a major source for planning. Other commonly

used resources were the associated *Teachers Guides*; the respondents’ own ideas and current events.

Teachers’ ranking of social studies and other school subjects

Metropolitan teachers show a strong preference for the traditional subjects, with mathematics, reading, social studies and creative writing ranked in the top four (Table 1). Sport, computing and music, which were ranked in the top three of the students’ lists, are in the bottom half of the teachers’ lists. Computing, while still positive has a low mean of 3.39.

Table 1: Metropolitan and country teachers’ ranking of social studies and other school subjects

Metro teachers				Country teachers			
Ran k	Subject	Mea n	SD	Ran k	Subject	Mea n	SD
1	Mathematics	4.48	0.69	1	Reading	4.32	0.70
2	Reading	4.39	0.68	2	Mathematics	4.26	0.77
3	Social studies	4.26	0.61	3	Spelling	3.94	0.68
4	Creative writing	4.26	0.73	4	Creative writing	3.87	1.03
5	Spelling	4.12	0.81	5	Health	3.87	0.92
6	Health	3.99	0.92	6	Writing	3.81	0.87
7	Library	3.86	0.82	7	Sport	3.80	1.16

8	Writing	3.85	1.09	8	Social studies	3.77	0.76
9	Sport	3.81	1.26	9	Library	3.71	0.74
10	Science	3.79	1.22	10	Science	3.39	1.15
11	Computing	3.39	1.08	11	Computing	3.35	1.11
12	Music	3.02	1.36	12	Music	2.68	1.17
13	Religion	2.51	1.20	13	Religion	2.10	1.06

SD = Standard deviation

Compared with metropolitan teachers' preferences for subjects, country teachers' preferences show overall lower means for all subjects, a drop in rank for social studies from third to eighth and an identical bottom four of science, computing, music and religion. Though country students use computers a lot more than their metropolitan counterparts their teachers are barely positive about computing.

Students' views on instructional practices in social studies

Students develop ideas, feelings, predispositions, preferences and attitudes about school subjects over a period of time and from a variety of sources. How a subject is presented in school is likely to affect the way students perceive and relate to it (Baker and Moroz, 1997; Moroz, 1996; Anderson, Stevens, Prawat, and Nickerson, 1988; Marshall and Weinstein, 1984). In addition to the structure of the classroom experiences, according to Stodolsky, Salk, and Glaessner, (1991), the actual content and competencies sought within each subject may also contribute to differing student perceptions.

Students were asked to rank instructional practices in social studies for a series of 24 items on a five-point scale, ranging from "strongly agree" to "strongly disagree". Metropolitan and country students were in agreement that in social studies "There should be more computer activities", "I have learned how to use maps", and "I like small groups". Strongest disagreement was registered for the items: "There are too many tests"; "We do too much colouring-in", and "We have too many excursions".

Frequency of instructional practices in social studies lessons

Students were asked to indicate the frequency of a range of instructional practices, by responding to a list of 28 different activities in terms of their frequency. The results are revealing, indicating that the most common activities undertaken in the metropolitan social studies classes were copying from the blackboard (80% undertook this at least every two weeks), reading (75%), whole-class discussion (63%), colouring-in (58%) and pictures and diagrams (58%). The most common activities undertaken in country social studies classes were reading (71%), copying from blackboard (70%), library (67%), whole-class discussion (67%). Apart from library, these are all conventional, teacher-dominated activities, symptomatic of inputs based education philosophy. The teacher's role is identified as one of transmission of knowledge to learners whose role is to absorb information.

Reliance on these kinds of activities as the principal teaching and learning strategies raises serious questions about their effectiveness. This concern is reinforced when results for the least-common activities (interactive or action-oriented strategies) are considered: role-plays (acting), newspaper activities, projects, films, guest speakers and excursions.

Two thirds of metropolitan students (and 46 % of country students) indicated that computer based learning (CBL) activities in social studies were rare. Almost double the number of country students (42%) compared to metropolitan students (25%) indicated frequent use of the computer in social studies (at least once a week). Overall, CBL activities were ranked ninth, in terms of frequency of occurrence by the country students and eighteenth by the metropolitan students.

Students' attitudes toward social studies and other school subjects

The final segment of the questionnaire asked students to rank social studies and other school subjects on a five-point scale ranging from "like a lot" (5) to "dislike a lot" (1). In Table 2 subject areas are rank ordered from most to least positive, based on mean scores.

For both the metropolitan and the country cohorts, sport and computing were perceived considerably more positively than other subjects. Other highly rated subjects were creative writing, music and reading. Health, writing and spelling were each ranked higher than social studies. In terms of least-favoured subjects: social studies ranked lowest apart from religion which was the only subject to record a score lower than the neutral point of 3. Religion is not a compulsory school subject in West Australian government schools. In those schools where it is offered, community members who are not necessarily trained teachers usually provide the instruction. The low status of social studies must be of extreme concern to those responsible for the learning area at all levels. The data show clearly that students, although slightly positive about social studies, rank it as one of their least-favoured subjects.

Computing which is not really a "subject taught" in primary schools but rather something that students use as a tool, is one of the favoured "subjects". Large numbers of metropolitan and country

students, report their frequency of experience with CBL in their social studies classes as "hardly ever" but almost 80 percent of all students want more computer activities in social studies.

Table 2: Metropolitan and country students ranking of social studies and other school subjects

Metro students				Country students			
Ran k	Subject	Mea n	SD	Ran k	Subject	Mea n	SD
1	Sport	4.65	0.83	1	Computing	4.63	0.84
2	Computing	4.45	0.87	2	Sport	4.60	0.92
3	Creative writing	3.98	1.23	3	Music	4.03	1.26
4	Music	3.90	1.35	4	Reading	3.97	1.22
5	Reading	3.88	1.24	5	Creative writing	3.96	1.26
6	Science	3.82	1.25	6	Library	3.79	1.30
7	Library	3.75	1.31	7	Science	3.78	1.30
8	Mathematics	3.68	1.41	8	Writing	3.69	1.26
9	Spelling	3.59	1.29	9	Mathematics	3.64	1.41
10	Writing	3.59	1.27	10	Spelling	3.61	1.29
11	Health	3.49	1.29	11	Health	3.47	1.28
12	Social studies	3.38	1.37	12	Social studies	3.34	1.36

SD = Standard deviation

DISCUSSION

In both metropolitan and country government primary schools, Western Australian students do not like social studies as much as other subjects. Their teachers, on the other hand, find it pleasant and not unduly taxing to teach. Teachers, particularly in the city, rank it in the top three of their preferred subjects to teach. The students rank social studies twelfth. Teachers like the structured, “written” subjects, whereas the students prefer the active, performance based, creative, non-written, non-assessed subjects, like sport, computing and creative writing. Students want more hands-on, practical or interactive work, including excursions and small group work, collaborative approaches, more challenge and diversity and more computer based learning. The disparity between what the teachers and students think about the learning areas in primary schools must impact in a negative way on all aspects of the classroom learning environment including achievement and outcomes.

The teacher’s lack of awareness of what their students think about instructional practices in primary school social studies results in “more of the same” limited range of instructional practices being employed and it is this that turns the students off. Perhaps the “major and long-standing concerns” of social educators would be partially alleviated if teachers actively sought objective feedback about the learning environment from their students. Teachers are not aware of the perceptual disparity or gap that exists in their classroom. This lack of awareness must contribute to a sense of alienation between students and their teachers. Students’ needs and wants, in terms of content and

pedagogy, are often not being considered by their teachers. The “sit still and listen to me” and the “we will do it my way” approaches are not acceptable or conducive to active, collaborative learning. The student/teacher partnership needs to be re-established (Baker and Moroz, 1997). The first step would be for teachers to *listen* to what their students have to say about what is being taught and how.

Leaving aside questions of the preferred content and pedagogy it may be possible to venture some tentative remarks about the teacher factors which make social studies less desirable than most other learning areas for primary students.

Teacher factors

“I don’t know the subject.”

Neither the social science disciplines nor the methodology of teaching social studies have ever been popular with teacher education students, and few graduate with significant studies in either area (Reynolds and Moroz, 1998). For most, their pre-service experience is limited to one one-semester compulsory course in Years 11 and 12, and compulsory studies in primary and lower secondary school. Very few teachers have sufficient knowledge of all or even some social sciences to claim an adequate background to develop valid learning programs in social studies and there is no expressed intention on their part to undertake further studies in the area.

“There’s nothing here to teach with.”

To some extent this is a valid claim. Few schools list social studies as a priority for school development planning and this is reflected in its poor showing in competition for the budget dollar. In-school resources are therefore likely to be poor and badly dated. On the other hand, the teacher genuinely committed to developing a sound learning program will regard this as an impediment to be overcome.

"I'd like to do it but I don't know how."

This is the outcome of a constellation of factors:

the lack of pre-service preparation;

- low levels of effective system wide professional development;
- poor motivation (social studies has received no systemic attention since 1981 and there is no sense of movement and innovation);
- insufficient curriculum leadership (the long interregnum between the demise of the subject superintendents in 1987 and the introduction of learning area superintendents in 1995);
- the absence of a clear curriculum structure (the otherwise-commendable 1981 syllabus is out-of-date (in terms of its content) and there is no replacement on the horizon. The introduction in 1998 of an outcomes based approach to learning may well impact in an even more negative way on the learning area as the Curriculum Framework is not a replacement syllabus document. It is a framework not a clear structured curriculum to replace the SSK-10S and the recommendation is for teachers to continue using the 1981 materials.
- poor assessment skills (some teachers are neither confident about or competent in evaluation and in the case of social studies this is compounded by uncertainty about what is to be measured and why; and
- the inability of teachers to integrate CBL, active and collaborative learning into their social studies; and
- low levels of creativity: social studies without flair can be as deadly as any subject in the curriculum.

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A Journey Into Journalling

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At the International Seminar for Teacher Education in 1996 (ISTE) 1996 and subsequently in the Journal of the International Society for Teacher Education (JISTE) (Sinclair & Woodward, 1997) we began to research how 'reflective journalling' might promote the professional growth of student teachers and develop more reflective practitioners and how keeping a reflective journal might encourage the articulation of the theory-practice relationship and result in practice based upon sound educational theory. We are now continuing this research to a greater depth by analysing a random sample of first and third year students' reflective journals to consider the content of the reflective journals, change in that content over time and any correlation between the journals (ie what students actually wrote about) and the survey data (ie what students said they wrote about). Journal content was analysed using a NUDIST-type coding system to determine themes arising with possible themes drawn from the research literature.

Results indicated differences between first and third year students on the focus of their journal writing, both in specific topics and the variety of topics selected commensurate with their maturation as they progressed throughout their university studies. Further study is still required before we can confidently link the survey data and journal entries with their impact upon student teacher professional development.

Introduction

The quality of initial teacher education (ITE) has been identified as being of enormous significance in attempts to improve the quality of education in schools (Australian Council of Deans, 1998; Department of Employment, Education and Training, 1993; The New South Wales Ministry of Education, Youth and Women's Affairs, 1990). Within ITE, the practicum, that experiential aspect where first-hand, 'site-based' learning takes place, is regarded as central to effective teacher preparation (The Committee of Review of New South Wales Schools 1989; National Board of Employment, Education and Training, 1989; Schools Council, 1990). Just experiencing schools and classrooms, however, through the practicum, or indeed lectures and tutorials at university is considered insufficient for effective teacher preparation to occur (Cavanaugh, 1993; Gore, 1995; Queensland Board of Teacher Registration, 1994; Zeichner, 1989). Reflection on those experiences, the active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusion to which it tends (Dewey, 1933) is thought necessary for the effective development of teachers as reflective practitioners (Calderhead, 1989; Ferguson, 1989; Morine-Dersheimer, 1989; Zeichner & Liston, 1987). Further, while professional practice (ie teaching) was once assumed to be a matter of applying previously learnt theory, it is now considered more appropriate to start with the new situation itself, systematically inquiring into and learning from it.

Therefore, Bachelor of Teaching (Elementary) student teachers (herein referred to as students) at the University of Western Sydney, Macarthur (UWS, Macarthur) are involved in inquiry and reflection upon their theoretical and practical learnings and experiences on

campus and in schools throughout the three years of their degree. They are encouraged to question taken-for-granted thoughts, feelings and actions, to look beyond what they are observing or are doing in the classroom and consider why it is happening and for whom. Reflection is not considered an end in itself but a means toward developing deeper understandings, ethical judgements and strategic actions; to consider alternative practices and make decisions based on a commitment to all people involved: students, parents and other teachers (Groundwater-Smith, Cusworth & Dobbins, 1998).

Researching Reflection

While much of the literature, however, supports the value of reflection and reflective practitioners, and many ITE programs implement reflection in at least some parts of their programs (Sinclair & Woodward, 1997; Smith & Hatton, 1995; Wilson, Hine, Dobbins, Bransgrove & Elterman, 1995), the actual impact upon students is less clear. For example, Allan (1993) noted that, "reflective journalling *per se* doesn't guarantee reflection" (p. 114) and as Calderhead and Gates (1993) commented:

Reflection has come to be widely recognized as a crucial element in the professional growth of teachers ... It is frequently presumed that reflection is an intrinsically good and desirable aspect of teaching and teacher education, and that teachers, in becoming more reflective, will in some sense be better teachers, though such claims have rarely been subjected to detailed scrutiny. (p. 1)

Earlier research on how 'reflective journalling' might promote the professional growth of students and develop more reflective practitioners reported the results of a survey of first, second and third year students (See Sinclair & Woodward, 1997). We are now

continuing the research to a greater depth by analysing the content of a random sample of first and third year students' reflective journals. Students at these year levels are totally free to choose what to reflect upon in their journals with encouragement (but not compulsion) to focus on their practicum experience. Thus their learning is individualised as they focus their reflection upon what is important to them, and take responsibility for their own learning. First year students are instructed in reflection and reflective journalling techniques, being given a particular structure to guide their weekly journal entries. This structure included a description of the idea or event students considered worth reflecting upon, the positive and negative feelings it evoked, an inform and confront section where they wrote what they thought the event may be indicative of and from where their own attitudes about that event arose, and an action section where they proposed action to change the situation or their own practice. Third year students also wrote weekly journal entries but were free to modify the above structure as long as each journal entry included description, reflection and action sections. While the procedures for assessing journals varies over the three years of the ITE program, all journals scrutinised for this research were graded on a pass /fail basis. One journal entry was written each week (12 in a semester) and this formed approximately 20% of the assessment requirement for the particular subjects studied. Other assignments in these subjects were numerically graded, though successful completion of the practicum was graded pass/fail (for first year students) and pass/fail/pass with merit (for third year students). Students had total ownership of what they wrote but were required to share their reported experiences and reflections with their university professor/ mentor who worked with them in campus-based tutorials and practicum experiences.

The sample consisted of 17 first year students, four male and 13 female and 15 third years students, two male and 13 female and is representative of the gender balance across ITE student cohorts at UWS, Macarthur. For the purposes of this research the description section of each journal was analysed to ascertain what students thought was important to write about, whether there was any change in the focus of reflection over time, and if there was any correlation between their reflective journaling (ie what they wrote about) and the survey data (ie what students said they wrote about). For example, what kind of conceptions of schools and schooling, teaching and learning did the students possess and did these change over the semester? Did individual students tend to focus on the same sort of issues in their journals or did they vary and if so how might they vary? Were there differences in the focus for reflection between students in the first semester of the ITE program to those in their final semester?

From the research literature on teacher education student reflection (for example, Calderhead, 1989; Field, 1994; Surbeck, Han & Moyer, 1991; Grow-Maienza & Howard, 1995), a number of possible themes were generated and the focus of each journal entry for each student was coded in accordance with these themes. Any additional themes arising were also added to the coding system. The themes included:

- student's self as a person, student teacher or teacher;
- lesson planning, lesson content, teaching or resources;
- pupils- their backgrounds, relationships with others (including teachers), engagement with the learning tasks or response to teaching / lessons;
- student self-evaluation;

- relationships with others in the school and local community (excluding pupils)- supervising teachers, the practicum school, university professor, their own parents or significant others;
- practicum in general or the university course; and,
- link to theory and educational literature or society in general.

The themes arising from first and third year students' journals are outlined in the next section as are comparisons between these themes and student responses to the survey.

Results

Some comparisons between the first and third year journal content are shown in Tables 1 and 2, and individual students' journals are then discussed. The results of the descriptive data, the actual text in the journals, and the understandings that emanate from it, is included to add to the depth of the data and to validate the conclusions.

Table 1: Most Frequently Reported Themes from Student Journals

First Year Students (n=17)		Third Year S	
Teaching (89)^a [with high emphasis on] Classroom management		Teaching (113)^a [with hi	
Discipline (32)	Behaviour (9)	Activities (22)	A
Activities (26)		Group Work (11)	Cl
		Classroom management	
		Behaviour (8)	D
		Resources (6)	

Pupils (52) [high emphasis on] Relationships among pupils (16) with pupils (15)

Pupils (69) [high emphasis on] Beliefs about Individual pupils (24) Relationships with pupils (6) Response to teacher (7)
University (3) [some reference to] Assignments (3) Pupil background (4)
Self Evaluation (2) among pupils (5)
Planning (1) [some reference to] lessons (1)

School (37) [high emphasis on] Schools in general (9) Inservice/staff meetings (7)
Lesson Content (1) [some reference to] Experiences (8) Events (5)

Note. ^a Derived from multiple entries for each student

University (33) [high emphasis on] Academic subjects (12)

Assignments (10)

Most Frequently Reported Themes from Student Journals

Self as a Teacher (20)

First year students' journals focussed on only one or two topics throughout the entire semester across all entries. Discipline had an extremely high focus for these students in terms of observing others carry it out and apprehension about their own ability to discipline the children. The seven students who most frequently wrote about

Note. ^a Derived from multiple entries for each student

Table 2: Least Frequently Reported Themes from Student Journals

First Year Students (n=17)

Third Year Student (n=15)

Self as a teacher (7)^a [some reference to] Developing skills (7)

Self as a student teacher (7)^a as they see themselves more as teachers at this stage [some reference to] Stress (5)

discipline were Tanya and Marcia (50% of all journal topics each), Jehan (42.9%), Madeline (37.5%), Tracey and Courtney (33.3% each) and Julie (23.8%). Other areas of teaching such as activities, marking and student performance were the main feature of another seven students' journals: Adrian (54%), Raelene and Effie (50% each), Karen (41%) and Tim and Kim (33% each). Six students also concentrated on the pupils and their interactions with others: Troy (87%), Jenny (75%), Marcia (50%), Raelene (40%), Madeline (37%) and Tracey (25%). Only two students wrote about a variety of themes without focussing on any one theme (Marguerite and Maria).

Self as a student teacher (6) [some reference to] Feelings of inadequacy (4) Concerns (2)

Self evaluation (6)

School (6) [some reference to] Playground (4) Advice from school personnel (2)

Planning (5) [Only nominally mentioned- some talk about lessons in various stages eg current lesson, next lesson]

Third year students' journals, however, focussed on many topics not only across the semester but across any one entry. This variety did not mean that the entries were fragmented but rather they were

combining themes and ideas in a variety of ways. For example, Craig discussed over 40 areas across the semester, 34 of which were different topics. His predominant themes were self as a student (38%) and as a teacher, in particular the stress accompanying teaching. Renee described 27 areas with 25 different topics, but generally focussed on the students (40%) and teaching (24%). Kylie discussed 26 areas with 16 different topics and her main focus was on teaching (75%). Joanne reported 22 areas with 16 topics related to teaching. Only a few students (3) showed limited description and few topics. As a whole, first year students focussed mainly on teaching and pupils while third year students also wrote about the school and the university. In addition, third year students wrote much more than their first year counterparts and while they dealt with similar topics they addressed them differently. Example journal entries relating to these themes are outlined below.

Teaching

It is evident from Table 1 that teaching was the most common theme for both first and third year students. First year students generally described the teaching of their supervising teachers rather than their own teaching which is understandable as their role in the first semester of their studies was to discover what schools and schooling were all about. Even though they were teaching by the end of the semester they were still viewing teaching from an 'outsiders' point of view. Nevertheless, several students entered the teaching arena with enthusiasm. For example, Maria wrote, "Today I gave a maths lesson with year three and it was fantastic" and Tania commented that, "Teaching that group has given me a sense of satisfaction and accomplishment."

Within the theme Teaching, discipline and behaviour management were by far the most constant focus of these students. Such comments as "Linda [the supervising teacher] has one of the best controlled classes I have ever seen" (Karen) and "After a brief talk with the teacher he [the child] re-entered smiling and after a short time continued on his disruptive journey," highlighted some of the supervising teacher discipline reported. Indeed, one student (Julie) was quite dismayed when the behaviour of one pupil caused the teacher to "blow his stack and yell at him [the pupil]".

Concern over the students own discipline methods was also evident. For example, Madeline worried because she "kept telling them to do their work but they did not listen," and Julie complained that she "tried many times to get them to settle down but they wouldn't listen to me." Maria, however, was more successful reporting that, "it was the first time that I had the children fully controlled." Thus "controlling pupils", and student focus on "Self" and "Task" concerns (Fuller, 1969 cited in Reiman & Thies-Sprinthall, 1998, p. 84) are of paramount importance to these students.

Third year students, however, focussed consistently on the areas of activities and assessment with some emphasis on classroom organisation and management (but not necessarily "control"). While some students described an activity being carried out in the classroom, most described activities they carried out themselves. This situation is also understandable as these students increasingly took on the role of the teacher in what would be their final practicum. Kelly, for example, talked about, "One of the highlights of this week's teaching has to be the 'rainforest walk' that I took my class on". However, such comments show that students are still teacher-centred rather than

child-centred nor do they view, in this part of their journals, teaching as a collaborative partnership between teacher and children.

In commenting on assessment, third year students were both critical and supportive of the assessment methods being used in the classrooms. As Joanne commented, "I worry about the basic skills tests that are implemented in schools and wonder if the government will ever abolish them". Jason focussed on his own assessment practices and commented "I am trying to improve my assessment and planning of assessment".

Again classroom management and organisation was described by third year students but mostly in terms of their own practices. For example, Kerry related that "I am going to reflect on the behaviour management strategies that I utilised in my classroom" and Charlotte commented that "The idea of using the theme fantasy through a reward system has been fantastic".

Pupils

Pupils were also a major focus for both groups of students, however, first year students focussed on the relationships among and with pupils while third year students reported mainly their own beliefs about individual pupils. First year students singled out either incidents involving interaction between a couple of pupils or their own interaction with individual pupils. For example, Tracey recounted, "Today while walking through the playground I noticed a 6th grade boy holding a 3rd grade boy upside down" and Courtney "told Jarred to stop teasing Amber". Raelene gave an example of the interaction between herself and the pupils when she wrote, "After learning about Spyros, I wrote a sentence for him and explained to him what the sentence said and what it meant" and Renee commented that "The [pupils] are becoming much more relaxed when they are around me".

Third year students, however, commented predominantly about individual pupils noting, for example, "We cannot forget that the children are all hyperactive - pumped up" (Renee) or puzzlement as to "why Elena is seated by herself if she has learning difficulties" (Diana).

School

The third year students were very aware of the school and its environment, much more so than first year students. Staff meetings and school inservices were very much to the fore with the students decrying the lack of recognition they received for the knowledge they possessed. Renee, for example, complained that "several teachers did not really take notice of the us even though we had a lot of experience with profiles." Other comments related to school excursions and other events, which to some students disrupted the normal school program.

University

Third year students were also more focussed on the university, particularly, academic subjects and assignments. While assignments for both groups were closely linked to their work in schools, first year students attended schools for one day a week (plus a four day block practicum at the end of semester) while third year students spent 10 weeks of a 14 week semester in the school, attending three to four days per week plus a five week block practicum. Further, it is in the school that all interactions with their university professor / mentors occur. First year students are, therefore, more 'campus-based' and undertake two additional campus-based subjects during the first semester while third year students are 'school based' undertaking only one 'school-based' subject. When mentioning their university subjects, third year students mostly mentioned the subject in which they were currently enrolled. For example, Jason reported that "This subject has given me

a realistic outlook of what the teaching profession is about in terms of preparation, management, planning and assessment". Other comments related to University life and what constitutes good work and study situations. Craig, for example commented that "Given the right group I have realised that working with others is of far greater benefit". With regard to assignments, these students commented on their progress as each assignment fell due with some commenting on the value of these assignments. For example, Charlotte described putting her portfolio together commenting that, "it will be a terrific benefit to me not only for [the] teaching interview but for other jobs as well".

Least Frequently Reported Themes from Student Journals

It is evident from Table 2 that the themes reported by both first and third year students is seldom particular lesson content, planning or self-evaluation. Self-evaluation of particular lessons taught may be infrequently noted because first year students are doing little teaching during their practicum and third year students complete separate lesson self-evaluations as part of their teaching programs.

Both groups of students also infrequently focus upon themselves, especially as a student teacher. First year students also infrequently focus upon themselves as teachers, supposedly because they undertake limited whole class teaching during the practicum. Third year students, however, are more likely to see themselves as teachers rather than student teachers during what is their final practicum.

Another difference between the first and third year student groups is that while third year students quite frequently write about the schools and the university, few first year students do the same. This result may reflect first year students' "newness" to the practicum setting and although their inquiries each week focused upon a different aspect of school life (eg teachers, students, school, curriculum,

learning environments, resources etc) their primary focus is still what happens within the walls of their practicum classroom rather than the bigger 'worlds' of the schools and community.

Links to earlier survey

The questionnaires showed that the content of the journal entries for many students did not change much over the semester (Sinclair & Woodward, 1997). These results are also reflected in this study, particularly with the first year students. The third year students while seeming to be diverse in the variety of content actually continually made connections across their journal entries. They were much broader with their content than the first year cohort. This diversity was also supported in the previous study as some students then reported that they changed from writing about how a school runs to writing about things they had learnt during practicum.

Some of the benefits and difficulties experienced in 'journalling' and commented on in the questionnaire were able to be 'seen' in the actual entries analysed in the second study. Students stated that the journals helped them work through solutions and many of the journal entries showed how the students solved problems that confronted them. For example, Charlotte wrote a whole entry on the way she worked through a class management problem from initiating the strategy to success.

Results from the questionnaire also showed that journal writing was cathartic as upsetting situations were able to be recorded and reflected upon. Joanne, for example, described one of her "worst weeks ever". As she worked through her entry, she was able to find some positives and finished the entry on a high note.

Some of the difficulties explored in the first study were also evident in this study, in particular, the difficulty students can

experience finding different things to write about. This finding supports those of Canning (1991), but conflicts with Mayer (1996) whose students had little difficulty finding something to write about. In our study, first year students, in particular, had only a narrow view of what they wrote about and even a few of the third year students wrote very little description at all. Like the student questionnaire responses, these students may have found writing detailed journal entries just too overwhelming a task with so much to do during the practicum.

Conclusions

How then does 'reflective journalling' promote the professional growth of student teachers and develop more reflective practitioners? The second part of the research, reported here, does not give us a clear answer to this question at this stage but what it does show is that there are differences in the "journalling" of first and third year students. The difference exists in the variety of topics selected for discussion, the views students take about these topics and in the way each topic is developed.

For example, third year students wrote about a great variety of topics linking them across entries while first year students basically wrote about one topic each entry and usually continued to write about that one topic on many occasions. Such "journalling" was a no risk venture on their part as they made sure they complied with university requirements and ventured only slightly into personal thought and experiences. Third year students, on the other hand, were much bolder and spun across the topics blending them together and imprinting their personal experiences on the happenings they were describing. They were obviously much more knowledgeable about teacher's work, the school environment and the pupils in that environment. They were also

more able to connect University work with the work they were doing in the schools and consequently were able to make sense of the context they were in, in terms of future work.

First year student journals indicated that right throughout their first semester, students still saw themselves as 'outsiders' viewing schools and schooling from the outside looking in. Generally they commented upon what they had observed not what they had tried (even though they are encouraged to work with individual children and small groups of children right from their first school visit). When they commented upon their own teaching, they mentioned only a limited number of strategies or activities, again probably a result of their "newness" to the teaching context. They may have relied upon their own past experiences as pupils, the few strategies they may have seen presented at university or the particular strategies suggested by their supervising teachers. Further, they seemed more comfortable observing and reflecting from a "student" perspective rather than a "teacher" one. Third year students, however, commented upon schools and schooling as "insiders", saw themselves as teachers, and commented upon their own teaching and upon the appropriateness of a variety of teaching or assessment methods.

Views were also expressed differently. For example, while both student groups wrote about teaching and in particular about classroom management, first year student entries were very single minded and focussed clearly on how others managed and their own fears and defeats when it came to discipline (or as they saw it, controlling pupils). Third year students, however, tried a range of discipline methods and commented on others. Very few showed the apprehension that first year students demonstrated. It is obvious from

the data that the students were working through as series of stages in the development of their classroom management skills.

Another common theme, that of interaction among and with pupils was again dealt differently by each cohort. Many times the first year students described their role as an assistant and frequently were drawn to the uniqueness of the pupil's interactions. The third year students, however, focussed more on the individual pupil and his or her progress, position and response within the classroom context. The change in these issues seems to have been brought about by the maturity of the students within the ITE program in which they were involved. There is little evidence at this stage of the research of students constructing their own notions of teaching and learning, nor of the collaborative partnership of teachers and children in learning.

Compared with the enormity of the journey to analyse student's reflectivity and its role in their development as beginning teachers, this piece of research has been but a short trip. It has, however, unfolded some of the issues that teacher education students discuss in their reflective journals when they have total freedom of topic choice and has begun to establish development that seemingly occurs across the student years. Our findings do not suggest so much a change in the focus of reflection over a practicum but more so over the entire ITE program. This result in itself has implications for teacher educators, suggesting that individual subjects promoting reflection may be insufficient to develop reflectivity. As La Boskey (1993) states, "novices stand to acquire from their acts of reflection new comprehensions about an educational *topic* [author's emphasis] and about the *process* of reflection itself" (p.27) yet our research shows that this learning takes longer than a one semester subject. Perhaps as Wildman and Niles (1987, as cited in Stout, 1989) commented,

"reflective teaching skills must be systematically taught and then nurtured over a period of time" (p.524), perhaps the entire three or four years of the ITE program. As we seek to discover the depth and the nature of reflection in student learning may the journey into journalling continue.

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Should There Be Certification of Teacher Educators?

Douglas F. Warring

Professional societies and associations have standards for effective practice. These standards have been developed for a wide array of occupations such as medical doctors, lawyers, public school teachers, and others. Does a similar set of standards leading to certification need to be developed for teacher educators?

If certification is sought there must be consistent standards of practice for teacher educators which represents agreements about what teacher educators should think about, know, and be able to do. This could lead to board certification much like other professions with standards being used to determine expectations and assess performance. What these standards are and how people would be evaluated needs to be determined prior to establishing conclusive evidence. This article attempts to address these and related issues.

Teacher Educators

Teacher educators are professionals who educate teachers. They typically are university faculty who are defined by the institution that hires them while doctors and other such professionals are defined by professional societies and associations who license them (Light, 1974). In most professions persons wishing to practice must qualify for a license. In order to qualify a certain set of standards which has been determined by a board must be met. Professional societies and associations have set these standards for effective practice.

Certification could be desirable, voluntary, and designed to be helpful in assessment as well as provide assistance. It could recognize

that the expertise of teacher educators is more extensive and requires greater depth than that of other teachers. It could apply to teacher educators employed in a wide range of institutions such as universities, schools, school districts, private organizations, professional organizations, education agencies or other such operations.

The National Council for Accreditation of Teacher Education (NCATE, 1997, p. 75) defines professional education faculty as those who "teach one or more courses in professional education, provide professional services to students (e.g. advising or supervising student teachers), or administer some portion of the professional education program." This definition includes those who teach such subjects as methods, philosophy of education, content methodology, educational psychology, and work with field experiences.

Other types of university faculty provide necessary and useful input to prospective and practicing teachers but are not included in this definition of teacher educator. Examples of these would be historians, mathematicians, accountants, and other educators from the disciplines who contribute important knowledge but are not always committed to nor responsible for the professional education of educators.

Culture

The culture of the university has created a context that often outweighs that of the schools for a variety of reasons. In most universities faculty are expected to continue learning and applying new material to their courses and subsequently impacting their students. The professional faculty member is one who learns from teaching rather than one who has finished learning how to teach. Although organizations operate in many forms with a variety of purposes, schools are social organizations designed to achieve specific goals (Reitz, 1987).

Kowalski (1995) contends that schools are social institutions which do not operate at random. They have highly refined systems of rewards and sanctions that are designed to guide behavior. Sanctions may be imposed by any number of groups or subgroups within the system. This creates, enhances, and reinforces the culture.

Since there have been significant changes in the university culture impacting expectations, the circumstances and requirements for faculty have also greatly changed. University faculty who engage in preparing educators for schools straddle two cultures (Goodlad, 1990). One culture is defined by the university system while the other is defined by the P-12 school system (Light, 1974). Some of these areas need to be considered when assessing university culture and the faculty teaching there. Certification could lead to an agreed upon set of assessment criteria and assist in better understanding this issue.

A comprehensive set of standards could be developed for teacher educators that could lead to certification much like other professions. These standards could be used for determining expectations and assessing performance. Areas for consideration could include hiring, annual evaluations, tenure, promotion, scholarly pursuit, and work in the P-12 schools. Many issues revolve around the certification and could be somewhat standardized if an agreed upon set of standards leading to certification were developed.

These are a few of the areas for consideration when assessing university faculty. Since many of these are in place and already require high standards, the idea of certification of teacher educators may not be as far removed as it first appears.

University Issues

The idea behind certification of teacher educators is the belief that people who work in these fields must be highly skilled and recognized

as specialists in the field. The standards must be realistic and provide assistance for faculty in understanding criteria and preparing meet them. Since goals of certification are to improve teaching and student performance all organizations involved in the education process could share in this effort.

University politics can be very vicious at times and occasionally deadly (Light, 1974). Regardless of a persons personal view, the university system of tenure and rewards drives the areas in which faculty spend time. If teaching is not rewarded as much as research it is highly likely that faculty will spend more time on research.

Because each university is different, each has unique ways of measuring faculty. Goodlad (1990) is concerned that often the only sense of personal worth derived by faculty is from their own estimation of the value they provide by using their own individual measuring stick. These factors can lead to a large amount of ambiguity when attempting to do cross university comparisons.

Goodlad (1990) identifies area for consideration with implications that impact self worth for faculty because teacher educators often suffer from a perceived low status by persons outside their area. This may include teachers in the P-12 schools as well as colleagues in other departments on campus. Teachers in P-12 schools often see university faculty as too theoretical and too far removed from the "real world". Since many universities are market driven research is often highly prized and they often reward production in areas other than working with students. The research often perceived as more valuable is in the science and technology fields. These factors contribute to questions regarding the worth and productivity of teacher educators.

Certification Standards

Certification standards could reasonably address some of these concerns. In an attempt to define some of the criteria that determine a master teacher the Association of Teacher Educators (ATE) appointed a task force. According to the ATE Task Force on Certification of Master Teachers (ATE, 1996) standards of practice for teacher educators should represent agreements about what teacher educators should think about, know, and be able to do. The standards address the need to identify competent, accountable people who are committed to educating P-12 teachers and prospective teachers.

To that end ATE has developed standards based on the following behaviors for Master Teacher Educators. These could be used as a guide in the development of standards for certification of teacher educators. These include:

1. Model professional teaching practices which demonstrate knowledge, skills, and attitudes reflecting the best available practices in teacher education;
2. Inquire into and contribute to one or more areas of scholarly activity that are related to teaching, learning, and/or teacher education;
3. Inquire systematically into, and reflect on, their own practice and demonstrate commitment to lifelong professional development;
4. Provide leadership in developing, implementing, and evaluating programs for educating teachers that embrace diversity, and are rigorous, relevant, and grounded in accepted theory, research, and best practice;
5. Collaborate regularly and in significant ways with school, university, state education department, professional associations, and community representatives to improve teaching, learning, and teacher education;

6. Serve as informed, constructively critical advocates for high quality education for all students, public understanding of educational issues, and excellence and diversity in the teaching and teacher education professions; and,

7. Contribute to improving the teacher education profession. (ATE, 1996).

These lead to standards that should be flexible so they can be applied to a variety of roles and organizational settings. Prior to application the specific criteria and indicators or evidence, a consistent assessment of evaluation procedure, and an application procedure would need to be developed. Once developed these standards could then be helpful in both assessment and as a guide for assistance. They could provide a framework for understanding roles and responsibilities of teacher educators and recognizing successful candidates for certification.

The step after the identification and agreement upon the standards would be to assist university teacher education faculty in becoming better prepared to apply for certification. Some organizations require continuing education credits as a way to ensure continuous improvement to maintain certification. A number of other programs could be utilized to take the place of continuing education requirements that are typically required of other professionals. The following are examples of programs that could assist faculty in preparing for certification.

Programs

Mentoring

One way to achieve this is through implementation of a mentoring program. In the mentoring program a new faculty member is paired with a more experienced one and time is provided for peer observation

and conferencing. The purpose of the mentorship program is to unite experienced and newly hired faculty in smoothing the transition from theory to practice (Anderson & Shannon, 1988). These programs are of benefit to both the experienced and the newly hired faculty (Anderson & Shannon, 1988).

The programs also assist experienced teachers who are new to the university to become familiar with the school, its programs, students, staff, and community. Likewise, faculty who significantly change teaching assignments may also receive assistance to become familiar with the new instructional program assignment. The intent of the program is to have a positive impact on the learning environment.

This match must be made very carefully. In addition to providing time for this to occur, mentors must be provided with specialized professional development. This development would be in the areas leading to certification. The feedback and assistance could be based on meeting the necessary criteria for certification. This would assist all involved in understanding the certification criteria and being better prepared to meet it.

Professional Development Schools

The Professional Development School (PDS) approach connects school based clinical faculty and university faculty to prepare new teachers and enhance the skills of current ones while working in a P-12 setting (Metcalf-Turner & Fischetti, 1996). Experienced teachers would have access to professional development sites as they prepare to become master teachers.

In order for these partnerships to be successful there needs to be a reciprocal relationship with university teacher education faculty and P-12 teachers (Neubert & Binko, 1998). The university faculty must be involved in the daily activities of the school and provide in-service

programs for the P-12 teachers with the P-12 teachers working to assist the university faculty. The third part of this professional partnership involves preparing new teachers in this type of setting.

The close relationship that can be forged between university faculty and P-12 teachers helps them both understand the realities of teaching from a variety of perspectives (Metcalf-Turner & Fischetti, 1996). PDS can also help to bridge the gap between theory and practice for P-12 teachers and university faculty. Many of the criteria for certification are directly related to involvement in and application of learning derived from PDS.

Other Methods

There are many other methods that could be utilized to assist in the development of skills prior to assessment for certification. These methods could also be used to provide assistance to persons who have a demonstrated weakness. Once candidates felt ready, a system of assessment would need to be applied. Candidates could undergo training and assistance and reapply if they were not successful in their first attempt.

Systems for Assessment for Certification

According to Teitel (1996) a wide range of tools could be used for assessment to determine levels of proficiency leading to certification. Candidates for certification would be expected to demonstrate that they possess the knowledge and skills required to teach prospective teachers how to teach students and that they can function in ways identified as the professional patterns and practices of teacher educators (Stallings, 1991). Each of these could be of benefit in the determination of specific levels of proficiency for candidates.

Teachers at all levels, especially teacher educators, need to be able to analyze and reflect on their practice so they will continue to refine

and improve their teaching skills. Utilization of specific tools for assessment are essential in this process.

Tools for Assessment

Assessment centers could be developed for teacher educators and use exercises that included simulations and written examinations. The exercises could be conducted by international boards, national boards, or regional/state boards who use consistent standards of assessment. These boards could operate in a similar manner to the National Board for Professional Teaching Standards (NBPTS) in the United States which was created to identify excellent P-12 teachers and grant recognition to them (NBPTS, 1995). The board emphasizes three areas (NBPTS, 1995): effective environment for teaching and learning in schools; improving teacher education and professional development; and, high levels of instructional expertise.

Portfolios are a combination of pieces of evidence supporting the candidate's application for master teacher status and could also be utilized. These could consist of specific verifiable documents pertaining to each of the areas needing to be demonstrated. They could be a combination of paper and video including but not limited to items such as student evaluations of teaching, student advising, peer evaluations, evidence of professional involvement, membership and leadership in professional organizations, scholarly activity, university service, and community service.

Personal interviews could be conducted as part of this process. Interviews could follow specific criteria and be uniformly applied by a panel that would examine the breadth and depth of decisions and responses to questions based on contributions. Since electronic communication and teleconferencing are becoming more available, the

interviews could be conducted without requiring all participants to be physically located in the same room at the same time.

Proficiency can be demonstrated by teacher educators seeking certification in many ways. For each standard there could be specific indicators and supporting evidence. Since the standards are interrelated, materials might be submitted that applied to more than one area. This would provide for normal limits on the amount of materials and stress quality and interrelationship of standards rather than quantity. While institutions vary widely, there are still many commonalities.

Summary

Certification of teacher educators has potential in creating consistency and enhancing the image of teacher educators. Although issues vary from one campus to another there are commonalities which provide for a sense of shared mission. If uniformly applied this can improve colleagues and others perceptions of teachers and teacher educators.

Certification is not a goal in itself, but a means to continuous improvement and renewal which is required for the culture of education to remain healthy. Goodlad (1990) contends that teacher education faculty want to be involved in this process and are concerned citizens who truly want to do an excellent job in their fields. According to Stallworth (1998) model faculty are model learners and model learners can become master teachers.

If there is a comprehensive knowledge base applied consistently for professionals in teacher education certification of teacher educators can overcome existing barriers. With the certification of teacher educators there will be an identification of competent, accountable faculty who are committed to educating teachers. However, for this to

work there has to be local ownership so that each participant may express their essential abilities. If the standards are objective, measurable, and consistently applied, certification of teacher educators has possibilities.

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Recent Publications by ISTE Members

According to the author, Edwin Ralph, these two recently published books are "complementary" volumes:

Ralph, Edwin G. (1998). *Motivating teaching in higher education: A manual for faculty development*. Stillwater, OK: New Forums Press.

This manual deals with the "what" of effective instruction in post-secondary settings, and is designed especially for instructional personnel at the college level who have not had any prior "teacher training."

Ralph, Edwin G. (1998). *Developing practitioners: A handbook of contextual supervision*. Stillwater, OK: New Forums Press.

This handbook deals with the "how" of assisting teachers at all levels to improve their instructional skills, and is designed for individuals in leadership/supervisory roles to help their colleagues in their professional development quests.

Publication Guidelines

The goal of ISTE is to publish its journal, twice each year, with six to eight articles in each issue. Using the Seminar theme articles in the first issue of the journal are papers that had been presented at that seminar. Articles in the second issue are non-thematic.

Articles submitted to JISTE must be written in English, following manuscript guidelines (see below) and will be anonymously reviewed by referees. Each article must pass the review process to be accepted for publication. The editors will notify the senior author of the manuscript if it does not meet submission requirements.

Articles are judged for (a) significance to the field of teacher education from a global perspective, (b) comprehensiveness of the literature review, (c) clarity of presentation, and (d) adequacy of evidence for conclusions. Research manuscripts are also evaluated for adequacy of the rationale and appropriateness of the design and analysis. Scholarly relevance is crucial. Be sure to evaluate your information.

Articles pertaining to a particular country or world area should be authored by a teacher educator from that country or world area.

If English is the author's second or third language, manuscripts accepted for publication will be edited to improve clarity, to conform to style, to correct grammar, and to fit available space. Submission of the article is considered permission to edit the article.

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- * Manuscript length, including all references, should be 1,000 to 3,000 words
- * All text should be double-spaced
- * Margins should be at least 1 inch (2.5 centimeters)
- * Paragraphs should be indented five spaces
- * Paragraphs should be separated by a space.
- * Tables, Figures, and Charts should be kept to a minimum. If tables, figures and charts are use, be sure that they will fit on a 5.5 x 8.5 inch (13.5 centimeters x 21.5 centimeters)
- * Abstract should be limited to 100 - 150 words.
- * Reference entries should be indented five spaces on the first line, just like other paragraphs (See example below).
- * Electronic references should have an address permitting retrieval.
- * Justification should be set to "off" or "left margin only" (the right margin should be uneven).

Writing and editorial style shall follow directions in the *Publication Manual of the American Psychological Association* (1994, 4th ed.). References MUST follow the APA style. The following style is from the APA Publication Manual:

Book:

Kissock, C. (1988). *Curriculum planning for social studies teaching: A cross cultural approach*. London: The Macmillan Press Ltd.

Journal Article:

Manuscript Guidelines

Churukian, G. A. & Lock, C. R. (1995, Summer). A case for creating an international research agenda for teacher education. *Action in Teacher Education*, 17(2), 1-6.

Article or Chapter in an Edited Book

Churukian, G. & Lock, C. (1997). The nature of Teacher education. In B. Jeans (Ed.). *Issues in teacher Education, Volume 2* (pp. 114-126). Victoria, Australia: Felicitas Academic Press.

Unpublished Paper:

Lock, C. R. & Churukian, G. A. (1996, February). *Teacher educators in other countries: Some comparisons with teacher educators in the United States*. Paper presented at the 76th Conference of the Association of Teacher Educators. St. Louis.

Submission Requirements

Send a copy of the manuscript complete with cover page, abstract, and computer disk. Due to the high postage rates, manuscripts and computer disks will not be returned. If you wish to submit an article by e-mail, send it as an attachment and fax a copy of the manuscript.

The cover page shall include the following information on a separate sheet: Title of the manuscript; name of author or authors, institution, complete mailing address, business and home phone numbers, FAX number, and e-mail address; Brief biographical sketch, background and areas of specialization not to exceed 30 words per author. Author(s) name(s) and institution(s) should NOT be on the manuscript.

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Deadline for submission: September 1, 1999

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Manuscripts presented at 19th International Seminar, for Teacher Education will be considered for publication, with corrections suggested by the paper group members.

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