Student teachers and critical approaches to education: re-imagining the 'other' through a re-imagining of the learning environment

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Abstract:
This paper reports on a teacher education initiative that seeks a more effective approach to a commonly used treatment of education foundations, particularly the sociology and philosophy of education. The initiative takes as its starting points a critique of education foundation practices in at least two universities and the standpoint that the main rationale for including education foundations is to (morally) influence learning outcomes in schools. The ‘vehicle’ or ‘mechanism’ for this re-conceptualisation is a developing theory of the Learning Environment, used by the author and others, which takes the Learning Environment to be not simply the location of learning but the total conditions that enable and constrain learning.

Liberty is more than consumer choice; and it is also more than irony. The British Marxist philosopher, Roy Bhaskar, in a detailed critique of the liberal constructivism of Richard Rorty, notes that once we have identified the sources of injustice or cruelty or social stagnation, once we have formulated a language in which to think about them, we are bound to be involved, like it or not, in an incipient process of public change - 'action rationally directed to transforming, dissolving or disconnecting the structures and relations which explain the experience of injustice' (Philosophy and the Idea of Freedom, Oxford 1991, p.72).

Shifts in language and explanation that arise in the wake of critical understanding are bound to make different kinds of action and therefore different kinds of decision possible. Not to act in the public sphere in consequence of such new possibilities is to make an active choice for stagnation. If ironic redescription is no more than words it is not really ironic at all; it remains dependent on the systems and power-relations it claims to challenge.

Rt Revd Rowan Williams, Archbishop of Canterbury, 2006

Introduction
It is a commonplace that teacher education courses include the study of so-called education ‘foundations’, namely educational psychology, sociology and, less frequently, history and philosophy. This is because teacher educators and, more widely, teacher education stakeholders who contribute to and ultimately approve or ratify teacher education courses, hope to make the teachers who graduate from these courses more able. However, not all teacher education stakeholders endorse this view uncritically. A recent Australian Minister for Education reported complaints to him that (Australian) education faculties are ‘quasi-sociology faculties’ (Nelson 2005) to the claimed neglect of studies in curriculum content. This comment was made in the context of an experiment by that same minister of having grants approved by the Australian Research Council (ARC) additionally vetted by a lay committee that famously included an outspoken and conservative media commentator. While that minister’s successor has been less forthright, it is nevertheless true that the current education policy climate is not unquestioning of education practices, including teacher education practices. This holds at both Australian federal and state levels and, with only some variation, across the political divide. It is therefore prudent for teacher
education academics and faculties to review the rationale, approach and overall balance of course content. This paper aims, firstly, to contribute to that process. More generally, however, it also aims to address issues of pedagogy and approach in a particular instance of content commonly addressed in foundations studies, namely equity and the sensitisation to others in society.

A description of practice
The author has been involved with the design and implementation of four foundations subjects, in four teacher education programs at two Australian universities. Subject #1, at University A, concerned the sociology of education and was part of a double degree in secondary education: an education degree studied concurrently with, usually, a science or an arts degree. As it happened, maths and science were offered on one campus, and arts – mostly English and the social sciences – on another campus. The education subjects were offered on both campuses, which is significant because it meant that the education subjects were run discretely for the sciences and arts student cohorts. The author was responsible administratively for the double degree program and so was privy to the implementation and progress of all education subjects.

Without exception, all the education teaching team reported a difference between the two student cohorts. All found the arts students, on the whole, to be more receptive to their education content than the maths/science students, on the whole. This receptiveness was not only in the sense of comprehending the concepts more readily and more deeply, but also in the sense of finding the arguments more convincing and acceptable. Indeed, the two sociology lecturers reported, with different year cohorts, resistance and even antagonism on the part of significant portions of maths/science groups. None was reported among the arts groups with the exception of a small number of students who described themselves as having strong religious (Christian and Muslim) and/or cultural beliefs (students from several non English-speaking cultures). These exceptional arts students objected to the study of homophobia and the argument against discrimination on the basis of sexual preference. They did not raise their objections with the lecturers or tutors because of a claimed fear of “discrimination” (their term) or recrimination (my term) but formed delegations to see the author as the administrative head. The more widespread resistance in the maths/science cohort partly arose from a generally held pedagogical view in that group that maths or science education entailed the transmission of content, and that matters of psychology or sociology were not central, and even marginal. Beyond this, though, there was also an element of resistance to critiques of stereotyping, sometimes in written assignments and most certainly in discussions in and out of class. One could not be confident that the exposure to sociological concepts in particular was going to have an effect in the classroom. The implication for the program was that the rationale for the pedagogy and possibly the subject content was not being met. Several of the teaching team considered this to be worthy of more detailed study, but regrettably it did not fit with the research agenda of any of the team and the opportunity for a more systematic study passed.

Subject #2, at University B, is a foundations subject in an undergraduate primary teacher education program, which largely comprises sociology with some basic educational philosophy and history. While some students do impressive work in this subject, a significant number report the subject as difficult and too theoretical. As
with subject #1, a small number of students also reject or resist some of the central concepts concerning equity. Also again, this may be done wittingly, as in discussions with or emails to the author, or unwittingly, as when the written language in assignments differs from the language in conversations. Students expressed frustration at having to write or say “what they want” (their term, meaning what the teaching staff want) for fear of being marked down (my term).

Subject #3, at University B, is a foundations subject in a graduate entry, end-on primary and secondary teacher education program. Essentially, it is a subject in the sociology of education, small components of educational philosophy and history having been phased out for mainly staffing reasons. In terms of student response it is an interesting amalgam of subjects #1 and #2. In general, the comments for subject #2 apply, but there is a possible correlation of resistance with the maths/science/technology-trained students. Without a systematic survey it is not possible to substantiate this suspicion, because there is a single, mixed cohort of students, and the suspicion could simply be the expectation of the author based on the experience of subject #1. Unlike the research circumstances of subject #1, however, this situation is planned as part of the author’s research agenda and will be the subject of a forthcoming study. In the meantime, the author had the opportunity to develop and teach a fourth subject, subject #4, which is taken by secondary maths and science teacher education students on at separate campus. This has afforded an opportunity to re-imagine the treatment of concepts of equity.

Subject #4, at University B, is a critical take on the curriculum, offered to final year students in a four-year secondary maths education and science education program. The cohort is similar to the maths/science students in subject #1, who are not mixed with arts graduates. The central theme of the subject is the discrepancy between the formal, or written, curriculum, and the experienced or enacted curriculum, what causes such discrepancies and what can be done about them. The concept of equity is central because such discrepancies are almost invariably inequitable. The evaluation of the initial implementation in 2006 was critical of both the rationale for the subject not being met, and the approach taken. I turn now to these matters.

A response
I take the primary rationale for including the concept of equity in teacher education courses to be to morally influence learning outcomes in schools. I do not use the term morally lightly. I recognise that in some academic circles it is unfashionable to speak of morality and ethics, which are presumed to be mired in ethnocentrism. Such a position presumes the truth or superiority of one’s own sense of morality, as one might suspect an Anglo-centrism or Christian-centrism in the present paper from the use of the opening quote.

As the oft-rehearsed postmodernist narrative goes, contemporary life is coped with under conditions of globalisation and radical pluralism. Not only do we encounter varying and competing conceptions of the grounds of moral authority to be embedded within incommensurable ethical, religious and metaphysical worldviews, but we also find radically different understandings of the meaning and pursuit of truth and rightness, rationality, and justification. On such premises, there is no universally binding ‘transcendent good’ that is able to serve justifiably as the necessary, trans-cultural epistemic ground of moral authority and rationality. Okshevsky 2005, p. 175
However, this is confused in several senses. Firstly it confuses the difficulty of disentangling cultural mores from particular values positions with the reality that, like it or not, values positions are real: people take values positions whether or not you or I are aware of them, let alone agree with them. Moreover, the position that it is wrong to speak of values positions is itself a values position. Secondly, it invokes the classic fact/value dichotomy in western philosophy, which holds that one cannot derive an ought from an is. As the introductory quote points out, the philosopher Bhaskar has argued that, on the contrary, once we are confronted with the facts of an injustice we can either act on it or not, but to decide not to act is to decide on stagnation. That is, an is leads to an ought one way or the other. A moral position is an ought or a should. Thirdly, it does not account for other paradigms and disciplines. There is in philosophy of education a strong tradition of discourse concerning moral education that addresses the postmodern critique among other things. Fourthly, it confuses epistemic relativism – the position that knowledge is constructed and relative to historical and cultural contexts – with judgemental relativism – the position that because knowledge is relative, we are fundamentally unable to judge between knowledge claims. This is a position of postmodernism and poststructuralism. This position has been subjected to strong criticism from the philosophy of social science, in particular the emerging position of critical realism, to which I shall return.

Each of these confusions can be answered. On the first count, the (often tacit) moral position in a rationale for studying equity in a teacher education course is that equitable learning outcomes are a good thing and should be promoted. A position of social justice is that it is a good thing, deserving of encouragement, to identify and redress inequitable learning outcomes, such as those based on race, religion, sexual preference, politics, social class, and economic circumstance. On the second count, i.e. Bhaskar’s point, once we are aware of an injustice we are obliged to redress it in some way, acknowledging that the language in which we formulate this response is culturally embedded. Not to act in this way is to act for the status quo.

On the third count, the postmodernist/poststructuralist hegemony in educational sociology does not recognise its own limitations and that fruitful work in this area is being done in philosophy of education. The philosophy of education is rich in examples that resonate with the observations of the subjects discussed here. Some examples will suffice. Suzanne Rosenblith (2005) discusses what she calls the ‘pluralist predicament’, which is the difficulty of reconciling a commitment to liberal education goals like critical rationality (using reason and evidence), individual autonomy and tolerance of diverse views, with religious pluralism that avoids questions of reason and evidence. Barbara Houston (2003) explores what she calls the ‘moral lethargy of decent people’. Haithe Anderson (2004, p. 107) critiques the idea that ‘theoretical multiculturalism per se … has direct consequences for the practices that are its subject’. The Fall 2001 edition of Educational Theory ran a symposium on the social construction of Whiteness. In it Hytten and Adkins (2001) examine the preparation of future teachers when the (US) ‘student population grows increasingly diverse, the teaching force remains predominantly white, and the achievement of minority students continues to lag significantly behind their white counterparts’ (p. 433). Warren (2001) examines what it means to be white in the context of a movement for the concept of race to be abandoned. Allen (2001) analyses the effect of the domination of White over Othered narratives of globalisation on education policy. Pak (2001) discusses the contribution of the progressive education movement.
to addressing a paradox in the aims of democracy: ‘social progress in the face of regressive acts toward disenfranchised [specifically non-white] groups’ (p. 487).

On the fourth count, the philosophy of social science as both empiricism (as in positivism) and idealism (as in postmodernism and poststructuralism) has a cogent and emerging alternative in critical realism (CR). A full treatment of critical realism is beyond the scope of this paper, but I will give a brief synopsis to indicate its general position to the reader unfamiliar with critical realism\(^1\). The three pillars of critical realism are as follows:

- Social structures and relations are real in the sense that they exist whether or not we are aware of them. This is ontological realism.
- Our knowledge of these structures and relations is socially produced, contingent, fallible and framed in language. This is epistemological relativism.
- It is possible at least in principle to judge between knowledge claims about the world depending on how well they correspond with how things really are. This is judgemental rationalism.

It should be evident that critical realism (CR) differs from naïve realism, which although it holds that there is an external reality (like CR), it says that we have direct and unmediated access to that reality through our perceptions (unlike CR). Unlike positivism, which holds that knowledge arises from sense perceptions, and postmodernism, which holds that knowledge is a construction of the mind, CR holds that, while sense perceptions and mental constructions contribute to knowledge, the possibilities for knowledge are enabled and constrained by the natural and social worlds. The natural and social worlds comprise causes (mechanisms and structures which have tendencies to act in certain ways), events and experiences. Examples of causes are atomic structure in physics or gendered relations in society, which may or may not result in events like electric current flow in physics or a sexist remark in society, which may or may not be experienced (as, for example, an electric shock or offence). Except in the experimental conditions of the natural sciences, there are multiple causes operating at the one time, which may interfere and interact with one another. Thus in non-experimental conditions, which include the entire social world, a particular causal mechanism may or may not lead to an event. In turn, events may or may not be experienced by an observer. Thus CR rejects the model of explanation in positivism, which is that an event is explained when it can be deduced from initial conditions and a natural law (defined as a pattern of events). It also rejects the model of explanation in postmodernism/poststructuralism, which is a social (and therefore fallible) exchange that resolves puzzlement. An explanation in CR is a socially produced (and therefore fallible) account of the way a generative mechanism or tendency produces an event (Bhaskar 1981, p. 141). Despite this terse summation of CR, a critical realist account is a plausible alternative in the philosophy of social science, and was employed to underpin and frame a response to the evaluation of subject #4.

Arising from the use of CR as the theoretical framework is a developing theory of the Learning Environment (Brown, Konza & Kiggins 2006). It is based on the mode of question on which a CR understanding of the world is based: what must the (natural

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or social) world be like in order for knowledge of it to be possible? The world is such that it enables the acquisition of the knowledge that we have of it. Similarly, it can be argued that the Learning Environment enables and constrains learning (the acquisition of knowledge). The Learning Environment is therefore construed as more than merely the location of learning. It has multiple dimensions: physical (space, time, temperature, light), biological (e.g. health, hunger, restfulness, etc), psychological (e.g. aptitude, motivation, ability), sociocultural (e.g. social class, culture, group dynamics) and curricular (particular meanings). Briefly, the Learning Environment is argued (Brown 2004) that the LE is real, open and dynamic, layered and emergent, and moral.

- The LE is real in that it comprises things that exist whether we have knowledge of them or not, like material (tangible) objects, relations between actors/positions, the beliefs and reasons of actors, and meanings of texts.
- The LE, like any social system, is an open system with multiple causes existing that may be interfering with the action of each other. (Remember, a cause is not an event but the tendency or way of acting of something.) Thus there can be causes existing whether or not they result in an event. Likewise there can be events whether or not they are experienced. With multiple causes operating in an open system, events can be unpredictable and the system not only changes but changes often in ways that are difficult or impossible to predict accurately.
- The LE is layered, in that it comprises different layers or levels of organization, e.g. the physical, chemical, biological, social. Each of these layers has properties that arise from the organization of that layer and that cannot be reduced to the properties of lower layers, e.g. you cannot explain social phenomena simply in terms of biology, or the biological in terms of the chemical. Equally, you cannot predict the properties of the higher level from the properties of the lower level. The properties at the higher level are said therefore to be emergent. Learning is an emergent property of the LE, and is not simply explained by the biology of the learner or the sociology of the group.
- The LE is moral, in that it reflects the values decisions of the actors and others. Particularly in the example of teaching for ethical outcomes, this reflects an unavoidably moral decision: it is a decision about what should be done.

I return to the rationale for these subjects, which is to morally influence the learning outcomes in schools. The questions for the teacher educator are how to make the student teacher aware of an inequity, how to provide her with skills to redress it, and how to engender the disposition to act. From the rationale and aims of the subject, the Learning Environment should be constructed in such a way as to enable certain learnings, including removing the constraints on desired learning, and constraining other learning. Now, the reader may immediately object that engendering a disposition to act smacks of indoctrination, not education. It is true that conditioning for a Pavlovian response would be indoctrination. We must return to the rationale for equity in teacher education. One of the lecturers in subject #1 was explicit in setting rigorous assignments; rigour in sociology could not be compromised and the cognitive load was high. The predictable result was a higher than usual number of student appeals and many complaints to the administrative head about irrelevancy. This might be tenable in a liberal arts degree, but surely the point of addressing
sociological concepts in a single subject of a teacher education program is to lead, however indirectly, to more equitable educational outcomes in schools (both as places of learning and as workplaces). This was the rationale for that and indeed all four subjects. We had to agree to disagree that to alienate prospective teachers from the very concepts thought worthy to present to them was self-defeating. To make this transition is to act, and to develop a disposition to do so in a non-Pavlovian fashion is to develop a reasoned argument. This is the strategy behind subject #4.

A critical realist perspective leads us to ask, what are the generative mechanisms, or structures or tendencies that led to the unfavourable outcomes? I suggest four. (1) is a sexist, racist, homophobic or other discriminatory attitude that some students display, but which CR suggests may be held by others even though not expressed in class. Some of the students in subjects #1, 2 and 3 who complained were clearly affronted by sexism, racism, homophobia and the like being raised, and took it as a criticism of their own and possibly their family’s position. (2) is a set of beliefs, implicit or not, held by at least some maths and science students that are realist and empiricist (realist, though not critical realist, meaning a presumption of an external reality, and empiricist in the sense of scientism and preference for quantifiable data). These beliefs are displayed when these students read much of the humanities (including sociological) literature that is not based on experimental procedure, uses small sample sizes and is hermeneutic in approach. It does not appear ‘scientific’ and there are comments that indicate that these students find this research genre plausible only reluctantly if at all. (3), mentioned earlier, is an assumption by at least some of these students in favour of a transmission mode of teaching and learning, meaning that time not spent towards learning about the transmission of content is viewed as less useful. (4) is the ability of these students to frame an argument, both verbally and in writing. While some of these students write and argue quite well, the standard is generally below that of the arts students and in some cases quite poor.

The present implementation of subject #4, which is the second iteration, is trialling strategies designed to address each of these four suggested causes. That is, the aim is to enable certain learning, including removing constraints on desired learning. For (1), students were provided with a reference list of articles available in the library from the maths education, science education and curriculum literatures, not from foundations literatures like the sociology or philosophy of education. These were selected because they reported on studies of children learning in schools in the disciplines these students are training to teach. These have been used with much greater acceptance than previously, being as they are based on a timeworn education maxim: start with the known and then move to the unknown. These articles seem to be viewed more credibly. Some of the articles were chosen because they also illustrated the relative effectiveness of different pedagogical strategies, which is a response to (3). Class activities relevant to (1) include the students learning content unknown to them but specifically relevant to particular cultural or social groups, e.g. knowledge that is commonly known to Aboriginal groups but not to white groups. The class is debriefed with a discussion after the activity. (2) has been more perplexing, because these students have already completed a subject on research methods in education. For some students it seems to have had little effect on a bias towards quantitative and experimental or quasi-experimental approaches. The list of readings will be augmented next time to include a planned variety of research styles. Liaison with the research methods lecturer might enable a stronger focus on non-experimental
research. For (4) I have engaged the services of the unit in the university that provides student assistance in writing. This has been most successful. The writing tutor has joined the class in the weeks when each assessment task begins. She methodically deconstructs the task with the students and provides writing strategies. Based on just this first attempt, the quality of argument and expression has been markedly improved over the previous year and similar cohorts. We are continuing this as a permanent feature. The sum of these strategies has been an overall improvement in the quality of submitted work and class discussion. This is supported by comments in discussions with students, although of course they have no means of comparing their experience of the subject with previously used strategies.

More is planned for next time. Kathy Hytten (2007), in discussing the contribution of philosophy to teaching social justice, argues we need to think of new possibilities:

To inspire students both to think critically and to assume the moral agency necessary to cultivate more humane and more democratic social and political relationships, we need to use and invent new forms of pedagogical engagement, which ideally can also serve as models for new forms of social engagement. These can only be developed as we experiment with different methods and with multiple ways of seeing and engaging the world around us in educational spaces. (Hytten 2007, p. 446)

Hytten argues that stories, poems, parables, autobiographies, pictures, photographs and videos are often more evocative than arguments. Such a strategy was used in subject #3, which set the making of a collage as an assessment task. The quality was variable, which is no sin, but the only students to complain were technology and maths students. Follow up is planned to determine the extent of any correlation between achievement and area of specialism. The use of these media to convey impressions of inequity or as sensitisation is well known to the mass media, of course, but their use in this particular educational setting needs to be well thought through to avoid being construed as marginal. Hytten also suggests performance, such as role-plays and game playing. Again, this is planned for trial when suitably high quality and relevant material is developed for problematising the curriculum. A full evaluation of this subject will include a comparison with the equivalent cohort in subject #3, to see if the new approach in #4 has made a difference, and student evaluations at its conclusion. The real test would be to study the students once they graduate and commence teaching.

There can be no illusions about the intransigence of the problem being confronted; the extensive literatures in sociology and philosophy of education and the ongoing need for sociological work in the community attest to that. Nonetheless there is a strong prima face case that students with a maths/science/technology background, as a whole, tend to respond differently to, and engage more reluctantly with, sociological concepts when compared with their arts peers. The project described in this paper shows promise in tailoring an education experience, through modifying the learning environment, to the aim of creating more equitable learning outcomes in schools. Further research, as indicated above, will clarify the extent of any success to that end.
Reference List:


