



Professional identity creation: Examining the development of beginning preservice teachers' understanding of their work as teachers

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ABSTRACT

The importance of reflection in supporting the continued professional learning of preservice practitioners is well recognised. This study examines one aspect of the outcomes of preservice teachers' reflection: the development of their own self-image as a teacher. In making the transition from student to teacher, preservice teachers create their own professional identity. Their ability to articulate this identity is examined through a new construct, a "teachers' voice". A teachers' voice, develops when preservice teachers interpret and reinterpret their experiences through the processes of reflection. A teachers' voice is articulated as part of the persons' self-image. The construct, a teachers' voice, was investigated by examining changes in preservice teachers' contributions in an online discussion forum. Two complementary approaches of content analysis were applied. Both methods revealed changes in preservice teachers' levels of engagement and showed that in the first semester of preservice teacher education, the majority of preservice teachers moved towards a more professional stance in their contributions.

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1. Introduction

Teaching, like all professions is a highly complex and skilled practice. While teachers' professional competence is formally recognised with accreditation, the notion of being a teacher is socially legitimised through the accredited teachers' interactions with other members of the profession, parents and children (Coldron & Smith, 1999). These social processes begin in the students' preservice education as they make the transition from student to accredited teacher. During their preservice education students develop a series of attributes they need for deep understanding of complex practice and ethical conduct associated with the work of teachers (Shulman, 1998). These attributes include their understanding of pedagogy and its impact on students' learning, their technical abilities to organise and manage learning, their motivation to improve their practice and the ability to engage in individual reflection (Shulman & Shulman, 2004). These attributes (developed via the interplay among a complex range of teacher experiences) include the professional and the personal, the individual and the social, the objective and the subjective, the formal and the informal as well as the situated and generalised (Fisher, Higgins, & Loveless, 2006). In understanding how preservice education programs

impact on the development of preservice teachers' perceptions of themselves as teachers and their professional identity, the interplay of a number of factors, both at an individual and community level need to be considered (Bianchini & Cavazos, 2007; Bryan, 2003; Gee, 2000; Shulman & Shulman, 2004; Walkington, 2005).

2. Professional identity

Teachers' identities are central to their beliefs, values and practices that guide their actions within and outside the classroom (Walkington, 2005). Professional identity can be considered as one component of multiple perspectives of a persons' identity, the component associated with their professional status as a teacher (Gee, 2000). Like other aspects of peoples' identity, a person's professional identity comes from his/her position within society, his/her interactions with others and his/her interpretations of his/her experiences (Gee, 2000; Geijssels & Meijers, 2005).

While there are multiple interpretations of the notion of a professional identity within the literature (Beijaard, Meijer, & Verloop, 2004) in this study the notion of a professional identity is considered to be a "person narrativization of what consists of his or her (never fully formed or always potentially changing) core identity as a teacher" (Gee, 2000).

This definition is consistent with the synthesis of the research by Beijaard et al. (2004) which highlighted four common characteristics of professional identity. Firstly, it is not a fixed entity, rather it is

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a process involving the interpretation and reinterpretation of experiences. A person plays an active role in the formation of his/her professional identity. This process, identity formation, is driven by the individual's goal state of what he/she wants to become (Smeby, 2007). Secondly, the interaction between the person and the context is important in forming a person's identity. A person's identity arises from his/her personal knowledge of and the refinement and adjustment of this knowledge through his/her negotiated experiences within a particular community (Wenger, 1998). Thirdly, the formation of a professional identity involves human agency. It is a part of teachers' self, a way of explaining and justifying their experiences to themselves (Coldron & Smith, 1999). The process of professional identity formation begins with a person's self-perception of being a teacher and then being seen by others as teachers: it is a matter of "acquiring and re-acquiring an identity which is socially legitimated" (Coldron & Smith, 1999, p. 712). Finally, especially in their initial work, teachers' professional identity consists of a set of sub-identities that later form a somewhat harmonious whole (Beijaard et al., 2004). An individual's prior knowledge and beliefs act as a filter for interpretation of his/her experiences; thus the characteristics of, relationships among, and coherence of these sub-identities will be unique to each individual.

While the most rapid changes in the development of a professional identity occurs when preservice teachers graduate and begin their work in schools and classrooms (Flores & Day, 2006; Luehmann, 2007), the development of a professional identity begins in their preservice education (Walkington, 2005). During this preservice period, which Flores and Day (2006) identify as a Pre-Teaching Identity, the participants' professional identity arises from their student images of teachers, their initial beliefs and concepts of what constitutes a good teacher and their implicit theories of teaching. This pre-teaching identity is refined through the processes of reflection as the preservice teachers develop a more sophisticated understanding of their work as teachers through their educational experiences in their formal studies and their work in schools and classrooms (Geijssels & Meijers, 2005; Korthagen & Vasalos, 2005).

From an examination of preservice teachers' contributions to an online discussion forum, this study identifies some of the features of professional identity formation. A new construct, a *Teachers' voice*, conceived as the measure of the extent to which a person can articulate a personal practical identity image of himself/herself as a teacher. In this study the construct is used to trace changes in preservice teachers' professional identity. The construct, a teachers' voices involves more than just a participants' statement indicating a sense of belonging to the professional community of teachers, it also incorporates their understanding of complex practice, and ethical conduct associated with effective engagement in the complex environment of the classroom. An important aspect of the construct a teachers' voice is the apostrophe. This signifies the personal nature of this aspect of the professional identity formation. Like other aspects of professional identity formation, the development of a teachers' voice is conceived as ongoing, developing through peoples' interpretation and reinterpretation of their experiences. The full development of a teachers' voice represents the participants' membership of the community of practice of professional practice of teachers (Little, 2003). It is this community of practice, which gives the authority to teachers to speak about their practices and how these should be constructed and implemented. It is this authority which other researchers (Darling-Hammond, Bullmaster, & Cobb, 1995; Kirk & Macdonald, 2001) have referred to as a teacher voice (no apostrophe). The development of a teachers' voice depends on the participants' experiences, and their ongoing mindful-consideration and reconsideration of events and experiences through reflection (Hatton & Smith, 1995).

While reflection is a critical process in the development of a professional identity, systematic reflection is difficult for many preservice teachers (Gale & Jackson, 1997; Hatton & Smith, 1995). To some extent, these difficulties arise from the complexity of reflection, as reflection is not a series of steps or procedures, but rather a holistic way of meeting and responding to problems (Zeichner & Liston, 1987). It involves an effortful cyclical process of monitoring, evaluating and revising ideas and actions in the light of new evidence and new insights (Hatton & Smith, 1995). It also involves intuition, emotion and passion (Zeichner & Liston, 1987). The quality of practitioners' reflections depends on their knowledge and understanding of the relevant concepts in a particular domain (Griffin, 2003; Hatton & Smith, 1995) as well as a level of expertise, which enables the practitioner to recognise discrepancies or opportunities for reflection (Lyon & Brew, 2003). While there is an affective component (Zeichner & Liston, 1987), reflection is primarily a cognitive process (Griffin, 2003; Pultorak, 1993). The capability to engage in reflection can be developed, as practitioners enhance their reflective capacities there are corresponding qualitative differences in the outcomes of their reflections that can be observed in their language and actions (Fund, Court, & Kramarski, 2002; Hatton & Smith, 1995; Pultorak, 1993; Sparks-Langer & Colton, 1991; Valli & Agostinelli, 1993; Van Manen, 1977).

Apart from the challenge of the processes of reflection, the nature of the preservice teachers' experiences in typical preservice teacher education programs has also impact on the outcomes of their reflection. Preservice teacher education programs typically organised around two different contexts formal coursework undertaken at university or at other teacher education institutions and practicum experiences in schools and classrooms. For many beginning teachers there is a mismatch between knowledge and understanding of teaching they develop in these two different contexts (Flores & Day, 2006; Luehmann, 2007).

Part of this mismatch may arise from how knowledge is generated and understood in these two different contexts (Fuller, Hodkinson, Hodkinson, & Unwin, 2005). In their formal coursework, the preservice teachers' knowledge of teaching and learning (their professional knowledge) is based largely on theoretical principles and is explicitly expressed in an academic discourse. Such knowledge is generalisable and decontextualised. By contrast, preservice teachers' experiences in schools and classrooms typically focus on the concrete day-to-day demands of teacher's work, and thus their knowledge is linked to particular solutions and situations (Ebbutt, Robson, & Worrall, 2000; Little, 2003; Smagorinsky, Cook, & John, 2003). Further, preservice teachers' knowledge gained in the schools and classrooms is more tacit, often personal and practical in nature, expressed in common-sense terms and organised around the challenges associated with their daily practices (Connelly, Clandinin, & He, 1997; Cope & Stephen, 2001; Ebbutt et al., 2000; Mewborn & Stanulis, 2000). Both contexts, formal education and experiences in schools and classrooms, are essential for a well-rounded teacher's professional understanding and decision-making ability (Shulman, 1998; Wideen, Mayer-Smith, & Moon, 1998).

The formation of school–university partnerships is one mechanism to help preservice teachers to integrate and develop their knowledge, skills, values and other attitudes within these two different contexts. These partnerships provide the preservice teachers with opportunities to engage in some, but not all the day-to-day work associated with the professional work of teachers (Day, 1998; Hodkinson & Hodkinson, 1999; Rice, 2002; Sutherland, Scanlon, & Sperring, 2005). Through these peripheral participation experiences, preservice teachers have the opportunity to engage with the stories, actions, concepts and discourse of teachers and if learning experiences are thoughtfully developed, integrate the

knowledge developed and enacted in these two different contexts (Burn, 2007; Sutherland et al., 2005). It is through their engagement in these experiences that preservice teachers begin to refine their initial concepts of teaching and being to create a self-image of themselves as a teacher.

The challenges associated with developing and maintaining meaningful learning experiences within school–university partnerships have been well documented (Hodkinson & Hodkinson, 1997; Meijer, Zanting, & Verloop, 2002; Rice, 2002; Sutherland et al., 2005). These challenges appear to arise from the differences in the knowledge bases, the organisation and the cultures between schools and teacher education institutions. By removing some of the organisational and cultural constraints, an online discussion forum may provide an alternative mechanism where teachers can share their insights and experiences. Participation in an online discussion forum should provide the preservice teachers with opportunities to appreciate the different perspectives teachers bring to the theoretical issues discussed at the university and assist them to appreciate the relationship between theory and practice. This exploratory study examines one aspect of preservice teachers' the development of their professional identity by using the construct of a teachers' voice to examine changes in their contributions in an online forum. The purpose of this study is to examine the extent to which an online discussion forum can assist preservice teachers begin to create their professional identity.

3. Online environments that promote knowledge-building and reflection

A written text-based environment of computer-mediated communication may support the development of preservice teachers' professional learning including the development of their capacity to reflect. Firstly, the written text-based environment may provide a discipline, forcing students to communicate complex ideas in writing (Garrison, Anderson, & Archer, 2000). Secondly, an asynchronous discussion removes time constraints that typically exist in face-to-face and synchronous online discussions (Davis & Brewer, 1997). Studies have reported that participants spend longer reflecting in an online environment and achieve better learning outcomes (Morgan, Rawlinson, & Weaver, 2006). Finally, support, modelling and responses of online facilitators and peers may facilitate and help to enhance individual reflection (Levin, He, & Robbins, 2006; Maher & Jacobs, 2006).

The design and organisation of the online environment can also play an important role in supporting participants' engagement. Lin, Hmelo, Kinzer, and Secules (1999) argue that technological supports can help students more effectively engage in reflective processes by making these processes more explicit. They suggest that reflective processes in an online environment can be enhanced through the inclusion of various design features, such as process displays, prompts and models and a social discourse focused on reflection. Further, it is argued that the process displays and prompts offer structure and remind students to engage in the appropriate knowledge-construction processes. Finally Lin et al. (1999) propose that the shared community discourse provides the opportunity for students to consider multiple perspectives and use these as a source for reflection.

The latter two approaches were applied in this study. All participants were expected to include a discussion of the implications of the concepts on their perceptions of their work as teachers. The process displays and prompts used in this study were a set of textual pre-specified labels or tags referred to as "knowledge labels" (Table 1). These knowledge labels were based on Bereiter's and Scardamalia's (1998) schemata of the levels of working with knowledge, where each level represents a progressive

objectification and transformation of knowledge from concrete experiences and individual mental objects (Level 1 and 2), to socially shareable experiences and objects (Level 3 and 4) and, finally, to individually or collaboratively improvable conceptual artefacts (Level 5–7). The relationship between the knowledge label and the levels of working with knowledge in Bereiter's and Scardamalia's (1998) schemata is summarised in Table 1.

The first three tags or knowledge labels articulate different levels of working with knowledge and emphasise generic aspects of knowledge generation (Bereiter & Scardamalia, 1998). This three level representation was based on the Sloffer, Dueber, and Duffy (1999) model in which the tags "Exploration", "Analysis" and "Decision-Making" were used. In the present study, the knowledge labels, "Identification", "Elaboration", and "Reflection/Application" were selected and defined to capture these processes. As non-cognitive interactions are also important in online collaborative learning, a group of additional tags were added to support interaction and unstructured social discourse (Duffy, Dueber, & Hawley, 1998).

4. Assessing student teachers' learning in online discussion forums: the development of a teachers' voice

A number of different approaches can be used to assess and examine students' learning in online discussion forums (Herring, 2004). Researchers have specifically considered students' perceptions of the impact their individual posts have in the online forum through standardized and research generated questionnaires (Goodyear, Jones, Asensio, Hodgson, & Steeples, 2004). In this type of discussion forum, participants must make conscious efforts to contribute to an online discussion and the texts produced are objects, which can be shared, worked on and collaboratively improved (Goodyear & Zenios, 2007). Participants' interactions in the online environment and the text that emerges from these processes capture the process of creating and improving ideas and therefore, can provide important insights into the learning processes and outcomes (cf. Herring, 2004; Marra, Moore, & Kinczak, 2004; Ross et al., 2007; Savenye & Robinson, 2004; Wever, Schellens, Valcke, & Keer, 2006). Content analysis is one approach that can be used to examine the nature of the contributions.

Participants' self-labelling of their contributions can provide the basis for this content analysis (Jeong, 2005). This technique has been extended by the development of a set of quantitative indexes for analysing and reporting students' discourse and engagement (Markauskaite, Sutherland, & Reimann, 2006). By assigning weights to the knowledge tags, various measures reflecting students' social and cognitive engagement with knowledge and reflection has been introduced, such as The Index of Cognitive Engagement, The Index of Social Cognitive Engagement and The Index of Social Engagement (Markauskaite et al., 2006; Markauskaite & Sutherland, 2008; Markauskaite, Sutherland, & Howard, 2008). These techniques provide semi-automatic means for analysing large corpuses of messages where all contributions can be considered. This provides a broad, but 'thin' picture about students' learning.

To counter-balance the limitations of the semi-automatic content analysis using indexes, in-depth human coding-based content analysis can be used for the analysis of specific subsets of the contributions (de Laat & Lally, 2004). While the number of contributions analysed in this way has to be limited by the availability of resources, the focus of the coding can be matched to specific learning outcomes and research aims. This interpretative analysis of students' messages can help to detect and reveal subtle changes in the quality of individual contributions and provide deep insights into students' learning, the development of their professional knowledge and their professional identity. Both approaches,

Table 1

Levels of working with knowledge and description of the knowledge labels and their weights.

Knowledge label (weight)	Level of approach to knowledge ^a	Description
Explanation (1)	L1. Knowledge as individualized mental states. L2. Knowledge as itemizable mental content.	A statement about your understanding or your interpretation of the reading. This could be a summary of the main ideas in the article, written in your own words.
Elaboration (2)	L3. Knowledge as representable and interpretable L4. Knowledge as viewable from different perspectives	Additional evidence or insights beyond your explanation. The additional evidence could come from your reading of the research or policy document or it could be example(s) from your past or present experiences (e.g., school observations). It should be your own ideas.
Reflection/application (3)	L5. Knowledge as personally constructed artifacts. L6. Knowledge as improvable personal artifacts. L7. Knowledge as semi-autonomous artifacts.	Discussion as how this idea(s) helps you in understanding more about teaching and/or learning and/or education in the Australian context. You might also discuss how you might use this idea(s) in your future work as a teacher.
Request; administration/maintenance; social label; no knowledge (0)	Interaction and social discourse	Questions, information not specifically related to the discussion of the reading, administrative matters, greets, jokes and off-task comments, and any other information.
Please choose (0)	Default	Non-labelled paragraph (i.e., default option).

^a L1–L7 based on Bereiter and Scardamalia (1998).

the participants' self-labelling and the interpretative content analysis, have been integrated and applied in this study.

4.1. Assessing the development of a teachers' voice: a Cognitive Process and Professional Focus model

The interpretative content analysis focused on examining one aspect of preservice teachers' professional identity formation, the development of their self-perception of being a teacher. In order to examine this development the new construct, a teachers' voice was developed. This construct is a measure of the extent to which a person can articulate a personal practical identity image of himself/herself as a teacher. It involves more than just a statement of belonging to the professional community of teachers, it also incorporates an understanding of complex practice, and ethical conduct associated with effective engagement in the complex environment of the classroom. Like other aspects of professional identity formation, the development of a teachers' voice is ongoing, developing through peoples' interpretation and reinterpretation of their experiences. Its development is interwoven with the person's experiences and learning in a particular context and is directed by the persons' goal states. It is not a stable entity, but a way of explaining and justifying their experiences to themselves and using this justification to monitor and direct their own professional development.

The processes of critical and analytical reflection are central to the development of teachers' professional knowledge and identity (Shulman & Shulman, 2004). This process should also be observable in their language (McLoughlin & Oliver, 1998) and play a significant role in the development of a teachers' voice. Existing classification systems of reflection should thus provide the basis for the development of a set of categories to identify developments of a teachers' voice among preservice teachers. The most commonly used schemes for examining changes in student teachers' reflections is Hatton and Smith's (1995) classification system that identifies three distinct steps of reflection – *Descriptive*, *Dialogic* and *Critical* in students' reflective utterances. In other studies this one-dimensional classification scheme has been extended into multi-dimensional models (cf. Fund et al., 2002; Valli & Agostinelli, 1993). These schemes distinguish the cognitive processes from the goal or purpose of the reflection. Using this

latter approach, a two-dimensional Cognitive Process and Professional Focus coding scheme was created to investigate the development of a teachers' voice (Table 2). Using the first dimension, the online contributions are classified into four levels of cognitive engagement: *Identifying*, *Analysing*, *Critical Evaluating* and *Problem Solving*. Using the second dimension, the extent to which participants position themselves as members of their future professional community, is categorised into three categories: *Theoretical*, *Linkage*, and *Professional*.

Contributions in the Identifying level only describe the issues, whereas in analysing the discussion of the factors contributing to the issue are considered. To be classified in the Critical Evaluating level the contribution must demonstrate some form of judgement of the impact of these contributing factors, while possible solutions or future courses are considered at the Problem Solving level. If the focus of the contribution is largely academic with examples drawn largely from the participants' experiences as a student then the contribution is labelled as Theoretical. At the Linkage level students consider the application of the concepts or ideas to his/her future professional practice. Contributions at the Professional level relate the concepts or issues discussed from the perspective of a professional, making decision. See Table 2 for samples illustrating model categorisations. The technical procedure of the scheme construction is described in Section 5.

5. Methodology

5.1. Participants and the context

Participants were 270 first year postgraduate students enrolled in the two-year Master of Teaching program at the University of Sydney. The research took place within the first semester (12 weeks) of their preservice education in a compulsory course "Introduction to Teaching and Learning" (Study-1). Throughout the course, students engaged in the following compulsory learning experiences: (a) lectures; (b) face-to-face seminars; (c) four half-day observation visits to schools; (d) maintaining an individual learning journal; (e) independent reading of assigned weekly readings and (f) asynchronous discussion of readings in online forums. This study examines these preservice teachers' experiences using the online learning discussion forums, which were organised around the compulsory weekly readings.

Table 2

The Cognitive Process and Professional Focus model: description of the categories.

	Theoretical	Linkage	Professional Application
Identifying	Discusses an issue and/or experience from personal perspective/theoretical perspective.	Discusses issue and/or experience using a relevant educational concept. Teacher voice is present but not prominent.	Educational concept used as the basis for a discussion of an issue and/or experience from a teachers' perspective.
Analysing	Identifies contributing personal beliefs/reactions and discusses relationships between these to issue and/or experience.	Examines interaction between personal beliefs/reactions to issue and/or experience and relevant educational concept. Implications for work of teachers shown in at least 2 points	Educational concepts used to examines the interactions among personal beliefs/reactions and contextual/classroom/school factors associated with issue and/or experience.
Critical Evaluating	Evaluates reactions to issue and/or experience in terms of their personal beliefs about teaching/learning.	Evaluates/Reconsiders their beliefs/reactions or experience using relevant educational concepts.	Educational concepts applied to reconsider or evaluate beliefs/reactions about teaching and learning. Both the personal and contextual factors considered in the reconsideration.
Problem Solving	Discusses possible solutions or identifies possible course of actions from personal perspective.	Discusses possible solutions or courses of action justified by reference to relevant educational concepts.	Uses educational concepts to evaluate possible solutions or course of action. Professional decision making not just listing solutions.

The online component of the Study-1 course was implemented using the Plone¹ content management system. Students were allocated to online-seminar groups, corresponding to the weekly face-to-face seminar groups. Within each online-seminar, the 25 students were further divided into 4–5 student Reading Groups. An online facilitator (experienced school teacher) was assigned to each online-seminar group, in addition to a face-to-face seminar leader.

Students were required to read 1–2 academic papers related to weekly unit topics, and post their individual contributions (about 300 words) to the assigned Reading Group forums. They were given three tasks to address within Reading Group posts. Firstly, they had to identify and summarise three most important points from the weekly reading. Secondly, they were asked to elaborate upon these points, identifying how the concepts and ideas contributed to gains in knowledge, or re-evaluation of personal beliefs. Students were also asked to reflect upon how these ideas may have influenced personal concepts relating to their future work as teachers. Finally, prior to posting their contributions, students were asked to structure their key ideas into paragraphs and label them by using one of the descriptive terms, we called them “knowledge labels” listed in Table 1. Labels were clearly displayed within each posting (Fig. 1) allowing all the community to see explicitly the author's intended purpose of the different parts of their contribution. Each week, one member of the Reading Group prepared a summary of the individual postings and posted this summary to the Seminar Discussion forum, which could be read by all members of the online-seminar group. Members could respond to other's postings at either the reading group or seminar discussion forums. While the online facilitators were able to read all members postings they joined discussions in the Seminar Discussion Forum only, and each week posted their responses to the group summaries. Participants remained in the same groups for the duration of the semester, thus helping them to develop a sense of online community.

5.2. Approach and analysis

As the purpose of this study was to examine the development of students' perception of themselves as teachers, only their individual contributions to the Reading Group forums were analysed.

Firstly, the contributions of all students were analysed. On the basis of their self-labelling, the key quantitative descriptors of their online contributions (such as number of messages and paragraphs with different labels) and indexes were calculated to get insights

into the extent of students' engagement with online learning and identify any changes across the semester. The organisation of the online component meant that students were not required to make individual contributions to the reading group discussion forums each week. Secondly, in order to make comparisons between the same students contributions at the beginning (Week 3) and the end of the semester (Week 10) the contributions of all students from the one reading group at the beginning and end of the semester were analysed using the Cognitive Process and Professional Focus Model (CPPF model). Additional information about the students' personal and professional background and experience with online learning gathered at the beginning and the end of the semester using survey instruments were used for the interpretation of some findings.

5.2.1. Students' self-labelling and indexes of engagement

Two indices of engagement were used in the analysis: the Index of Cognitive Engagement (ICE) and the Index of Reflection and Application (IRA). ICE characterises the average cognitive level of a student's message. ICE is based on three main knowledge labels (i.e., Explanation, Elaboration and Reflection/Application) that students assigned to each paragraph, within their posted messages. In calculating this index, the length of the paragraphs (number of words) in each category is multiplied by its cognitive weight (from 1 to 3) and normalised by total length of the text (see Markauskaite et al., 2006, 2008). Thus, a message could acquire ICE values from 1 (only Explanations) to 3 (only Reflections/Applications). Higher values are potentially indicative of higher levels of working with knowledge. A similar method was used to develop the Index of Reflection and Application, which indicates the proportion of text labelled as “Reflection/Application” in a message. The IRA is calculated by dividing the length of “Reflection/Application” paragraphs by the total length of the text labelled with any knowledge tag (from 1 to 3) in a message. Thus, the resulting index can range from 0 to 1. An IRA equal to 0 would indicate that a student did not use the “Reflection/Application” label in the message, while an IRA equal to 1 would indicate he/she labelled all text with the “Reflection/Application” tag. To gain deeper insights into patterns of reflection, an additional ratio, the Ratio of Reflection and Application (RRA) was calculated. The RRA is similar to IRA, but it is based on the number of paragraphs rather than words, and equal to the proportion of the paragraphs labelled with a “Reflection/Application” tag. This ratio also can range from 0 to 1, but is independent of the length of text (number of words) and more sensitive to the structure of written discourse. For example, postings of 300 words organised into 4 paragraphs could be produced in many different manners. A posting could contain an extensive reflection

¹ <http://plone.org/>.

— EXPLANATION —
This week's reading by Thomson highlights the impact that socio-economic status and cultural background has upon students. It draws up a comparison between Thanh – the product of a migrant working class family, and Vicki – a girl from a middle class, well educated family. The two are from very different worlds, but competing in the same school system, where Vicki has the advantage over Thanh due to her family's background and circumstance.
— ELABORATION —
Statistically, those that are in Thanh's socio-economic situation are less likely to complete higher education and pursue tertiary education. This may be attributed to a lack of funding, parent's pressure to follow in their footsteps e.g. run the family business, or even barriers such as language. Vicki on the other hand, comes from a background that sets her up for her school life. She has "cultural capital", her socio-economic status enables her to excel, and her parent's have come from a background that fosters the school values.
— REFLECTION/APPLICATION —
I'd like to think that although these obstacles exist today, there is a shift towards getting the most out of socio-economically disadvantaged students regardless of circumstance – no one should be a victim of the "destiny effect". I saw an example of this at Ultimo Public School, where there was a focus on assisting the large proportion of non-English speaking students.
— REFLECTION/APPLICATION —
Due to a changing social conscience and awareness, school and government policies are now looking at achieving a more even playing field for children of diverse backgrounds. To be successful I think they still need to address important things like access to resources, parents' involvement and adjusting

Fig. 1. Structure of a labelled post.

in a single 150-word paragraph labelled as Reflection/Application and 3 paragraphs with other labels, while another posting could contain three shorter reflections subdivided into three 50-word paragraphs labelled as Reflection/Application and one 150-word paragraph with a different label, while the IRA would be the same. The proportion of the paragraphs labelled as "Reflection/Application" can show this structural difference.

The two indices provide complementary perspectives on the students' engagement with the readings and theoretical concepts in the course. The ICE identifies the general level of working with knowledge displayed in the message, while the IRA shows the amount of text where students perceive themselves discussing and reflecting on how these concepts relate to their professional practice and experience. The latter, interpreted together, with RRA provides a mechanism to understand the structure of all students' contributions.

Although some researchers argue that traditional inter-rater and intra-rater reliability concerns are not relevant for self-coding (Krippendorff, 2004; Rouke, Anderson, Garrison, & Archer, 2001), the reliability of students' self-labelling was assessed externally on a sample of 244 messages. All messages posted in one randomly selected week (3, 8 or 11) in seminar and reading forums, were sampled for reliability analysis. Initially, two research assistants checked students' labels and indicated their agreement or disagreement with the label, followed by discussion regarding disagreement. The initial inter-raters agreement ratio between the two researchers on the weighted by words sample was 88.1%, after the discussion 99.0% agreement was achieved. After this process, one of the two research assistants checked remaining posts in the sample. The final student-researcher Hosti's percent of agreement in reading groups on a weighted by words sample was 81.7% and Cohen's kappa (k) was 0.739 indicating a sufficiently good level of reliability of students' self-labelling (Rouke et al., 2001). Student labels were then used to calculate the ICE and IRA.

5.2.2. Development and application of the Cognitive Process and Professional Focus coding scheme

The Cognitive and Process model was used as a second, qualitative method of analysing students' online contributions. The dimensions and categories of the Cognitive Process and Professional Focus (CPPF) model were derived from previously documented research (Table 2). Initially, researchers tested the CPPF model, refining categories and clarifying key features of each category along two dimensions using a pilot sample consisting of 180 paragraphs, from different seminar groups in Weeks 2, 6 and 10. Each paragraph within a post was coded for cognitive engagement and reflection. After discussion and analysis of examples, researchers were able to clarify and refine the specifications of the

categories in the model particularly clarifying diagonal classification thus improving agreement and reliability. The first refinement differentiated the two focus levels "Theoretical" and "Linkage" by clarifying what qualified as "engaging with teacher practices." CPPF model language was refined, clearly distinguishing the categories in relation to "teacher work". Linkage posts show, "implications for the work of teachers shown in two points/ideas in the posting. Teachers' voice is present, but not prominent." Theoretical posts show, "limited (very briefly at the end of the posting) or no reflection/application of the implications for the work of teachers." For example, students who discussed teaching relative to academic issues in the reading were classified at the Theoretical position. Students posting at the Linkage position discuss themes in terms of "us as teachers," and "our role as teachers," the Appendix contains examples of extracts coded at the different levels.

The second refinement clarified the differences between the three cognitive levels "Identifying", "Analysing", and "Critical Evaluation" and removed the final level "Problem Solving" as no examples of this final level were identified. Researchers found emphasizing the action related to cognitive levels allowed stronger differentiation between categories. Posts at the Identifying level will only "discuss" themes from a personal or theoretical perspective. Analysing will include "examining" theoretical concepts in relation to additional resources, such as another article or personal experience. Critical Evaluating posts will "evaluate" reactions to theoretical concepts in relationship to personal beliefs or other resources (see Appendix for examples).

The researchers then applied the CPPF coding scheme to analyse students' contributions in one reading group from each seminar group contributed at the beginning (Week 2) and end of the semester (Week 10). In total, 129 messages written by 43 students were analysed: 72 messages consisting of 334 paragraphs were posted in Week 2, and 57 messages consisting of 341 paragraphs were posted in Week 10. To assess the CPPF model and coding reliability two researchers coded two Seminar group posts (25% of student posts) independently and after discussion the inter-rater reliability of 99% was reached. After consultation and discussion of the coding scheme the researchers independently coded the remaining posts.

The following extracts are examples of the differences among the three major patterns of students' responses across the seminar.

5.2.3. Student 1: Limited development of a teacher identity

Firstly, an example of Student 1 post from Week 2, which was coded at the Theoretical Identifying level:

"... I completely agree with teacher as image. I can relate to this understanding even now as an adult. Here at Sydney for

example, I tend to focus a lot on the Professor or instructor and how they are delivering information. I often have to snap myself out of the trance of the instructor's tone and manner, bringing myself back to note taking and information gathering."

Student 1 identifying issues from the weekly reading from a student perspective, not a teacher. This is a typical example of many earlier posts, where the students' self-image remains salient and the teachers' voice has not been well developed. In this particular example, however, for Student 1 the teachers' voice is still not articulated at Week 10, as seen in the following example:

"I find myself agreeing almost completely with the author's findings; students need to be supported in their learning. To reflect on this personally, I learnt and accomplished the most at school and University when the teacher or lecturer showed enthusiasm and excitement about the subject and about us. Conversely, I, like Justin, stopped excelling in certain areas at school when I felt overwhelmed by the attention that followed performance...."(Reflection/Application; Theoretical Analysing)

In this post, Student 1 reflected upon her personal experience on a deeper level, but still largely from a student perspective. While in the pre-semester survey this student indicated that she had two years of experience teaching or tutoring she does not seem to use these experiences in discussing theoretical concepts presented in this unit. There is insufficient data about the type or nature of this prior experience. It is noted that this student directly acknowledged the lack of practical teaching experience in her week 10 posting where she stated: "I found this to be a very interesting article and study into the work habits of children, and although I largely have only my own personal experience to reflect on, I can understand the results of the study".

There are numerous possible reasons why this might occur, for example the student may not have appreciated the online component or may have failed to recognise and validate the aspects of her prior experiences in the light of new knowledge. In commenting on the online learning experiences at the end of the semester this student indicated that online learning "Forced me to develop (in writing and for others to see) thoughtful responses and reflections to the readings".

For this student, the slight shift towards deeper analysis of the concepts suggests that she has increased her engagement with the readings. There is limited evidence of any change in how she uses these insights to develop her image of herself as a professional teacher.

5.2.4. Student 2: Limited to salient development of a teacher identity

Student 2 illustrates a developing teachers' voice in his postings at the end of the semester compared with his initial posting of reflection and engagement. In his Week 2 post he wrote:

"The writers' starry eyes start looking a bit spaced out by the time he/she asks 'What if teachers were control of Popular Culture?'... Isn't the teachers' role to be the alternative to the popular stereotype-not on the big screen, but in the classroom? Is there a need for teachers to 'Speak out, imagine write produce and create' to convince society that their work is valid? If they do their job well it should be interesting, but most importantly EDUCATIONAL, no need for bells and whistles..."(Elaboration; Theoretical Analysing)

In this post, he is actively analysing concepts presented in the weekly reading, but not considering how these concepts may impact on his work as a teacher. In his Week 10 posting this student uses his previous work experience, to relate the concepts of his work as a teacher:

"Although I had no formal teacher training, I learnt, as I progressed in my job, that there are certainly many opportunities for a teacher to increase students' participation. In my own ad hoc manner (I must have been reflecting) I made the effort to engage with my students, in various ways, and I discovered that the outcomes of my lessons were much, much better for it... Over the years I have developed many strategies for creating a positive learning environment to engage my students. These strategies include; asking questions, opinions, or, enquiring into students' prior knowledge and experience of a particular topic. Sometimes, it was the very simple things I did that produced the most significant results."(Reflection/Application; Professional Identifying)

In this post, Student 2 reflects how he has used teaching strategies in his previous work at a museum, but before this time, had not considered how his previous nine-year experience as a guide in a museum has provided him with experiences equivalent to that of a teacher in a classroom. Nevertheless, in Week 10, this student successfully translates the theory into the development of a sense of personal practical knowledge about teaching. His realisation of how his previous experience can be considered as teaching is a major shift in how this student positions himself in the relationship to the teachers' community of professional practice. This student however reported quite limited engagement with others in the online environment. In his comments he stated: "It [online forum] was a useful tool for summarising my own notes and research in response to the lectures and readings", but "it is difficult to have a discussion if you are the first person posting. 'Discussing' would meant (sic) that you have to check the site over and over again".

5.2.5. Student 3: Refinement of teacher identity

Student 3 is an example of a student who from the beginning of the semester has been able to use his prior experiences to develop his personal knowledge and understanding of the work of teachers. In Week 2 he posted:

"...as a peer support leader I had a year seven group that were having difficulties with dealing with transition into high school and had issues with the difficulty of work demanded from them. As a peer support leader I influenced change by assisting in their transition into high school by sharing my personal experiences. I effectively taught them how to deal with high school in an effective manner. It was a process of realisation for the students that I had been in their position before and I could relate to their situation. An implication is that I need to be more patient, tolerant and understand that learning is a complex process. These are essential qualities that build better teachers and thus better teaching practice."(Reflection/Application; Professional Analysing)

This student sees his work as a teacher and is able to consider the weekly reading in the light of his prior experience. In Week 10 he similarly wrote:

"... Establishing students in a meaningful context with respect to what they are learning is vital for creating greater understanding. Reflecting on teaching English to emergent readers and teaching maths to students I found that it was important that the basic structure and sequence of lessons is vital for creating understandings. Creating a 'phase' styled lesson is essential. In this I mean that the sequence of activities for each lesson should range from easy to hard thus catering for all levels and allows students to progress at their own pace..."(Reflection/Application; Professional Analysing)

By Week 10, Student 3 is able to share his insights into how to construct a lesson. While this student reported only a limited

Table 3

Quantity of students' messages (postings and replies) in reading group forums over Week 1–12 period: The main indicators of engagement into learning and reflection.

	Postings ^a			Reflection ^b		
	Messages		Paragraphs	Messages		Paragraphs
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
Week 1–3	436	4.55	2.94	271	1.05	1.22
Week 4–6	581	5.18	3.13	399	1.26	1.17
Week 7–9	390	5.41	3.14	267	1.50	1.47
Week 10–12	280	5.23	3.12	186	1.56	1.67
Week 1–12	1687	5.08	3.10	1123	1.31	1.36
ANOVA	$F(3, 1683) = 6.24, p < 0.001$			$F(3, 512) = 10.49^W, p < 0.001$		

^W – indicates that Levene's test is significant ($p < 0.05$) and Welch F is reported.

^a n – the number of messages, M – an average number of paragraphs per message.

^b n – the number of messages with label "Reflection/Application", M – an average number of paragraphs with label "Reflection/Application" per message.

amount of time in his previous experiences in a teaching role (a peer support leader in a high school) he appears to be able to use this experience in thinking about his future work as a teacher. His evaluations and comments in the survey at the end of semester also suggest that he valued the impact of the online component: "discussing with others students and their points of view" was the greatest benefit of the online learning identified by this student.

6. Results

6.1. Students' engagement with learning and knowledge-building

Overall, 236 students systematically labelled their messages. Over the 12-week period they posted 1687 messages in reading group forums (1434 postings and 253 replies) and the average number of paragraphs per posting was 5.08 ($SD = 3.10, n = 1687$). Sixty-seven percent ($n = 1123$) of messages contained text labelled Reflection/Application and within these the average number of paragraphs labelled as Reflection/Application was 1.31 ($SD = 1.36, n = 1687$). Paragraphs labelled as Reflection/Application in total accounted for 25.81% of text written by students. The changes in these indicators from Week 1–3 to Week 10–12 are shown in Table 3. Statistical tests indicated that students wrote significantly longer messages and longer reflections as the course progressed, $p < 0.05$.

Table 4 summarises the data showing the changes in the students' engagement with knowledge and reflection (ICE, IRA, RRA) based on the proposition that their engagement is proportional to the number of words and paragraphs with different knowledge labels in their postings. There was a gradual and significant increase in the ICE and IRA from Week 1–3 to

Table 5

The analysis of students' postings in Week 2 and 10 using CPPF model.

	Week 2				Week 10			
	T	L	P	Total	T	L	P	Total
Identifying	42%	3%	0%	45%	27%	6%	2%	35%
Analysing	39%	11%	0%	50%	34%	24%	2%	61%
Critical Evaluation	3%	1%	0%	5%	1%	3%	0%	4%
Problem Solving	0%	0%	0%	0%	0%	0%	0%	0%
Total	85%	15%	0%		62%	33%	5%	

T = Theoretical, L = Linkage, P = Professional.

Week 10–12 indicating that overall students tended to label their text with tags that have higher weights as the semester progressed, i.e., greater use of Elaboration and Reflection/Application. In contrast, the RRA index revealed only a small and statistically insignificant increase in the proportion of students' paragraphs labelled as Reflection/Application, indicating that students wrote quite similar amounts of reflective paragraphs at different points in the semester, but their reflections became longer over the semester.

6.2. Development of teachers' voice

The analysis using the CPPF model shows changes in student teachers' postings from Week 2 to Week 10 along two dimensions: cognitive process and professional stance (Table 5).

The results show changes in students' postings in both cognitive and professional dimensions towards an increase of paragraphs that indicate higher levels of development. Overall, there is an 11% increase in the students' depth of engagement with the concepts with a greater percentage of the postings classified at the Analysis level in Week 10 and a corresponding decrease in the percentage of paragraphs at the Identifying level. There is also a change in how the students use the concepts in creating their professional image of themselves as teachers with a 22% increase in paragraphs at the Linkage and Professional levels and a corresponding decrease in paragraphs at the Theoretical level.

7. Discussion

The transition process from student to a full member of the professional community of teachers is complex. In making this transition preservice teachers not only need to acquire the complex knowledge and skill base of a teacher, they also need to refine their understanding of pedagogical practices and develop their professional knowledge (Shulman & Shulman, 2004). As part of this transition process they need to create and recreate their image of themselves as members of a community (Wenger, 1998). The aim of this study is to examine the initial phase of this transition process

Table 4

Indexes of cognitive engagement and reflection, Week 1–12.

	Index of Cognitive Engagement (ICE)			Index of Reflection and Application (IRA)			Ratio of Reflection and Application (RRA)		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
Week 1–3	391	1.85	0.59	391	0.29	0.30	391	0.29	0.29
Week 4–6	525	1.92	0.54	525	0.32	0.28	525	0.31	0.26
Week 7–9	344	1.97	0.53	344	0.34	0.28	344	0.32	0.25
Week 10–12	229	2.04	0.51	229	0.38	0.28	229	0.35	0.26
Week 1–12	1489	1.93	0.55	1489	0.33	0.29	1489	0.31	0.27
ANOVA	$F(3, 718) = 6.74^W, p < 0.001$			$F(3, 1485) = 5.92, p < 0.001$			$F(3, 1485) = 2.50, p < 0.058$		

^W – indicates that Levene's test is significant ($p < 0.05$) and Welch F is reported. The Ratio of Application is calculated as a proportion of "Reflection/Application" labels of three main knowledge labels ("Explanation", "Elaboration", "Reflection/Application") in students' messages.

by examining preservice teachers' participation in an online discussion forum developed to provide an opportunity for ongoing engagement between teachers and preservice teachers. Two approaches of content analysis were used to examine the preservice teachers' postings. The first used the students' self-labelling of their contributions to provide a quantitative measurement of their engagement with weekly readings. This process provided a broad, but 'thin' picture of changes in the preservice teachers' learning across the semester.

To counter-balance the limitations of this approach, in-depth human coding-based content analysis was used on a specific subset of the contributions. This interpretative analysis of the preservice teachers' messages was based on a new construct, a teachers' voice, the preservice teachers' capacity to articulate a professional image of himself/herself. This was used to detect and reveal subtle changes in the quality of individual contributions and provided deep insights into students' learning and development and of their understanding of their future work as teachers.

Indexes of engagement (ICE, IRA) calculated from the students self-labelling showed a continuous growth in students' engagement with knowledge from the beginning to the end of the semester. This suggested that by the end of the semester the students were reflecting and writing more about the implications and applications of the readings for practice and their future work as teachers.

The in-depth content analysis of the sample of contributions using the CPPF model supported these findings and revealed more detailed insights into the nature of these changes. At the beginning of the semester, more than eighty percent of students' ideas were concentrated in the Theoretical, Identifying and Theoretical Analysing clusters. This implies that in their contributions, the preservice teachers predominantly summarised and analysed theoretical concepts and rarely linked them to their perspective of themselves as future professionals. At the end of the semester, twenty five percent of the students' contributions fell into the Identifying Theoretical category. There were more contributions in the Linkage Analysing category. Students progressed along both dimensions, the cognitive and the professional, however, the change along the cognitive dimension was much smaller (10%) than the change along the professional dimension (23%). This pattern suggests that the improvements in students' engagement were primarily towards a more professional stance. The beginning of the development of a professional identity was evident for many students, in some contributions students showed already a strong sense of themselves as teachers. This was the case for only a few preservice teachers.

Many factors might impact on the nature of preservice teachers' contributions. First, the nature of the task may have contributed. When responding to each weekly reading the majority of the students began by summarising their understanding of the ideas, before discussing how they perceived these ideas to be relevant to their future work in the classroom. By the end of the semester, there was a small increase in the average number of paragraphs self-labelled as reflection, which suggests there was an increase in how students perceived the relationships among the theoretical concepts in the readings and their future work in the classroom.

Secondly, many preservice teachers find reflection difficult (Gale & Jackson, 1997; Hatton & Smith, 1995). Many studies have examined the development of preservice teachers' professional knowledge by examining their reflection on their professional experiences in a school (Gale & Jackson, 1997; Korthagen & Vasalos, 2005) and the critical role dialogue with a mentor can play in the development of an individual's professional knowledge. In this study, the preservice teachers had very limited

contact with schools and classrooms and no one-to-one discussion with the teacher who was acting as the seminar group's facilitator. Even without either of these conditions, there is still evidence that the preservice teachers were developing a more complex understanding of teaching and beginning to create an image of themselves as teachers.

Thirdly, some models (e.g., [Beijaard's et al., 2004](#)) suggest that students might reflect privately about their self-perception of being a teacher. The construct, a teachers' voice, identifies the extent to which preservice teachers are able to use their developing professional knowledge to articulate a professional identity, an image of themselves as teachers. Further research is needed to examine the interaction between the organisation of the online environment and the extent to which preservice teachers are encouraged or inhibited in articulating their perception of themselves as teachers.

Finally it is not clear what factors influence the extent to which preservice teachers are able to use their earlier experiences as sources for their reflection. Some earlier work (e.g., [Beijaard et al., 2004](#); [Trotman & Kerr, 2001](#)) has shown that student teachers' individual beliefs, prior knowledge and the context in which this knowledge is generated all interact and may influence the development of student teacher professional identity. Our own studies indicate that students' individual characteristics, such as learning styles and attitudes, impact on their engagement with knowledge ([Markauskaite et al., 2008](#)). While this aspect was not the main focus in this study, our analysis of individual cases further suggests that variations in student teachers' previous professional experience, attitudes about the purpose and their involvement in online learning may be important contributors to their engagement with knowledge, reflection and consequently, development of their professional identity.

This paper highlights the potential impact of technologies, the organisation of online learning and the design of an online environment on student teachers' learning ([Bigum & Rowan, 2008](#); [Fisher et al., 2006](#); [Yelland, Cope, & Kalantzis, 2008](#); [Zenios, Banks, & Moon, 2004](#)). While this has not been the aim of this study, our previous studies indicate that the students' engagement with online learning was supported by knowledge labels, and some students benefited from the interaction with teachers and peers ([Markauskaite & Sutherland, 2008](#); [Markauskaite et al., 2008](#)). How designs of online environments and organisations of learning might affect students' professional identity, nevertheless needs further research.

Overall, our analysis shows that the two methods of content analysis very powerfully complement each other. While initial one-dimensional analysis, based on students' self-labelling clearly reveals gradual improvement in the preservice teachers' engagement with knowledge over the semester, it tells very little about the nature of their engagement. In contrast, the analysis using the CPPF model provides this insight. The time-intensive nature of this analysis meant that only a small but selective sample of the students' postings could be analysed. This provides limited possibilities to capture the process of the development of a professional identity at various points of time. While our analysis does not show the precise trajectory of students' progress along both dimensions, the two methods of analysis combined together capture both the continuity and multi-dimensionality of changes in the preservice teachers' contributions across time.

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Appendix. CPPF model: examples of students' posts

	Theoretical	Linkage	Professional
Identifying	Mitchell and Weber argue that the teacher archetype in popular culture (due largely to the mass of teacher images that exist in literature, popular fiction, film and television) has significant power in defining the role and expectations of teachers for both teachers and the community, and that serious study of popular teacher images in teacher education and professional development is essential in critically examining and understanding these expectations.	In my view, the three main points in the chapter are: 1) An analysis of the cumulative cultural text of teachers is a way of understanding what has influenced us as teachers and how others see us. 2) Popular texts can be used to 'impersonally' study of the taboos and inner desires of teachers. 3) Although romanticising and simplifying teachers in the cumulative cultural text is dangerous, there is often a kernel of truth to these stereotypes that, if identified, can help us grow and develop as teachers.	Although I had no formal teacher training, I learnt, as I progressed in my job, that there are certainly many opportunities for a teacher to increase students' participation. In my own ad hoc manner (I must have been reflecting) I made the effort to engage with my students, in various ways, and I discovered that the outcomes of my lessons were much, much better for it.
Analysing	As an aside I read an article today from the Weekend Australian on a play called 'The History Boys' which compared the teaching styles of two teachers. One's purpose was to drench his students with information for the purpose of 'pushing' them onto to the best of the British Universities. The second taught his pupils the passion of learning. Not surprisingly, the second was more successful and encouraged the kind of intellectual curiosity that brings out the best in young kids.	Because of the appeal and accessibility of popular teacher images to the general population, we can use these as a basis for conversation and comparison of our role as teacher, with other people. However, this can work both ways "some popular images of teachers can validate our role in the eyes of others, but others can make us feel pressured by unreal expectations." We can use the popular teacher image for our professional growth by being aware of popular stereotypes, using these for self-examination, paying close attention to our emotional reactions to these texts, and may even actively use the media to express our own visions.	Reflecting on the NSW model, I believe that it highlights the importance that teachers should create meaningful experiences that create deeper understandings and is more purpose driven rather than activity content driven. Establishing students in a meaningful context with respect to what they are learning is vital for creating greater understanding. Reflecting on teaching English to emergent readers and teaching maths to students I found that it was important that the basic structure and sequence of lessons is vital for creating understandings. Creating a 'phase' styled lesson is essential.
Critical evaluating	While I have often regarded teachers to have been the scorn of society, I have now read examples where teachers can emerge as heroes. I also believe, like Johnson, that students will be more engaged and willing to learn through a more creative and dramatic teacher rather than one who will follow the curriculum blindly. It should be noted, though, that while it may be plausible for a teacher to bend down to the level of students (be their friend etc.) like Johnson, I believe that a distance is also necessary between teacher and student so that the teacher will maintain her respect.	Though it further frightens with regards to my upcoming role as a teacher i think it is very important to be aware of such issues, to take them on to a degree, to know what society expects of us but also to not take it fully on upon ourselves, that is to the degree that we such an article shows us. To make clarify myself, i am referring to the unrealistic expectations that such an article points out to us on societies expectations, such as to save it which we know is not possible.	N/A

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