Why Teachers ought to be uncertain, if not ignorant

DANIELLA FORSTER
Faculty of Education/School of Philosophy and Bioethics, Monash University
School of Education/Faculty of Arts and Education, University of Newcastle

Abstract

Current discussion about teacher codes of practice has skirted what I propose is a crucial aspect of teacher professionalism: belief-forming practices. Epistemic concepts become morally infused when considered alongside educative aims such as open, public dialogue and intellectual integrity. This paper raises questions for the nature of an ethics of belief specific to the profession of teaching, and offers a model in terms of virtue epistemology. Alongside virtues which lead teachers to more accurate knowledge are ‘uneasy virtues’ in Julia Driver’s sense of the term. They are uneasy because it seems that a teacher ought to have a special kind of ‘ignorance’ in order to be a worthy professional. While teachers are becoming increasingly accountable for codified professional practices, proportional focus has not been applied to teacher ethics of belief. This paper aims to promote discussion about this worthwhile dimension of educative practice.

Introduction

This paper explores the ethics of beliefs for teachers. An ethics of belief is what grounds one’s reasons for forming beliefs in a certain way; it guides the development of opinion and is what is capable of promoting opinion to belief and belief to certainty and possibly back again. It leads us to deliberated actions. Understanding the reasons why one way of forming beliefs is morally better than another is what grounds one’s ethics of belief. There are two forms of an ethics of belief: content and manner (Degenhardt, 1998, p. 333). The ethics of belief is neither entirely epistemic nor ethical but relates to ethical implications of the formation of beliefs. It thus concerns the ‘good-making’ characteristics of believing which can help to make a person more ethical – that is, by supporting right acts, values and the exercise and development of virtues. In educational theory, the richness of ethical belief is still relatively unrecognised, and it seems that even now only a handful of researchers have approached the question of teaching or teacher ethics of belief with some directness about general beliefs (Axtell, 2001; Dearden, 1974; Degenhardt, 1998, who also cites Dearden, 1984 and Degenhardt, 1986; Quinton, 1987), but much discussion about the ethics of belief in education has focused on the teaching of religious beliefs (inspired by James’ The Will to Believe).

There are two objections to an ethics of belief that I consider here; firstly, one could object to the idea of an ethics of belief wholesale, that is, to argue that belief formation may only be evaluated in terms of its capacity to gain epistemic goods such as knowledge, understanding and wisdom; and secondly, one could accept the idea that we can evaluate belief formation in ethical terms (as well as epistemically) and yet reject that it applies to teachers. I explore the argument that to be a good teacher one ought to hold beliefs formed in epistemically questionable ways: firstly, to hold unreasonably confident beliefs; and secondly to be ignorant of some kinds of evidence. These epistemically questionable ways of believing seem to support teaching practices which produce useful outcomes. I argue that the kind of teacher practice they encourage ought to be considered for its ethical implications against the broader practice of public dialogue. The capacity for deliberation within an open public dialogue is an important educative aim that promotes the exercise and development of intrinsically worthwhile virtues, an understanding of diversity, and multiplies opportunities for learning. I also propose a model of an ethics of belief for teachers. There are several ways
of doing this, but I argue for a form of ethics of belief based on regulative ideals rather than on principles alone.

**Education and the Ethics of Belief**

Epistemic notions – knowledge, justified belief, truth, wisdom, and intellectual integrity – are foundational to how we conceptualise education having practical value to young people living well into the future. Gaining ‘knowledge’, or being able to engage in ‘knowledging’ (Warner, 2006) and develop intellectual integrity and critical thinking skills are important for young people so they have the means to make a living and make worthwhile decisions. Educating entails a teacher has special obligations for modelling and explicitly advocating rationally held beliefs, for instance those beliefs which are supported by substantive evidence rather than by whim or prejudice. Teachers pass on epistemic values to the young people with whom they work, at least through the formal assessment of their expressions of belief and justification as well as through the enacted curriculum and the choices they make about which sources, claims and theories to include in it. Beliefs are a teacher’s ‘stock in trade’ for instance as subject-matter expertise. A teacher might be expected to prefer teaching putatively true claims over those she believes are false, perhaps because she believes these ideas have more worth. They may be useful, likely to help one achieve one’s goals and aims in the world, or represent the way things are accurately and this is of value in itself.

Certain intellectual activities are often considered worthwhile learning activities because they are likely to bring about practical goods of true, justified beliefs, understanding and beliefs that make sense in terms of the way things are. These are activities such as clarifying assumptions, weighing evidence, following logical procedures, and finding trustworthy sources of evidence which allow us to more effectively pursue the goals and objectives we value. A teacher may be expected to have beliefs about how to gather evidence about the value of her pedagogy. Evaluating this is complex. She may focus on evaluating the coherence of enacted curriculum, degrees of student learning, or a range of other elements such as her teaching philosophy and educative aims. She may be expected to make some effort to distinguish between well and poorly developed professional opinions and as such have heuristics for evaluating whether a belief about her practice is worth keeping. Thus, it is plausible to evaluate a teacher’s way of forming beliefs in epistemic terms.

**Morally evaluating beliefs**

What has been considered good belief formation has changed over time. In the Victorian era – with the rise in popularity of the Darwinian theory of evolution and the resulting questioning of religion – came a sense of “heroism of unbelief” which lead to the spiritual satisfaction of “confronting the truth, however bleak and unconsoling” (Degenhardt, 1998, p. 335). Today the idea of coming face to face with the Truth has been significantly undermined by post-modernist critique, although there is a sense in which we can motion towards the multiplicity of the ‘way things are’. But whilst Aristotle had previously discussed the ‘intellectual virtues’, the claim of moral wrongness in reference to belief-mechanisms came first in 1877 when Clifford stated “it is wrong always, everywhere and for everyone to believe on insufficient evidence”.

Exactly how it is wrong was explained in reference to a ship’s owner, who despite the evidence for the un-seaworthiness of his vessel believed that chance or God would keep it well, and so sent it abroad with passengers, crew and cargo only for it to be lost, along with the lives on board. Clifford explains the obligation;

“It is admitted that he did sincerely believe in the soundness of his ship; but the sincerity of his conviction can in no wise help him, because he had no right to believe on such evidence as was before him. He had acquired his belief not by honestly earning it in patient investigation, but by stifling his doubts. And although in the end he may have felt so sure about it that he could not think otherwise, yet inasmuch as he had knowingly and willingly worked himself into that frame of mind, he must be held responsible for it.”
The ship owner had an ethical responsibility to prevent these lives from being lost if he had sufficient doubt that his ship would not be safe to travel. In other words, if a person is not epistemically justified in believing a proposition, then it is morally wrong for them to believe the proposition. Indeed, laws on negligence show that there can be serious legal implications for culpably having false beliefs. Whilst we cannot ‘freely choose’ to believe whatever one likes, if we are responsible for our physical acts then there is also an important element of responsibility for one’s mental conditions; our beliefs. Getting “our beliefs to fit the world may involve a lot of work” (Stocker, 1982, p. 408) as well as sensitivity and perception. But since our desires can get in the way of holding beliefs which are in cognitive contact with reality and are embedded with other mental aspects, such as understanding, it is no wonder that it “is often so hard to hold a new belief or reject an old one” (Stocker, 1982, p. 410). Thus, reappraising one’s way of forming beliefs may involve great and potentially uncomfortable change, but it is change that agents can be responsible for. Similarly, the teacher whose stock in trade is beliefs – about the knowledge, values, perceptions and ideology both hidden and made explicit in her curriculum – is responsible for the way in which she forms her professional role-related beliefs. How she models believing and engages in direct instruction can affect belief formation in others, specifically students, colleagues and the school community.

However, some think that having unsubstantiated belief can be good. It is plausible that ‘bootstrapping’ is a beneficial strategy, especially for those who need to believe they are, or the situation is, better than it really is in order to get through a performance, to take risks or to save lives. Consequentialist reasoning argued contrary to Clifford only twenty years later. William James (1897) claimed “that it can be proper to hold beliefs without adequate evidence so long as holding them is likely to be beneficial”. This led to the modern idea that being ignorant of one’s faults can protect an individual’s psychic harmony and self-worth. James may have initially meant it in reference to the soothing belief in heaven for a lost loved one, but it could also be applied to the idea of bootstrapping; where one’s belief causes the supporting grounds for it to come about, like in the case of an optimistic teacher’s expectations of the unproven talent of her student. Both a young person and a teacher might benefit from believing that, for example, they are more talented than they are because this can lead them to engage in action they may not otherwise take, and which may extend them to achieve. A teacher’s overconfidence in her teaching capacity – high self-efficacy beliefs – is often claimed to be instrumental in promoting more effective teaching. A teacher’s unwarranted optimism about a student’s talent can be the starting point for the development of higher self-esteem. But it could depend on the teacher either choosing to ignore, or being genuinely ignorant of evidence against the student’s capacity. Driver has called this kind of belief an example of blind charity. In terms of Driver’s ‘uneasy virtue’ this kind of believing must involve a genuine ignorance about what is bad in other people. According to Driver’s view, blind charity is a virtue because it promotes good consequences. But this is a controversial conception of a virtue because it de-emphasises the agent’s active role in choosing virtue for the right reasons and it undermines the value of good intentions which motivate deliberate, habituated action. One can also question Driver’s interpretation of the nature of this virtue. Optimistic teachers – whilst they may be overreaching the evidence – are not necessarily ignorant but are deliberately utilising a strategic approach intended to promote positive outcomes. Some have given this style of believing an alternative name: intuitive high hopes. This kind of “hope that pupils can learn and change must be upheld whenever test scores, the opinions of parents or even the firsthand experiences of the teacher may imply the contrary” (Tirri, Husu, & Kansanen, 1999, p. 916). Thus, we need to consider the value of a teacher’s belief practices with an eye to their ends in view.

One way to approach the issue of harmful and helpful unjustified beliefs is by looking at the difference between rational and non-rational belief. This brings the focus onto the nature of a teacher’s ‘reasons why’ for their believing. There is a valuable distinction between rational and non-rational beliefs that points to the role of evidence in belief formation. Rational beliefs can be justified or unjustified; but they are typically responses which take account of the available evidence. Non-rational beliefs can be distinguished into two groups: those which cannot be subject to verification, that is “beliefs immune to evidentiary or rational challenge”; and those which contradict or ignore known evidence (Merry, 2005, pp. 402-403). The latter sort are beliefs for which the content is not open to doubt or change, is protected from challenge and can be
culturally and religiously exclusive (Merry, 2005; Singer, 2004) whereas the former may not be provable, these beliefs are not amenable to reason. Non-rational beliefs can be inflexible, dogmatic and intolerant of alternative views and accepted evidence and thus have the power to separate and fracture communities, potentially violently. But the kind of non-rational beliefs whose content cannot be subject to verification are not necessarily held in an unreasonable way. One may believe an unverifiable claim and yet be open to revision in the event of emerging circumstances. These kinds of non-rational beliefs can be held rationally if the believer is able to deliberate about one’s reasons for holding these beliefs (Merry, 2005, p. 403) and is inclined to be open-minded.

Some have argued that non-rational beliefs ought to be exempt from public dialogue (Singer, 2004). That is, non-rational beliefs such as some religious beliefs have been thought to endanger social goods like justice and democracy, particularly in cases where the church and state are not separate and policies are made in favour of dominating religious groups which are to the detriment of others. Hence, Singer argues “that there is an ethical obligation to base one’s views about life on evidence and sound reasoning” (2004, p. 118). If people reject questioning the ‘reasons why’ then there's limited hope of progressive dialogue: everyone is caught within their own inflexible webs of beliefs (Singer, 2004). “Someone sitting on an unreasonable belief is sitting on a time bomb” (Blackburn, 2005, p. 5) akin to Clifford’s train of social and practical disasters. The privatisation of beliefs prevents others from engaging in constructive critique with us in the public space. Encouraging open, deliberative dialogue about both rational and non-rational beliefs held rationally actively undermines xenophobia, for instance. This is a worthwhile moral aim.

Teachers are an important link in the development of both shared and personal understandings. A teacher can be lauded or deplored according to the way she chooses to manage her beliefs and respond to expressions from others; students, colleagues and the school community. She can engage in deliberative public dialogue and encourage others to put forward their reasons why. She can show openness to new or alternative beliefs by being willing to put her beliefs up to scrutiny and for being critical of the evidence for the purpose of moving towards more secure knowledge. Even if one cannot believe ‘at will’ one can still exercise a fair amount of control over what one comes to believe; it is the coming to believe which is such hard work.

Regulative Ideals of an Ethics of Belief for Teachers

The language of rationality can be limiting, however. Calling a belief ‘justified’ or ‘unjustified’, ‘rational’ or ‘irrational’ gives little indication for what makes it so. What is valuable to human knowledge cannot be entirely reduced to formulae, neither can ethical deliberation. There may be principles which guide knowledging practices such as ‘do not contradict yourself’ and ‘look for counterevidence’; and those which guide ethical practice, such as ‘respect others as ends in themselves’ and ‘minimise suffering’. These principles can be useful pedagogic tools, especially for those becoming aware of rich moral concepts such as intellectual integrity and friendship. A common method of teaching ethics involves the use of rich case studies which pit two seemingly equally important principles against each other; for instance, the principle to maximise preferences/minimise harm versus the principle to save life. We can soon find counterexamples which make it clear that the use of principles alone is not sufficient as a guide to action.

Principles can sometimes work against an appreciation of the contextual complexity of circumstance by being in conflict or if there seems to be morally salient elements too difficult to articulate, such as may be the case with the concept of a ‘good friend’. An attempt to develop a set of principles for the nature of a good friend might result in a list of characteristics such as ‘having a friend’s best interests at heart; ‘being fun to be with’; ‘accepting and caring for a friend just as they are’; ‘remembering significant facts about a friend’; ‘helping a friend through changes or challenges’, and so forth. A good friend may embody some or all of these features, but no two friends are the same. There may be a family resemblance between all the possible cases for good friendship. Learning to have a feel for who is a good friend and who is a fair-weather friend would take some trial and error as a person’s maturity gathers. In the meantime, principles might be
generally useful but not sufficient to anticipate the direction of the relationship; it seems to depend on emerging, unknown factors.

A similar case against the reduction of morality to principles could be made for epistemic concepts such as wisdom, intellectual integrity and understanding. Some prefer understanding to knowledge as “a necessary component of the highest epistemic good” (Riggs, 2007, p. 215). Wisdom too is an example of a personal positive epistemic state of immense value which resists objective, abstract analysis since it manifests differently in individuals, as does understanding and intellectual integrity. Wisdom could be concerned as much with self-knowledge as it is knowledge about others, complex phenomena, anticipation, careful observation, patience, clarity, and discipline. It does not progress in a similar way to the development of collective human knowledge. There is “no stock of wisdom possessed” by humanity, unlike the stock of human knowledge (Zagzebski, 1996, p. 22).

The rich language of virtue taps into intuitive ways of evaluating intellectual acts, such as believing5 (Zagzebski, 1996). A person can be commended for using their “adaptability of intellect, the ability to recognise the salient facts, sensitivity to detail, …intellectual care, perseverance, and discretion” (Zagzebski, 1996, p. 21) and deplored for being “narrow-minded, careless, intellectually cowardly, rash,…prejudiced, rigid, …ignoring relevant evidence, …lacking insight” and so forth (Zagzebski, 1996, p. 20). Others are concerned about tendencies in some teachers to desire power and control over others’ beliefs; that is to desire disciples, to be arrogant or exhibit vanity rather than humility (Roberts & Wood, 2007). Intellectual virtues such as wisdom, intellectual integrity and understanding could provide ideals which take account of the rich personal dimensions of educative value, and could provide ‘reasons why’ which underlie an ethics of belief for teachers. Teachers may need to work with principles and many case studies to assist the development of the ‘feel’ for what it means to believe ethically. But it may be worthwhile to move beyond principles towards ideals which can be used to regulate practice (Oakley & Cocking, 2006). An initial sketch of ethical teacher practice which seems to follow on from the previous discussions may include regulative ideals such as:

- Open-mindedness6: to encourage engagement with new and emerging situations, professional learning, fair student interaction, democratic classroom management, and appreciation of diversity and multiple perspectives.
- Truth-seeking: to motivate inquiries. It may be phrased as wisdom-seeking or understanding-seeking to demonstrate an approach of more personal value, and may depend on a regard for uncertainty and complexity.
- Intellectual integrity: to encourage the aspiration towards intellectual ideals.
- Reasonably held beliefs: to allow for open public dialogue and deliberation of the ‘reasons why’.
- Capacity to articulate deliberation: to make thinking transparent, as a pedagogical tool and a collegial tool, i.e. shared professionalism, shared community inquiries in public dialogue.
- Counter-factual imagination: the capacity to think of alternative positions and arguments in the absence of others and to test claims7.

A teacher’s ‘feel’ for ethical intellectual practice might rest on a sophisticated epistemic stance which may not only involve one’s manner of believing, but also certain beliefs. For instance one may believe that one’s evidence for a claim is independent from the reality of that claim. No matter the strength of the justification, it is still possible to be mistaken. As well as this, one might also believe that the nature of the ‘ends in view’ play a determining role in an intellectual inquiry, and these ends in view are not pre-given. An appreciation of uncertainty could arise from a belief about the complexity of dynamic systems. There is evidence suggesting that the “uncertainty-oriented person [is] one who is more open-minded, and who changes their beliefs as needed – … is just what is required of teachers who are attempting progressive, meaning-centred teaching” (Wheatley, 2002, p. 11). If a simple epistemic stance is taken (i.e. knowledge is unproblematic or absolute) then this may encourage teachers to develop more rigid views which may be played out in their curriculum; and they may be less able to differentiate contextual detail if they think that human knowledge conforms to principles alone.
Uncertainty and the Plague of Doubt

None of this gives the reader an indication why society needs more ignorant teachers. It rather seems the opposite. So important is it for teachers to make sound decisions and beliefs that a young person’s perceptions, hopes, and sense of worth can be dependent upon it. A misguided decision from a teacher to mark down, fail or punish a student can affect their chances for further learning and an ‘easy’ mark may dampen respect for the teacher’s critical expertise. Rather, it seems, teachers must believe accurately and be knowledgeable about students, and about correct test answers or subject topics, and about who did what to whom, and whether they are being effective practitioners or not. Why would it be morally desirable for a teacher to be ignorant?

Research suggests that it is not unusual for teachers to engage in belief practices which ignore or contradict the evidence. As discussed above, teachers choose to ignore the bulk of evidence which points towards negative student outcomes; what some call ‘intuitive high hopes’ (Tirri, Husu, & Kansanen, 1999) about potential student achievement, and others have called ‘blind charity’ (Driver, 2001, p. 37) which is supposedly a kind of ignorance about what is bad in other people, particularly students. But teachers are also encouraged to engage in similar overconfidence about their own teaching practices.

Much of the literature on teacher motivation and efficacy assumes that teacher beliefs are crucial to teacher decision and action. For example, one teacher belief which has been claimed to have great value in terms of student outcomes is a teacher’s beliefs about her teaching effectiveness. This is known as teacher self-efficacy beliefs. Common opinion amongst researchers is that overconfidence in teachers about their ability to teach (in various specific situations) is associated with positive student outcomes (of a measurable kind) (Caprara, Barbaranelli, Steca, & Malone, 2006; Tschannen-Moran & Hoy, 2001). However, one’s confidence in one’s abilities does not always match one’s actual capacity (if this could be measured). If a teacher is overconfident relative to her capacities then this may be more damaging than beneficial. If she cannot see a need to search for alternative beliefs – because she is not disposed to uncertainty or doubt in her attitude to her beliefs, but rather tends to be certain that she is right about her practice in a particular teaching context – then she may not be open to the contrary evidence when it presents itself. For instance, if a history teacher practices questioning pedagogy where she asks students to provide ‘the answers’ about, for instance, the causal factors of World War Two, and has a manner of overconfidence and certainty, then students may be more inclined to play the ‘let’s guess what Ms Forster has in mind’ game rather than engage in genuine deliberation about the topic. The students who confirm Ms Forster’s ‘right answers’ provide her with the evidence she is looking for – that they are learning what she wants them to know – but those who have a variant conception may have their perceptions undermined, withdraw and the opportunity for open dialogue about the ‘reasons why’ is lost.

It is plausible to assume that one’s sensitivity to, perception and interpretation of feedback evidence in the teaching context can also be hindered by one’s beliefs about oneself. Since “uncertainty is increasingly recognised as an inescapable feature of our ability to know” some argue that becoming “comfortable with uncertainty and doubt helps teachers model the kind of thinking that is characteristic of experts” (Wheatley, 2002, p. 13). Some doubts about one’s efficacy as a teacher could be beneficial especially for teacher learning and educational reform. Having some doubt, a concern, confusion, an unresolved problem, a question, some sense of dissonance, or even a feeling that things, generally, aren’t necessarily ‘fitting together’ are powerful opportunities for deliberative thinking; but this is different from suffering a plague of debilitating doubt. Debilitating doubt may lead a teacher towards inaction, cynicism and relativism. She may suffer from so much doubt about her practices that she fails to win her students’ respect. Such a plague of doubt – sometimes blamed on a misunderstanding of the post-modern critique – can also undermine the edifice of human inquiry and can leave students with incoherent beliefs such as ‘anything goes’ or ‘this is my truth; the opposite is yours, and none can tell us wrong’. It can be an easy, convenient method of supporting diversity without regard for systematic evaluation of the ‘reasons why’ but ultimately leads nowhere fast, particularly if non-rational beliefs are in play; those which contradict or resist the available counterevidence.
Some doubt is important, however. Dewey built his scientific method from the position that deliberative thinking cannot occur without doubt and uncertainty. Doubt is “a basic feature of the learning process” (Gabella, 1995, p. 237, cited in Wheatley, 2002, p. 11). Wheatley gives evidence that specific teacher efficacy doubts could include the following benefits:

- Doubt about something as important to a teacher as one’s capacity to affect students that can trigger the kind of deep disequilibrium required for transformative learning.
- Engaging with one’s doubts is a crucial component for being reflective and questioning one’s assumptions and can lead to new insights.
- The guilt experienced by being doubtful of one’s efficacy as a teacher can support “motivation, innovation and improvement” (Wheatley, 2002, p. 10). It is argued that this kind of doubt can also promote the teacher to become more responsive to diversity in her classroom.
- Doubt experienced by a team of teachers preceded a period of strong collaborative growth, and a lone teacher’s awareness of her limits can motivate her to seek out collaboration from others.

Thus, the disposition to doubt is an important dimension which supports ethical belief practices. It can encourage aspiration towards regulative ideals. So too can educative aims such as open public dialogue. Open public dialogue towards an understanding of diversity is one of many worthwhile educative aims, and coupled with the nature of the relationship between teacher and student serves to magnify the “moral significance of right belief” due to the “combination of institutionalized power with a lack of resources for intellectual resistance to their influence” (Quinton, 1987, p. 42). The extent of influence a teacher can have on young people's capacities to engage in dialogue is one reason for considering how best to develop a coherent account of the ethics of belief in education. The further professionalisation of teaching is another. I have offered a rough model of an ethics of belief based on regulative ideals such as the intellectual virtues of open-mindedness, the motivation to seek understanding and wisdom, to question the ‘ends in view’ and to ask about ‘reasons why’, and the capacities to imagine counterfactuals and to articulate one’s deliberations. These ideals need to be fleshed out further; potentially with the development of many rich case studies and stories. I hope that this foray into the ethics of belief for teachers has presented some groundwork for future discussion about professional belief formation practices in education.

References


Notes


3. Merry cites reincarnation as an example of the former, and an ability to walk through solid objects as an example of the latter.

4. In Stocker’s sense.

5. Zagzebski argues contrary to Stocker’s claim that beliefs are not mental acts but mental ‘conditions’, that beliefs are at least analogous to acts.

6. To engage in the active search for evidence which undermines one’s preferred beliefs (J. Baron, 2000). Baron has described it as a fundamental and modifiable thinking disposition important to intelligence (Jonathan Baron, 1985; J. Baron, 2000). William Hare has a slightly different view of it, but has defended the virtue of open-mindedness by arguing that if properly understood it does not encourage credulity, discourage definite views or prevent the tenacious pursuit of an idea (Hare, 2003).

7. Two additional virtues could also include: Patience or persistence with intellectual problems: to support teacher's inquiries in the face of challenges and complexity brought by open-mindedness; and intellectual courage: the capacity to stand alone according to one's reasoned deliberations (this may need to be mediated by one’s open-mindedness to prevent rigid thinking).

8. ‘Teacher efficacy doubts’ can refer to mild uncertainty about “one’s efficacy, including doubts about specific or general aspects of one’s teaching, and doubts regarding outcome expectancies, efficacy expectancies, and personal teaching efficacy” (Wheatley, 2002, p. 8).

9. Traditionally, teacher uncertainty was classified together with guilt and anxiety, “as examples of negative teacher feelings” (Wheatley, 2002, p. 7) and more recently some institutions test prospective student-teachers’ self-efficacy levels in order to weed out those who are self-doubtful (Groundwater-Smith & Sachs, 2002)