

Emerging Professional Teacher Identity of Pre-service Teachers

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Abstract: Research shows the development of teachers' professional identity to be in a state of flux and that there is a strong correlation between a sense of teacher professional identity and their propensity to stay in teaching. Our study examines pre-service teachers' emerging sense of professional teacher identity at exit point of their pre-service programme. For the first part, data was collected from an open-ended questionnaire which asked participants about their perceptions of the profession. 22 statements were used for the second part to elicit participants' perceptions about teaching. The open-ended questionnaire showed a high percentage perceiving a sense of reality, followed by a smaller percentage experiencing mismatched expectations. For the second part, five factors were extracted with 'role of teaching and learning' emerging with the highest mean. The final part discusses the implications for the continual enhancement of teacher preparation programmes.

Introduction

Most qualified teachers begin their initial teacher education programmes with various images of teaching and themselves as teachers. These initial images, largely developed during their schooling experiences, are crucial in determining their attitudes towards teaching, their understanding of teaching, their professional beliefs and their classroom practices (Flores, 2001; Gratch, 2001; Wideen, Mayer-Smith, & Moon, 1998). The extent to which these early experiences in schools as well as other factors impact on teachers' concepts of self (professional identity) and their teaching practice depends on how they view themselves as teachers before they begin teaching, and whether or not this is challenged or 'shattered' by the context of their preparation.

This study is based on longitudinal data obtained from the initial teacher education programme July 2005 cohort of the four-year education degree (BA/BSc – Education) programme offered at the National Institute of Education (NIE), Singapore, which is the sole teacher preparation institute in the country. The main purpose of this study is to examine their attitudes towards teaching and their understanding of teaching at the point of exit of their initial teacher education programme. It seeks to gain an understanding of the graduating teachers' perception of how they feel about teaching prior to starting their teaching career.

Literature review

The definition of identity can be understood within a sociocultural perspective (Olsen, 2008). Teacher identity is both a product, a result of influences on the teacher, as well as a process that is not fixed but an ongoing dynamic interaction within teacher development. Through this interaction, one learns the roles of others in relation to themselves and how to moderate one's actions toward others and the environment (Beijaard, Meijer, & Verloop, 2004). A teacher's identity is shaped and reshaped during these interactions with others in a various professional contexts. Olsen (2008: 139) expresses that teacher identity development is fluid as it is the collection of many differing contexts and relationships.

I view identity as a label, really, for the collection of influences and effects from immediate contexts, prior constructs of self, social positioning, and meaning systems (each itself a fluid influence and all together an ever-changing construct) that become intertwined inside the flow of activity as a teacher simultaneously reacts to and negotiates given contexts and human relationships at given moments. (Olsen, 2008, p. 139)

Recent research and literature highlights the importance of identity in teacher development (Day & Kington, 2008; Olsen 2008). One's professional identity affects the "sense of purpose, self-efficacy, motivation, commitment, job satisfaction and effectiveness" (Day, Kington, Stobart & Sammons, 2006, p. 601). Research (Bucholtz & Hall, 2005; Korthagen, 2004) has also shown that teachers at different stages of their careers (pre-service, beginning or experienced) do hold implicit beliefs and identities about students, their teaching subjects and their teaching role and responsibilities, and that these identities influence teachers' reactions to teacher education and to their teaching practice. Korthagen (2004) argues that reflective practices will help pre-service teachers to consciously direct their own development with their personal identity, their inspiration and enthusiasm for their profession. Teachers, through their community of practice reflect, construct and adopt identity positions for themselves (Bucholtz & Hall, 2005) which represent the experiences of their pre-service, professional development programmes, and interaction with their schools.

Becoming a professional involves both external realisations and personal conceptualizations. Professional identity is an ongoing process of interpretation and re-interpretation. It is not unitary but consists of sub-identities that result from the how teachers made sense of themselves as teachers as they develop professionally. Day and Kington (2008) list three dimensions of teacher identity, with each composite identity making up of sub- or competing identities that are significant in understanding the dimensions of professional learning and the influence of the cultural milieu where their work is situated. These dimensions and analysis are useful in understanding how teachers are positioned. In brief the dimensions of teacher identity are:

(1) Professional identity. The professional dimension reflects social and policy expectations of what a good teacher is and the educational ideals of the teacher. It is open to the influence of policy and social trends as to what constitutes a good teacher. It may have elements that conflict such as professional development, workload, roles and responsibilities, etc.

(2) Situated located identity within a school or classroom. This dimension is located in a specific school context and is affected by the surrounding environment. It is affected by pupils, leadership support and feedback loops from teachers' immediate working context, and shapes the teachers' long-term identity.

(3) Personal identity. The personal dimension is located outside school and is linked to family and social roles. Feedback or expectations from family and friends often become sources of tension for the individual's sense of identity (Day & Kington, 2008, p.11).

Alsup (2006) found that pre-service teachers' beliefs are difficult to change, but that change is possible if these beliefs are repeatedly challenged through the creation of cognitive dissonance as part of the teacher education program. Prior studies have shown that epistemic development, by which we mean how pre-service teachers come to an increasingly mature conception of their teaching identity, may be hindered by emphasis placed on a socially constructed normative teacher identity within teacher preparation programs (Alsup, 2006). Pre-service teachers' conceptions of teacher identity are constructed and reconstructed through the discursive practices of participants in teacher preparation discourse communities. Alsup (2006) found that creating discursive multiplicities within contexts creates opportunities for identity dissonance that may lead to pedagogical and political change, rather than the acceptance or rejection of the self as suited to assume a normative teacher identity.

Unrealistic expectations of teaching may result in early-career teachers (those teachers in their first few years teaching) being unable to cope with their teaching career (Gratch, 2001; Kelchtermans & Ballet, 2002). Discrepancies between beginning teachers' expectations of school life and the realities of teaching often contribute to what is known as praxis shock (Friedman, 2004; Mark, 1998). It is therefore important for pre-service programmes to adequately prepare pre-service teachers to deal with the realities of school culture so that the early years of teaching can be turned into a positive experience where teachers are enabled to grow and to continually develop the skills they first acquired in their pre-service teacher preparation programmes (Gratch, 2001; Kelchtermans & Ballet, 2002).

Early experiences both prior to and during the initial teacher preparation programme combine with personal beliefs and prior experiences to form teachers' professional identity, which in turn informs their future practices and influences their decisions and behaviour as teachers (Beijaard et al., 2004). This identity influences their perception of their teacher preparation and classroom field placements (clinical experience), giving new meaning to their experiences in initial teacher preparation programme (Bullough, 1997; Knowles, 1992; Wideen et al., 1998). From this perspective, Bullough (1997, p. 21) wrote that "What beginning teachers believe about teaching and learning as self-as-teacher is of vital concern to teacher education; it is the basis for meaning making and decision making. ...Teacher education must begin, then, by exploring the teaching self".

The roles and responsibilities of teachers have extended and broadened in the past years (OECD, 2005). The broadening of responsibilities along with extended roles have redefined professional profiles of teachers (Van Huizen, Van Oers, & Wubbels, 2005). People's lives are multifaceted causing challenging conflicts between professional and personal identities (Day et al., 2006). Korthagen (2004) indicated that preparing pre-service teachers should not only focus on changing behaviour, competencies or beliefs, but also take into account the development of the pre-service teachers' identity and their mission as a teacher. Being and becoming a teacher is a function of growth within complex social and cultural environments where discourses and identities are in constant tension (Day & Kington, 2008). Wideen et al. (1998) concluded that teacher educators as well as cooperating teachers during the teaching practice components should support the development of pre-service teachers' emerging professional identity.

As Beijaard et al. (2004) pointed out, the process and ever changing nature of professional identity implies that the characteristics of professional identity can only be described at the general and abstract level. Professional identity formation and development are individual maturation processes that begin before and during one's training for the profession, evolve during entry into the profession, and continue to develop as the practitioner identifies with the profession. The formation of professional identity during this crucial period (pre-service to beginning teacher phase) can generally inform the pre-service teachers if they are suited to the profession of teaching (Schempp, Sparkes & Templin 1999).

Aims of the present study

As the literature survey above has suggested, a teacher's professional identity formation begins even before entry into their pre-service programmes but continues to develop through the pre-service to beginning teaching years and this crucial phase can determine whether the teacher blossoms professionally or faces issues of coping with the realities of the school and classroom as beginning teachers. Arising from this concern then, our present research aims to explore pre-service teachers' emerging professional identity by surveying their attitudes towards the teaching profession and their understanding of teaching at the point of exit of four-year Bachelor of Arts/ Science (Education) pre-service teacher preparation programme. In examining graduating pre-service teachers' attitudes, it is hoped that a greater understanding of the complexities of their emerging professional identity is revealed. From our findings, we will discuss the implications for schools and for experienced teachers in terms of their role in teacher professional development and suggest avenues for the development and enhancement of pre-service teacher education programmes.

Methodology

Sample

The sample for this study comprised 105 graduating teachers who were enrolled in the July intake of the Bachelor of Arts/ Science (Education) 2005 programmes. The demography of the sample is summarised in Table 1.

Gender	Male= 25 (23%) Female = 83 (77%)
Age range	21 – 25 = 82 (76%) 26 – 30 = 24 (22%) > 30 = 2 (2%)
Programme	Primary = 55 (51%) Secondary = 53 (49%)

Table 1 Demography of the Sample

Description of the BA (Ed) & B(Sc) Programmes

NIE's degree programmes aim to integrate an academic degree with a foundation in the field of education in order to produce graduates with the requisite values, knowledge and skills to excel in both in education and education-related fields and beyond. The curriculum of these programmes is broad-based, extends over a period of four years and leads to the award of the degree of Bachelor of Arts (Education) or Bachelor of Science (Education). Pre-service teachers may be awarded honours degrees based on excellent overall performance in the four year programmes. The programmes prepare pre-service teachers for primary or secondary teaching. The programme essentially adopts a university/campus-based teacher education model with a school-based practicum (totalling 22 weeks over 4 years) forming a compulsory component of the programme (National Institute of Education, 2009).

Data collection

Data for this study was obtained from a funded longitudinal research project at the National Institute of Education (NIE), Singapore. The project's key aim is to provide baseline information to inform and improve NIE's initial teacher education programmes and the planning of professional development programmes for beginning teachers. Data was collected at various time points: entry, exit points of pre-service teachers' initial teacher education programme and at the end of the initial year teaching in schools.

The instrument used in the longitudinal project was divided into three parts: Part A comprised a mix of objective-type and open-ended questions which examined the perceptions of pre-service teachers about themselves as teachers and the teaching profession; Part B, was a questionnaire survey which investigated the beliefs of pre-service teachers about teaching and the teaching profession rated on a 5-point Likert scale; and Part C consisted of survey items about pre-service teachers' self-perception of their levels of knowledge about teaching and their teaching skills.

While the main study covers a much wider scope, this paper discusses and presents both qualitative as well as quantitative data from part of the objective-type and open-ended questions of Part A and the Part B survey conducted at the exit point of the Bachelor of Arts (Education) and Bachelor of Science (Education) programmes. The open-ended questions as well as the survey were designed to elicit the graduating teachers' view of the teaching profession as well as their self-conceptualization associated with the teaching profession upon completing their initial teacher education programme.

Data Analysis

Part A (What is your perception of the teaching profession?)

A questionnaire was administered to the 105 graduating pre-service teachers in the Degree programme (BA/BSc – Ed) in June 2009. One part of the questionnaire required participants to self-report on their perception of the teaching profession upon completing their practicum. A free-response format was chosen to capture the graduating teachers' perspectives and, indeed, a number provided lengthy answers to the proposed question. However, mindful of the unstructured nature of the qualitative data from an open-ended question, simplified categorisation is used to enable a more thematic analysis.

The categorisation phase employed a three-step content analysis procedure (Miles & Huberman, 1994). In a first "unitizing phase" the transcripts were broken down into units that ranged from a phrase to several sentences. Second, the units were organised into emergent categories or themes. The assignment of descriptors to each category reflected attempts to capture the perceived communality or shared message amongst the units.

A set of 3 key categories emerged from the analysis of the transcripts:

1. Teaching is perceived as a noble profession – a respectable profession, caring and making a difference to their pupils.
2. The realities of teaching and the wider role and responsibilities of a teacher are perceived
3. Mismatched expectations expressed by the subjects of the teaching professional—frustration, hesitation, self-doubt, personal re-evaluations.

Based on these 3 categories, each statement was coded by two raters to ensure inter-rater reliability. Some of the statements were classified into 2 categories. The frequency counts (110) were then tabulated. 37 (33.64%) graduating teachers gave responses that were in category 1, 43 (39.09%) in category 2 and 16 (14.55%) in category 3. There were 14

(12.73%) graduating students who left this section blank or gave responses that were not applicable to the question. Figure 1 shows the distribution of responses to the question “What is your perception of teaching?”

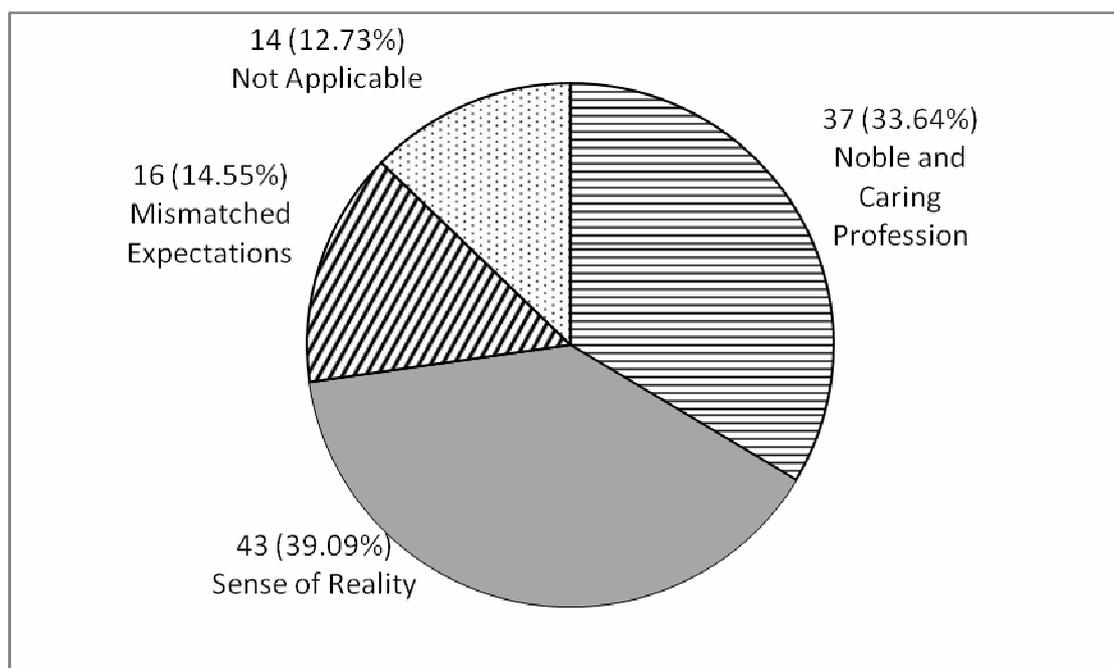


Figure 1: Distribution of responses to “What is your perception of the teaching profession?”

1. Teaching is perceived as a noble profession – a respectable profession, caring and making a difference to their pupils.

Category 1 with 33.64% of responses can be further classified into 2 sub themes. The first sub- theme tabulated responses that highlighted teaching as a profession with a high status. This is also a common perception in other countries, for example in Finland and Japan, where teaching is highly respected profession. In Finnish society, the teaching profession enjoys great public respect and appreciation. Teaching is considered an independent, high status profession that attracts some of the best secondary school graduates to enrol in university-based and hence research-oriented teacher preparation programmes (Schleicher 2006). School teaching is considered to be a profession that compares to any other highly regarded profession in society, such as medicine, law or economics.

The second theme in category 1 is connected to the caring for students, both academically and personally. Norlander-Case, Reagan, and Case (1999) clearly articulate the importance of being a nurturing teacher, calling for teachers who “have the capacity to nurture those in their care” (p. 53).

The following are some sample statements from category 1.

- *“A noble profession.”*
- *“A rewarding profession, a profession to nurture and care for our pupils.”*
- *“Teaching provides satisfaction that money cannot buy.”*
- *“Teaching is not only to impart knowledge, but to nurture our pupils to be good people.”*

- 2 The graduating teachers in this study see the realities of teaching and the wider role and responsibilities of a teacher.

Category 2 had the largest number of responses with 43 (39.09%) counts. Responses in this category highlight the realities as well as the wider role and responsibilities of the teaching profession.

The following are some sample statements from category 2.

- *“It’s not as easy as I thought.”*
- *“There is a lot more to teaching than just standing before the class and delivering the lesson plans.”*
- *“I am more aware of the responsibilities and work load of a teacher.”*
- *“It is more challenging than I thought.”*

3. Mismatched expectations expressed by the subjects of the teaching professional—frustration, hesitation, self-doubt, personal re-evaluations.

The third category had 16 (14.55%) counts. Aside from their mismatched expectations, these graduating teachers also highlighted their frustrations or disillusionments with the teaching profession.

The following are some sample statements from category 3.

- *“If I was offered teaching before signing up, I would certainly not have signed the bond.”*
- *“It is really hard work, I am not sure it’s what I want to do.”*
- *“Overwhelming and stressful!”*
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Part B (How I feel about Teaching)

Twenty two statements from the survey instrument of the longitudinal research project, *How I Feel about Teaching*, were used for this study. Each statement had a 5-point Likert rating scale to measure subjects’ perception of the teaching profession. The statements expressed opinions and beliefs about teaching and the teaching profession. The Likert scale used to assess these opinions and beliefs is given in Table 2. The range of means were from 3.19 to 4.69. Table 3 lists the 5 factors and provides a sample item to illustrate each factor.

How I feel about teaching
5. Strongly Agree
4. Agree
3. Neutral
2. Disagree
1. Strongly Disagree

Table 2: The five-point Likert Scale of *How I feel about teaching*

Factor	No of Items	Example Statement
Role of teaching and learning	4	It pleases me to be able to help children learn.
Self as a role model	4	As a teacher I will have the opportunity to be a good role model for my students.
Sense of calling	5	I always wanted to be a teacher and I still do.
Sense of Professional Identity	4	Teaching is a respectable profession.
Professional Growth as a teacher	5	I will continually upgrade my skills to be an effective teacher.

Table 3: Sample items of factors

Factorial Analysis

Factor analysis with Varimax rotation was used to extract five factors. Each factor's eigenvalue ranged from 11.94 to 1.10. Only factor loadings of 0.30 or above were considered. The five factors extracted are: Factor One: Role of teaching and learning; Factor Two: Self as a role model; Factor Three: Sense of calling; Factor Four: Sense of Professional Identity; and Factor Five: Professional Growth as a teacher. Each factor consisted of four to five items from the survey. 22 items were used for the extracted factors. The instrument is fairly reliable as the Cronbach alphas for the five factors ranged from 0.65 to 0.84. The factor with the highest mean is "Role of teaching and learning" with a mean of 4.48 and the factor with lowest mean is "Sense of calling" with a mean of 3.62. Table 4 shows the factor means, standard deviation and the reliabilities of the five factors.

Factor	No. of items	Mean	Standard Deviation	Cronbach Alpha Value
Role of teaching and learning	4	4.48	0.460	0.840
Self as role model	4	4.15	0.486	0.717
Sense of calling	5	3.62	0.617	0.803
Sense of Professional Identity	4	3.75	0.507	0.654
Professional Growth as a teacher	5	4.02	0.467	0.771

Table 4: Factor Mean, Standard Deviation and their reliabilities

Plot of Means

Figure 2 shows the plots of means of the 22 statements. The range of means received was from 3.19 to 4.69. The lowest mean score (3.19) was drawn from item 4, *I plan to teach till I retire*. The next lowest mean score (3.44) was drawn from item 6, *I believe I have a*

natural talent to be a teacher. The highest mean score (4.69) was drawn from item 19, *It will be a great joy for me if I can help a weak student do well*, followed by item 16, *It pleases me to be able to help children learn*, with a mean score of 4.46.

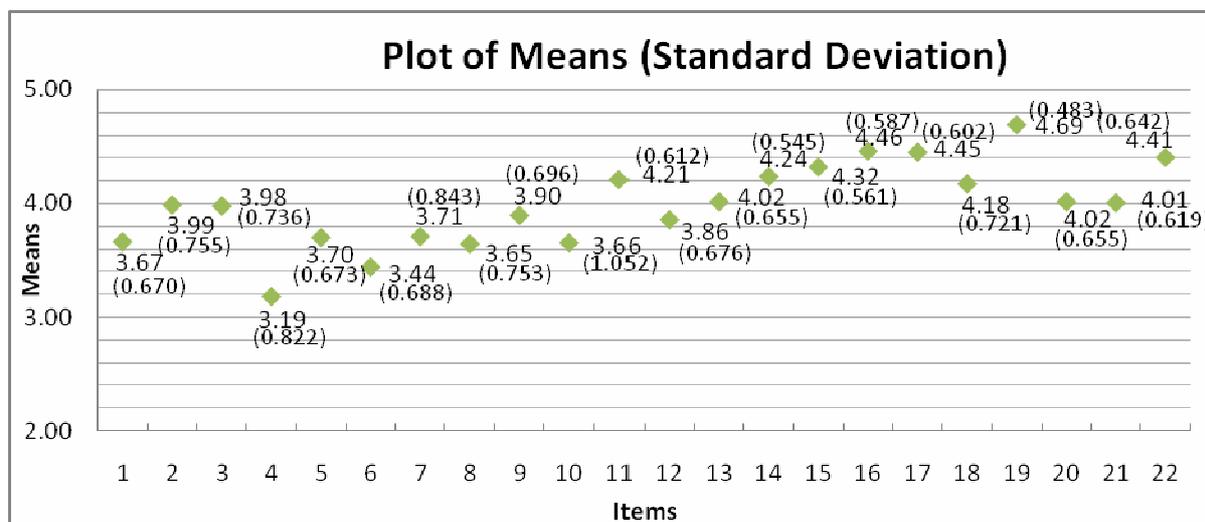


Figure 2: Plot of means for the 22 items

Main Findings & Discussion

Part A: Findings (What is your perception of the teaching profession?)

Part A questions the graduating pre-service teachers' perceptions about teaching, four broad responses were given: noble and caring profession, sense of reality, mismatched expectations and no response given. 33% of the respondents considered teaching to be a noble and caring professions, 39% became more realistic about what teaching entails after having gone to schools for their teaching practicum, and some 15% thought that their expectations were not met, while 13% did not have any particular view. A real concern is the 15% of pre-service teachers who declared that they had mismatched expectations. These pre-service teachers would leave very early in their career. Together with 13% that did not belong to any category, they constitute a significant number whose sense of teacher identity appears to be waning rather than developing.

Part A: Discussion

An encouraging one-third of the population hold altruistic views about teaching as a noble and caring profession at the point of exit of their programmes. Goh and Atputhusamy (2001) found that the most popular motives for selecting teaching as a career were altruistic in nature - *love for teaching and working with children, ability to influence lives for good, intellectually stimulating, and noble profession*. Another study by Chong & Low (2008) showed intrinsic reasons to be the highest, followed by altruistic and then extrinsic reasons for entering into teaching in Singapore. Other studies also indicated the same pattern such as Reid & Caudwell (1997) in Britain and Doliopoulou (1995) in Greece. What is therefore significant about the findings is that at least one-third of the graduating population still hold on to altruistic views about teaching. This augurs well for the future as previous studies have shown that those who remain motivated by altruistic reasons are likely to stay longer in the profession. It is also noteworthy that at least one-third remained highly positive about the teaching profession after completion of their pre-service programmes.

Also from part A, we find that the largest proportion of graduating teachers (39.01%) saw the realities of teaching after they had undergone the pre-service programmes. This may be due in part to a narrow conceptualization of the complexity of a teacher's work prior to entry into pre-service programmes (Britzman, 2003). Pre-service teachers' perceptions, based on formative experiences and cultural images of schooling as a student, often are one-dimensional. They do not enter classrooms with a complex, multidimensional picture of themselves as teachers (Cole & Knowles, 1993; Kagan, 1992). Another explanation could be that the practicum experience has made them more realistic about their expectations. This reality shock is common with beginning teachers who realised the difficulty of balancing the demands of dealing with students, curriculum, parents and school administrators and the school culture (Flores and Day, 2006; Korthagen, Loughran & Russel, 2006). While altruistic and intrinsic motives are important influences in driving teacher candidates into teaching, they must be tempered by some sense of reality and how teachers respond to this reality will determine whether they are likely to stay on in the profession or otherwise.

The third category (14.55%) showed that they were disillusioned with the teaching profession. Pre-service teachers' overly simplistic views of teaching often translate into simplistic teaching and learning. Further confounding this misconception is the belief that student learning is synonymous with instruction (Kagan, 1992). That is, if the pre-service teacher constructs a well-organised lesson, then all students will learn. These mismatched perceptions bring about a range of emotions of the teaching profession – often leading to frustration, self doubt and personal re-evaluations. According to previous research (Day and Kington 2008), providing scaffolded opportunities for professional learning and reflection will allow teachers to gain a better awareness of their beliefs and knowledge and how they relate to practice. This will help mediate between the pre-service teachers' expectations and the realities that they face in such a way as to minimize disillusionment at the end of their programmes. Alsup (2006) acknowledges that pre-service teachers' beliefs are difficult to change, but that change is possible if these beliefs are repeatedly challenged through the creation of cognitive dissonance as part of the teacher education program. There is therefore always a need to challenge pre-service teachers' existing beliefs about teaching throughout the programme so that the realities of teaching do not strike them as a rude shock leading them to be disillusioned. Elaborating on this cognitive dissonance idea, Alsup (2006: 187) showed that the preservice teachers' in her study expanded their identities, both personal and professional, through engagement in discourse that provoked transformation in their thinking; and that this discourse allowed them to confront their existing notions of their identity in formative ways. Such discourse she considers 'affect related' in the form of 'language, actions, emotions, feelings, ideas and appearances' in which these teachers were engaged.

Part B: Findings (How I feel about Teaching)

The second part of the study examines the factor analysis of the 22 statements that clustered into 5 factors. The factor, 'Role of teaching and learning', has the highest factor mean (4.48). The last two factors '*sense of professional identity*' and '*sense of calling*' show lower means. The sense of professional identity would still be in its infancy and at the point of exit of their preparation there is the lack of maturity in the understanding of the professional identity and self, but given time, and increased socialization, school support, professional development and sense of efficacy and recognition of that efficacy by school, this sense of professional identity would grow.

The plot of mean values of the 22 statements as shown in Figure 2, on the whole, paints a positive picture of the pre-service teachers in this study. None of the values are below 3 out of 5. The lowest mean score (3.19) was drawn from item 4, *I plan to teach till I retire*. This response may reflect a generational preference not to stay in a job for long and will always be a factor in any discussion on the issue of teacher attrition and retention. The next lowest mean score (3.44) was drawn from item 6, *I believe I have a natural talent to be a teacher* seems to be a realistic appraisal of themselves after going through the teacher preparation and exposed to a whole range of courses on what it takes to be a teacher and their experience during their practicum attachments.

Part B: Discussion

The finding that the factor 'Role of teaching and learning' has the highest factor mean (4.48) is in agreement with previous research (Wideen et al., 1998) which indicated that the concerns of beginning teachers are primarily with classroom control and the tasks related to teaching and learning.

The factors 'self as role model' and 'professional growth as a teacher' emerged as the next two important factors rated highly by the graduating teachers. This provides some evidence of an emerging professional teacher identity. As Bucholtz and Hall (2005) assert, individuals through each community of practice reflect, construct and adopt identity positions for themselves that represent their experiences for example, of their initial teacher education programmes. It is thus heartening that the result of identity construction at the completion of the pre-service programmes point to the positive development of a professional identity at least in terms of the graduating teachers seeing themselves as role models and asserting that they need to continually develop professionally as teachers.

Two factors '*sense of professional identity*' and '*sense of calling*' had lower means at the end of pre-service. This corroborates the earlier findings discussed in Part A where a significant proportion were either awakened to the realities of teaching or else became disillusioned. It is this group that requires that type of challenging of beliefs that Alsop (2006) talks about in order to inject doses of realities to their expectations throughout their pre-service programmes.

Implications of the Findings

The findings presented and discussed in the previous section have important implications for the continual development and enhancement of initial teacher preparation programmes and outlined several key areas where teacher professional development need to be taken cognizance of.

Confronting pre-service teacher beliefs during initial teacher preparation & beginning teacher induction

One of the key findings from the first part of the study is that the largest percentage of graduand teachers surveyed experienced mismatched expectations between what they had originally perceived of the profession and the reality that they were confronted with. The findings resonate with related literature that states that pre-service teachers possess a narrow view of the work of teachers as a knowledge transmitter (Britzman 2003, Richardson 1996) which may have been exacerbated by the stereotypical portrayal of the teacher playing a didactic role and standing in front of an enraptured class in recruitment advertisements. Recognising pre-service teachers' misconceptions becomes an important informant for teacher educators as they continue to explore and develop these beliefs during the pre-service preparation programme (Feiman-Nemser & Remillard 1996). In order to confront these pre-conceived beliefs, opportunities for reflection and inquiry-based approaches in teacher education programmes are highly recommended (Feiman-Nemser & Remillard 1996). Apart from pre-service programmes, bridging the mismatched expectations must be the concern of beginning teacher induction programmes. In order for successful mentoring to take place in the beginning teacher years, it is important to address the fears that the beginning teachers are most concerned about. For example, if the concern is classroom management, the beginning teacher can shadow an experienced mentor to observe their techniques of handling difficult and challenging students.

Strengthening the theory-practice nexus

Literature has also indicated that pre-service teachers may have problems reconciling university practices and classroom reality concerning instructional practices (Danielewicz, 2001, Steffy et al., 2000). This points to the urgent need for teacher preparation programmes to find ways to strengthen the theory-practice nexus. Four common approaches which have been backed by the literature (Korthagen et al., 2006, Rone 2008) are through opportunities for reflection, experiential learning approaches, school-based research or inquiry projects and pedagogical tools that bring the classroom into the university. To further bridge the theory-practice gap, teacher preparation programmes should also place a premium on helping pre-service teachers to recognise the process of becoming a teacher and not to merely focus on the knowledge and skills of teaching or imparting knowledge (Knowles & Cole 1996). This means that the imparting of pedagogical methodology through theoretical courses is simply insufficient and pre-service teachers require many opportunities to be exposed to the real setting of the school and the multi-faceted roles of the teacher. In the beginning years, the role experienced teachers and school leaders can play in attending to these factors as they interface with the novice teachers' personal, work and policy contexts would influence the quality of the novices' experience, confidence and effectiveness. If they are to maximise teachers' commitment and cause them to hold on to their sense of motivation for teaching experienced teachers and school leaders must reinforce the positive and address negative effects of these contexts.

Limitations and Directions for Further Research

As noted in the literature, a teacher's professional identity begins even before they enter the teacher preparation programmes and continue to evolve as they are undergoing the programme. The pre-service teacher's sense of identity is continually challenged during teacher preparation (Danielewicz, 2001; Steffy et al., 2000). It is therefore important to highlight the limitations of this research. A key limitation is the focus on how individual identity develops within the structure of group practice rather than considering other ways in

which identities are discursively created. Furthermore, since the development of a teacher's professional identity begins even before they enter into the pre-service programmes, there is a need to explore subjects' perceptions about teaching at the point of entry into the programmes and compare them with their perceptions at the point of exit. Precisely because teachers' professional identities are constantly evolving, it is necessary to extend this study longitudinally, in order to continue exploring how the teacher's professional identity evolves especially after the first year of teaching and then again, after three years into the teaching profession. This can certainly set the agenda for future research. Further research should also provide insights into the complexities of teachers' motivations, constructions and understanding of their work.

Since professional identity is defined as an ongoing process of interpretation and re-interpretation, future research will be needed to establish clear relationships between various factors, the features of the teacher education programme, and graduates' perceptions of their professional identity. Therefore, to deepen and elaborate on the relationships found in this study, additional research from a qualitative-interpretative perspective is necessary to reveal graduates' subjective perception and experience of teacher education from the perspective of their professional identity formation.

The present study only focused on one out of the three pre-service teacher education programmes offered in Singapore. It is useful to replicate this study across the two other programmes, namely, the Postgraduate Diploma in Education and the Diploma in Education programmes and compare the similarities and differences in the findings. Additionally, the present study should also be extended to include a cross-cultural comparison with a cohort of pre-service teachers in another international context so that the implications of the findings can help inform policy on, and practice of, teacher education not just locally but internationally.

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