# **Examining Professional Identity through Story Telling**

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This paper focuses on the notion of identity and how it is formed through stories. Many researchers equate identity with the construction of stories. This exploratory case study examines professional identity by interpreting stories which come out of an interview with a prospective mathematics teacher. A semi-structured interview was conducted during a school placement. The interview data was analysed using Kegan's (1982; 1994) constructive-developmental theory. Findings will be discussed in the light of usefulness of the theory in exploring identity through story telling.

# Keywords: identity, self, story, constructive-developmental theory, prospective mathematics teachers

### Introduction

Studying identity has a potential in investigating learning (Sfard & Prusak, 2006). Its importance stems from the fact that people's actions are in close relationship with their identities. With regard to this, Sfard & Prusak (2006, p.14) ask the following question: "Why do different individuals act differently in the same situations?" In the context of teaching, this cannot be explained merely by knowledge (e.g. pedagogical content knowledge), beliefs or attitudes.

The notion of identity has been a focus of attention in teacher education literature especially in the last decade (Cattley, 2007; Rodgers & Scott, 2008; Cook, 2009). Learning to teach, especially in the first years of teaching, is thought to be crucial for forming professional identities and there have been various studies in mathematics teacher education literature which investigated prospective teachers' and beginning teachers' identities (da Ponte & Brunheira, 2001; Walshaw, 2004; Goos, 2005).

To begin with a definition of identity, a distinction between *identity* and related notions such as *personality* and *character* should be made (Sfard & Prusak, 2005). To some extent, personality and character are naturally given. On the other hand, identity is socially constructed as a result of interactions between people (Sfard & Prusak, 2005; Stevenson, 2006).

Both sociology and teacher education literature point out another confusion, which is related to the notion of *self* (Rodgers & Scott, 2008). Self is defined to be "the mental construct of a person, by that person. It is a central proposition of sociology that the self is in large part social" (Bruce & Yearley, 2000, p. 274). American philosopher, sociologist and psychologist George Herbert Mead (1863–1931) claims that self is reflexively produced. By considering the demands of the community, its values and beliefs, people make reflections (Borgatta & Montgomery, 2000); therefore, self reflects society (Stevenson, 2006).

Sociology literature clarifies the relationship between self and identity and claims that self encompasses different parts, each of which is considered as an identity. According to Stets & Burke (2003), different identities reveal themselves in different contexts in a social structure. Therefore, identity is situational or contextual (Borgatta & Montgomery, 2000). Identity is "a set of meanings attached to the self in a social role" (Stets & Burke, 2003, p. 16). It is an "internalized positional designation" (Stryker, 1980, p. 60) for each of the different positions or role relationships the person holds in society. For example, a person is a mother at home (self as a mother), a colleague at workplace (self as a colleague) or a friend (self as a friend). These are all different identities of the same person depending on different contexts (Stets & Burke, 2003).

# **Theoretical Framework**

The theoretical framework is based on the claim that identity can be best understood by the developmental capacities of self, as emphasised by Rodgers & Scott (2008) in their research synthesis on teacher identity. They suggest that Kegan's (1982; 1994) "constructive-developmental theory" could be a useful framework to investigate the identity of teachers considering four basic assumptions: (a) Identity is dependent upon and formed within multiple contexts; (b) Identity is formed in relationship with others; (c) Identity is shifting, unstable, and multiple; (d) Identity involves the construction and reconstruction of meaning through stories over time.

This paper will focus on a particular aspect of identity, namely the notion of *story* and consider the following question (Rodgers & Scott, 2008): How do teachers/prospective teachers construct identity through stories? Answers to the above question will be investigated considering Kegan's (1982; 1994) theory which proposes five stages. Stage 1 (Impulsive) emerges during childhood and stage 5 (Self-transforming) could only be achieved by a few adults (Taylor, 2006). Therefore, this paper will focus on the following three stages:

- Stage 2: Instrumental knower (Imperial balance)
- Stage 3: Socialized self (Interpersonal balance)
- Stage 4: Self-authoring knower (Institutional balance)

At Stage 2 (instrumental knower), experiences are external and concrete, and viewed in black and white. There is almost no self-reflection. One is not aware of one's own needs and interests. At Stage 3 (socialized self), there is a plurality of voices. One can articulate feelings and emotions that surround teaching. Since standards are external (e.g. influenced by culture and context, such as teacher education program or school), stories are likely to be shaped by others' expectations. At Stage 4 (self-authoring knower), the self has its own set of values, which are clearly defined. Therefore, one tells stories according to one's own internal standards and is the author of one's own experiences. Demands and expectations of the cultural surrounds are not determinants of identity. One can easily engage in self-reflection and see the ways in which relationships impact upon teaching.

Based on this theoretical framework, this study aims to explore potential usefulness of Kegan's theory in investigating identity through story telling. With this aim, this paper examines identity by interpreting a prospective mathematics teacher's stories and how her identity is constructed through stories. Stories were analysed for evidence of the three stages as described above.

# Methodology

This is a qualitative explanatory case study, which was conducted during the third year of a four-year teacher-preparation program in Dokuz Eylül University in İzmir, Turkey. After graduating from the program, prospective teachers will be entitled to a diploma for teaching mathematics in elementary schools for students aged between 12 and 14 (Grades 6-8).

This paper focuses on a single case. The prospective teacher, Cansu, was 21 years old and female. She was in the third year of the program and she already taken courses related to mathematics, pedagogy and content specific pedagogy. The data was collected during one of the school practicum courses. The mentor of this course (who is also the second author of this paper) conducted workshops that focused on certain topics such as, "What 'being a good teacher' means according to students?" or "How school managers define a "good maths teacher?" Workshops lasted 14 weeks and each of them included a 50-minute session that aimed at reflective discussion among prospective teachers. Like her peers, Cansu spent two hours in schools to explore the topic of the week. She was interviewed before and after these workshops. This paper focuses on Cansu's pre-interview. The aim of this semi-structured interview was to examine her professional identity. The interview was verbatim transcribed. At the first phase of analysing the data, five stories were specified. An event in a particular context is considered as a separate story. As the second phase of data analysis, inferences regarding Cansu's professional identity were made from each story. Finally, a stage is assigned to each story. In order to enrich the validity of research, stories were analysed by two different researchers and a consensus was reached on the stages.

### Findings

This section consists of five sub-sections each of which is devoted to a different story. Each sub-section starts with excerpts of the story followed by our analysis of its implications regarding prospective teacher's identity. Each sub-section ends with a discussion on why a specific stage in Kegan's theory is specified for the story.

### Story 1: I always wanted to be a maths teacher since I was in primary school

During the interview, Cansu reported a story about how she decided to be a teacher and impacts of her family in her decision:

Researcher: How did you enter teachers' school?

Cansu: I always wanted to be a teacher since I was very young...since primary school...I always loved maths and I was very successful. Therefore, before high school, my parents told me that I don't need to bother about looking for another profession. We know that teachers school had courses related to teaching and it was a prestigious school.

As can be inferred from her excerpts, loving her profession is important for Cansu. Although her family influenced Cansu, her childhood desire to be a teacher implies an internal standard. Therefore, we claim that story 1 refers to Stage 3 (Socialized self) in Kegan's theory.

# Story 2: I used to love my teachers in school

Story 2 focused on why Cansu particularly chose mathematics instead of another subject. The excerpt below indicated that it was her mathematics teachers rather than mathematics itself which affects her decision:

Being honest, I loved my maths teachers rather than maths itself...I also liked maths lessons...I said OK, my maths teachers were definitely my idols. I wanted to be like Ms Ayşe in the future and behave just like her...my maths teachers were like teachers in a private school. They put so much effort. I was surprised that they were so nice...I was wondering whether my students would love me like this in the future...I loved maths because of them and hope I'll do the same for my students in the future, I hope they'll love maths

As can be seen above, Cansu's mathematics teachers had a great influence on her and she developed a positive attitude towards mathematics because of them. The excerpt above has some indications about Cansu's criteria of being a good teacher. For example, being hardworking and being able to affect students' attitudes towards mathematics in a positive way are important characteristics. In addition to these, she included good communication skills and cheerfulness as the other important characteristics of her mathematics teachers. All these characteristics are important factors which constitute her professional identity. We consider this story to be at Stage 2 (Instrumental knower) since experiences are external and concrete, and there is almost no self-reflection.

### Story 3: Private tutoring

As a prospective teacher, Cansu has a limited amount of teaching experience. Apart from her experience in school placement, she has been giving private mathematics lessons to prepare students for the university entrance examination. She was asked to reflect on this experience.

Researcher: Did you find what you've expected from teaching?

Cansu: I do private tutoring. But I don't do it for the money. I realised that I always exceed an one-hour session, end up with two or even three hours...when my student becomes successful, I become very happy...sometimes parents of my students sat down in the room with us, they see how hard I try...In university, we learnt about tangrams, geoboards and pattern blocks. I always wondered if they were really useful. Then I used them during my private lesson. Observing my students, I realised that these materials were very helpful for students to remember some rules.

As can be seen from the excerpt above, it is student success rather than salary which motivates Cansu as a teacher. During the interview, she also reflected on the way she taught mathematics and the way this impacts on how her student learns mathematics. Such a reflection might make us think that this story is at Stage 3 (the self-authoring knower) since she makes a reflection on her actions and consequences of them. On the other hand, her reflection is influenced by the expectations of the teacher education program rather than her own internal standards. Therefore, we claim that story 3 is at Stage 3 (Socialized self) of Kegan's theory.

# Story 4: A conversation among students at a bus stop

This story implies that Cansu makes reflections on even small events such as a short conversation at a bus stop:

I always make observations and make use of even small things...recently I overheard a conversation between students at a bus stop. What I've heard was the answer to the question of who is a good maths teacher...they said one of their teachers always give them lots of worksheets with questions and always check whether they do them all correctly...a good maths teacher has good communication with their students even out of the classroom...there may be more than that, these are just small things that I've observed.

As can be seen above, considering students' conversations Cansu reached some conclusions (e.g. communication in and out of the classroom is important) which constitutes her identity. However, this story implies some external standards (students' opinions) rather than reflection on her experiences in the classroom. Therefore, this story belongs to Stage 3 (socialized self).

#### Story 5: A conversation with relatives in the family

Just like story 4, story 5 implies a reflection, which is based on a conversation:

Researcher: When you said you wanted to be a maths teacher, what were the reactions of people and have these affected you?

Researcher: There are some professions which are not recognisable at all, but maths teaching is different. When my relatives first hear that I was going to be a maths teacher they said "it's wonderful, too many children doesn't like maths". When I come together with my relatives they always talk about my profession and me. I like it. Maths teaching is a prestigious profession.

As can be seen from Cansu's reflections on the way her relatives value teaching as a profession, she is satisfied with the prestige of her profession. However, as similar to story 4 above, her reflections implies some external standards (relatives' opinions) and therefore this story can be considered as Stage 3 (socialized self).

#### **Discussion and Conclusion**

This paper aimed to explore how identity is constructed through stories by using Kegan's (1982; 1994) constructive-developmental theory. In parallel to relevant studies in the literature (Sfard & Prusak, 2006), the findings of this study indicated that stories are rich sources for examining identity. Interview questions, which focused on how a prospective teacher chose teaching as a profession and what makes a good teacher, were helpful to reveal her personal stories. These personal stories contribute to our understanding of how teacher identity was constructed in time. The data indicated that inferences she made from her experiences constituted Cansu's professional identity. In that sense, an aware and active *self* is important for identity formation (Rodgers & Scott, 2008).

In our exploration of identity, reflection has an important role in enhancing awareness. Being able to make reflections is crucial for progressing as a teacher. It also helps increasing awareness of self. As Rodgers & Scott (2008) claim, identity can be best understood by the developmental capacities of the self. In that sense, Kegan's stages provide a lens through which the level of this capacity can be evaluated. Through these stages, progression can be monitored from being "authored by" (which refers to external standards) to "authoring" (which refers to internal standards). It is important to examine these stages to monitor prospective or beginning teachers' reflective capacity. To do that, teacher educators should encourage prospective teachers to tell stories so that they can develop a sense of awareness of their own identities. The data also indicated that Stage 4 (self-authoring knower) was not observed at all. It is not surprising since our participant in this case study is a prospective teacher with a limited amount of teaching experience. Another finding regarding Kegan's stages is that different stories reported by the same prospective teacher could belong to different stages. This confirms the claim that identity is unstable, situational/contextual and therefore multiple (Rodgers & Scott, 2008).

This explanatory study indicated that Kegan's (1982; 1994) constructivedevelopmental theory could be an operational tool to analyse identity. There is need for further studies to investigate identity using this theory in the context of mathematics teacher education.

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