

Looking at teacher identity through self-regulation

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In the present study, we designed a model of self-regulated inquiry that connects theory to practice for teachers to deepen their understanding of the core beliefs, commitment, and the experiences shaping their professional identity. The rationale of this model was grounded in motivational and identity theories related to self-regulation, self-efficacy, and goal setting. We posed three questions to 342 participants enrolled in graduate courses in educational psychology. These questions formed part of an interview process used as a dialogic retrospection to elicit teachers' voices. The results were summarized in meaningful written narratives, which were analyzed for generative themes. The researchers identified several themes that related to findings from the literature, confirming that (a) teacher identity is a complex construct, related to teachers' experiences of success and frustration, age, and cultural context; (b) the dialogic retrospection served as a mediator to clarify what influenced their teacher identity, and (c) the self-regulated inquiry model helped teachers to assess the development of their professional growth from a motivational perspective. Implications for teacher education and research to expand the notion of teacher identity are discussed.

Mirada a la identidad docente a través de la autorregulación. En este estudio hemos diseñado un modelo de auto-regulación con el propósito de facilitar la reflexión del docente sobre sus ideas, grado de compromiso y experiencias que forjan su identidad profesional. El modelo se fundamenta en las teorías sobre la identidad y motivación relacionadas con la auto-eficiencia y planificación de metas. La muestra consistió en 342 docentes inscriptos en cursos de postgrado sobre psicología educativa. Para la recolección de datos se utilizó una entrevista realizada en pares por los mismos participantes con carácter de diálogo retrospectivo. La información fue resumida en una narración escrita y analizada según categorías temáticas. Los investigadores identificaron tres temas los cuales fueron correlacionados con la literatura, que fueron: (a) la identidad del docente es de carácter complejo en relación a las vivencias de éxito personal, la edad, y el contexto cultural; (b) el diálogo retrospectivo sirvió al mediador para clarificar su identidad profesional desde una perspectiva motivacional, (c) el modelo de auto-regulación facilitó el proceso de reflexión sobre la conducta escolar. Se discuten las implicaciones para expandir la investigación sobre la identidad profesional del docente y sus efectos en la práctica educativa.

The teacher's mission is to create an environment that provides all students the opportunity for success. The complexities of being an effective teacher today are related to questions such as: what motivates teachers to choose and persevere in this profession? how do they meet the conflicting challenges of "high-stakes testing" and simultaneously be accountable to an increasingly diverse population in their classrooms? Thus, the primary aim of this study is to help them better understand the core beliefs, commitment, and those experiences shaping their professional identity. It is essential for educators not only to be motivated on what is to be learned but also on how it should be taught (Banilower, Heck, & Weis, 2007). Learning to teach in ways that

are culturally responsive has often been construed as acquiring competence. This occurs through a process in which experiences are assimilated and accommodated into an ongoing mental construction of how to think, act, and believe (Settlage, Southerland, Smith, & Ceglie, 2009). It is the process of attaching consequences to student standardized test performance. For many teachers, this idea of "accountability" can be somewhat intimidating (Henning, Stone, & Kelly, 2009).

We believe that a study on understanding teacher identity through self-regulation is timely since at the heart of the self-regulation construct is the notion that teachers are strivers-constantly trying to better themselves. Competencies and expertise are on a continuum of professional development through a purposeful engagement involving their teaching experiences and self inquiry: How does one keep motivated in dealing with the complexity of state mandates in education? How does one build public and student confidence within these constraints? The answers to these questions may be embedded in the work of several researchers who studied the motivational variables that guide teachers to learn about their self-regulated

competence and direct them to re-examine the goals that are shaping their identity.

Theoretical perspective on teacher identity and self-regulation

The study of teacher identity is relatively new to educational research with most of the qualitative investigations occurring within the past decade (Day, Kington, Stobart, & Sammons, 2006). Our emphasis on exploring the teacher-self has been justified from the need to gain understanding of the extent to which teachers are able to examine their competencies when faced with challenges due to changes represented by school reforms and increasing student diversity in their classrooms. Adapting to these changes requires a self-regulated commitment to act according to the new policies' educational mandates. Within this context, teacher identity can be defined from a cognitive-motivational perspective as a psychological attachment to the teaching profession. It is the inner-self, which affects everything a teacher does in the classroom. This core of the "self" is mediated by certain characteristics and expectations from a set of standards such as: self-esteem, self-consistency, self-efficacy, and self-regulation that influence teacher behavior (Cardelle-Elawar, Irwin, & Sanz de Acedo Lizarraga, 2007; Rots, Aelterman, Vierick, & Vermeulen, 2007).

The review of the literature shows that learning about teacher identity is to learn about the selfhood that educators bring to the classroom. Recently, Andrzejewski (2009) investigated the relations among teacher identity, knowledge, and teacher practices through a holistic lens. The findings suggest that teachers' professional identity is a combination of what they know (curriculum expertise) and the pedagogy they use to put it into practice. Recently, the majority of research has been focused on explaining pedagogy and its application to the classroom. However, Moore (2008) states that research on teaching falls short of considering the influence of certain characteristics influencing teacher identity. For example, what are the teachers sense of purpose, self-efficacy, self-monitoring of their progress on achieving their goals, job satisfaction, and competence to be effective in paying attention to individual differences? The prediction of these factors may sustain a teacher's efforts to promote effective self-regulation to be successful in achieving objectives and adaptations to new changes (Schultz, Jones-Walker, & Chikkatuer, 2008).

Research on teacher identity is multifaceted and poorly defined (Abedelal, Herrera, & Johnston, 2009). It has been explored from several theoretical frameworks such as social-cultural and cognitive-affective and it has been interpreted within changing contexts. Its foundation is inherently a relational phenomenon with "the self" which is primarily defined in relation to the other. Most studies focused primarily on the professional aspect by examining teachers' perceptions of the subject matter, and pedagogy expertise. The research findings vary in their definitions. It is characterized by the way teachers think and visualize themselves (Ottensen, 2007). They also reflect the complex life-long process of self-discovery, a process for teachers to know themselves, their students, and the subject matter they teach. Palmer (1998) conceptualizes teaching identity as an activity emerging from one's inwardness. The entanglements teachers experience in the classroom are the convolutions of their inner life. Viewed from this perspective, teaching holds a mirror to the self.

Some studies showed the development of the professional-self within a social-motivational perspective that depends on the extent the teacher's subjective educational theory meets the challenges of accommodation and conformity within the school-micro-political perspective (Findlay, 2006). Thus, we also contextualized our study within the literature of self-regulation, self-efficacy beliefs, and goal setting (Bandura, 2001; Gage, 2008; Schunk, 2005).

Self-regulated teaching is a complex construct embedded in social cognitive theory, which highlights the importance of social influences on teacher behavior (Mourad, 2009; Schunk & Pajares, 2005). These authors' conceptualization of self-regulation is formulated within a model which explains how teacher competence develops initially from social sources of academic skills and subsequently shifts to self sources in a series of levels: internal standards, self-reinforcement, and self-efficacy. This theory is rooted within the notion that teachers are agents proactively engaged in their own development. They are viewed as both products and producers of their own environments and of their social systems (LeBlanc & Gallavan, 2009). It focuses on how teachers acquire knowledge, rules, skills, strategies, and beliefs by observing others. The literature has recognized that those teachers' self-regulatory processes are critical for effective teaching (De la Fuente, 2008; Sanz de Acedo Lizarraga, Sanz de Acedo Baquedano, Goicoa Mangado, & Cardelle-Elawar, 2009).

Most self-regulation frameworks focus on four processes: self-observation, self-monitoring, self-judgment, and self-reaction. Self-observation refers to deliberate attention to aspects of teachers' own behavior. It is critical to determine progress at an activity. Self-monitoring can result in increased motivation because when teachers, for example, realize what they do they may react to this knowledge and alter their behavior. Self-judgment compares their current performance level with their expected goals. This self-evaluation reflects the importance of goal attainment as behavioral, cognitive, and affective responses to self-evaluation, and can be a source of teacher motivation. The result of this self-judgment produces self-reactions which according to Schunk & Zimmerman (2003) are behavioral, cognitive, and affective responses to self-evaluation, and can be a source of teacher motivation. Teachers may believe they are making an acceptable progress, along with anticipated satisfaction of accomplishing the goal, and therefore may enhance self-efficacy (Boekaert & Cascallar, 2006; Weiner, 2005).

Self-efficacy refers to the way teachers are able to picture not only what they want to achieve but also how to achieve it. It is causally linked to the teacher's sense of competence built on personal past experiences in relation to goals and standards (Bandura, 2001; Day et al., 2006). It involves a set of permanent values based upon teacher's beliefs, images of self, role and identity that are subject to challenge by changes, which are educationally-politically constructed. Boekaerts (2006) defines it as teacher's confidence in their ability to promote students' learning or get things done, which affects teacher's choice of activities, effort, and persistence in overcoming difficulties. It implies a sense of personal accomplishment, where teachers view their work as important and exhibit a willingness to try innovative classroom. It has also been found to be associated to teacher retention. Bandura (2005) makes the distinction of two dimensions of self-efficacy: outcome expectancy and personal efficacy. The first, describes the perception that certain actions will contribute to particular outcomes, reflecting a more general belief that inputs

into a situation, which can have a functional effect on judgment of the likely consequence of such a performance. In contrast, personal efficacy focuses on perceptions of one’s ability to enact the behaviors that will lead to desired results.

Goal setting is an essential process of self-regulation. It refers to establishing quantitative or qualitative standards of performance. Lock and Latham (2002) emphasize three important aspects of this construct: (a) goal choice represents the actual objectives teachers are trying to obtain and the level of achieving them; (b) goal commitment indicates how strongly teachers are attached to their accomplishment, their degree of enthusiasm and determination to achieve their objectives, and (c) goal performance, trying to surpass normative performance standards, using social comparative standards, striving to be the best in the group on a task. Teachers with this orientation can foster a productive learning orientation by giving students’ progress feedback showing how their skills have improved (Ormrod, 2009; Palmer, 2005).

Research questions

In the present study, we used the methodology for data collection based on the dialogical retrospection and narrative-biography, suggested by Chong (2007), Lindsey (2004), and Moore (2008). Our purpose was to elicit teachers’ voices through a self-discovering of the core beliefs and the experiences shaping their professional identity for guiding them for further professional growth. The questions guiding the inquiry process were how did the participants construct their views of (a) themselves as teachers? (b) their multiple teachers’ roles, strengths, and barriers to perform them?, and (c) the awareness of their teacher identity by using the IDEA Model as a self-regulated approach?

Method

Participants

Participants were 342 (n = 280 women and n = 62 men) volunteer in-service teachers enrolled in a graduate required course for all education majors, on educational psychology. The major goal of the course was to improve how can teachers learn about themselves, their students, and continue their professional growth. The participants varied in age, years of experience in teaching, and grade level.

Procedure and data collection

The content of the course to facilitate self-reflection was organized around the *IDEA Model* (Figure 1) acting as a self-regulatory inquiry for helping participants to identify, define, explore, and assess their motivation to fulfill their responsibilities as teachers and better understand their identity formation.

Data collection was carried out by students in pairs through a face to face interview as a dialogic retrospection, which included nine questions, related to their motivation to teach and classroom performance. Each participant had the interview questions and instructions to follow. For example: (a) partner A interviews, listens, and scribes B’s answers; (b) partner B interviews, listens, and scribes A’s answers; (c) each partner independently writes one page summarizing what has been scribed and comes to the next class prepared to read it to the other; (d) changes are then made to ensure accuracy of information; (e) each partner then chooses a pseudonym (or decides to use given name), and (f) remember the code of ethics for a researcher: do not share your partner’s story with anyone. It belongs to your partner. She/he decides what part(s) of the interview to include in two-page summary. The authors used an iterative,

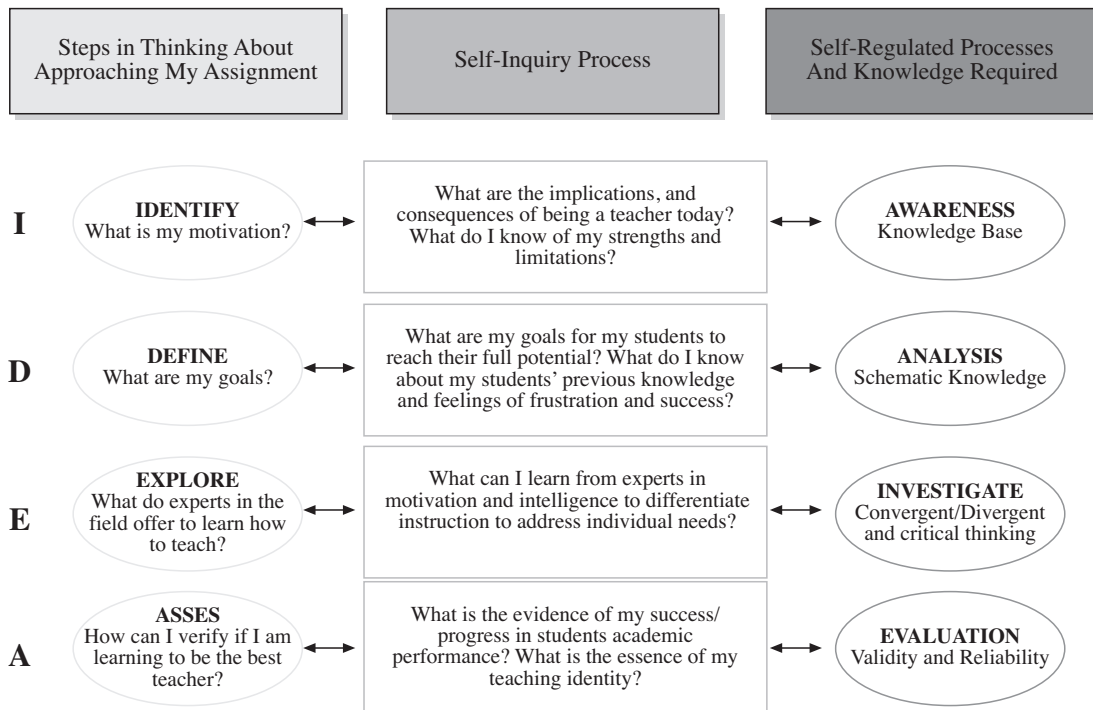


Figure 1. IDEA Model as a self-regulated

recursive, and constant-comparison process to analyze the data. The verbatim written interview responses were collated and analyzed for generative themes across all participants related the research questions.

Results

Following is the evidence of the significant data related with the three research questions.

Research question 1. How did participants construct their views of themselves as teachers? Two themes seemed to be related with this question representing 76 percent of their views.

Theme 1: Participants clearly articulated the influence of former teachers as a source of their motivation to become teachers. They described the teachers who influenced them most to become teachers as those who were experts in the content area, showed passion for teaching, and encouraged them with statements like, "You can do it, if you put in more effort". Excerpts from narratives that confirm this theme include:

Sofia, an elementary school teacher, first knew she wanted to become a teacher in Junior High School. The two teachers that encouraged her to excel in school were always giving her written and oral feedback. Still, when she made mistakes, they saw them as sources for learning not occasions for punishment. She still stays in touch with one of them who are in town. The other one is retired and has moved away from the state. She felt she possesses some of their attributes by being dedicated to her students especially, to those that are at-risk.

Sam, a middle school teacher, was not interested in becoming a teacher until he had some male teachers in High School who were role models for him. They showed Sam that teaching could be a cool profession. Today, he is motivated to be a teacher by constantly working at improvements to do his very best in helping students also to do their best. "I consider myself a good mentor for students as my previous high school teachers were for me."

Although almost every participant mentioned they were influenced by former teachers to become a teacher, a total of 23% of the participants remembered those who were less than desirable role models. For example, *Robin*, "I had a very negative experience with two professors who managed to strip me of my self-esteem and basically turn me off from teaching. I had the unfortunate experience to have both of them one semester. They did not provide a safe

environment. That made me thinking so down about myself that I almost came close to believing that teaching maybe was not for me. I am lucky that I did not give up on teaching because I am motivated to create the best environment for students feel successful in my class. In my class every student count. I teach them building on their strengths to overcome their limitations".

Theme 2: Commitment to pupils was frequently named as a source of motivation to become a teacher. Excerpts from narratives that confirm this theme include:

Moreen, a high school teacher, is motivated to be a role model for students by providing allowing students have a voice and enjoy the spontaneity of learning. "I feel responsible for impacting children's lives is my goal, and I hope that the impact is a positive one. I provide them with a variety of strategies to keep them on task. I am constantly reminding them of the importance of doing well, a rewarding them after they finish. My children like, when I create a poster with the best works they did and ask their peers to recognize it."

Judy, a teacher special education. She stated that although the teaching career required twelve hours of her day it is worthwhile because she is passionate to teach special education children to be successful and independent. "I want students to attribute their success to their effort. I use modeling as my major effective behavior to let students know what to expect. However, I am always monitoring their progress using constructive feedback. I believe there is always something good to be praised in their work and something to be improved."

Example that disconfirms this theme: Noris, first grade teacher had a college professor during her undergraduate education studies who told her point blank that she should look into another field of study. This professor told me: "I am not sure you should be a teacher." This hurdle taught Noris an important lesson, which she turned into one of her strengths: "I will never give up in learning how to be the best teacher I can be."

Research question 2. How did the participants' construct views of their roles, strengths and challenges to perform them? Table 1 summarizes the majority of teachers' perceptions of their need for improvement and the major challenges they experience in performing their roles.

Research question 3. How did participants' create awareness of their teacher identity by using the IDEA Model? A total of 90 % of participants indicated that the IDEA Model gave them opportunities

Table 1
Teacher's percentages of their perceptions for need to role improvement and challenges they experience to accomplish their roles.

Teacher roles	Recognition for improvement	Challenges
Expert in content area (61 %)	Keeping updated my content and delivering systems by using multiple intelligences, emotional intelligences and positive psychology.	Lack of teaching experience. Competence development is not always effective.
Manager (77 %)	Creating a classroom environment where every student count is respected, and their feelings are taken into account. Allow students to collaborate, in defining the rules of discipline.	The increasing of bully behaviors during recess, stereotypes, diversity and lack of parent cooperation.
Motivator (82 %)	Considering students are sources of my motivation to teach. Provide a variety of strategies to help them be successful.	Individual differences due to English proficiency, poverty.
Counselor (79 %)	Recognizing the way students feel about learning is as important as what they learn.	Child abuse, drugs, poverty, achievement gaps, and deficiencies in English.
Leader (65 %)	Student's mentoring, teachers' friendly collaboration, recognition by the administrators without using students' performance in the aims as the only criteria.	Too much emphasis on standardized tests. Lack of freedom to be yourself.
Reflective thinker (98 %)	Keeping an open mind to be flexible to tailor instruction to students' needs.	Government emphasis on the standardized tests.
Role model (83 %)	Behaving exemplary since students learn through imitation.	Deficiencies of students' home backgrounds.

to become better self-regulated learners as they create an awareness of who they are, what they want to become to better serve students and how to continue their professional growth to become more effective teachers. Within this group, 52 % considered this model will be of great use for faculty development workshops and 28 % said they would adjust it for students in their classrooms when performing tasks involving problem-solving skills. Following it is a summary of random excerpts from participants: the IDEA Model was a picture to make me more effective in identifying not only the students' problems but also my problem in handling them. I was considered myself efficient in covering content using and modeling different processes to facilitate student's learning. However, this model show me to become more reflective on my motivation to teach when I face my students every day and become aware that every day they can behave different. The IDEA Model guides me in performing as a self-regulated learner not only in selecting content knowledge but also in how to teach it. I become for critical of my performance and analytical of the roles and goals I should set for myself and for my students taking into account their diversity needs. It taught me how to use self-inquiry as a process and with constant questioning which promotes research procedures in social science, and new theories I should learn to inform my practice to improve the teaching of science in High School. I see it as a self-inquiry process about who I am and who I would like to become to adjust to changes from different perspectives: students' diversity and state standards, in sum it becomes as a catalyst for change. If we use it in our daily preparation for teaching I believe we have the best tool to set objectives, monitor students' progress and we will improve professionally as our students achieve at higher level. The IDEA Model has put a picture in my mind as a visual representation of what a good teacher should do on a daily basis. It validates what I believe as a good teacher should do. It made me better understand that teaching is more than a job and the responsibility of assuming multiple roles at the same time.

Discussion and conclusions

The research outcomes confirm the complexity of teachers' lives at work and the influence of former teachers in selecting the education profession. Three major issues related to motivational theories and practices are worth discussing for their implications for further research on teacher identity.

First, it is clear from the narratives that participants construct their views of becoming teachers from different perspectives, age, years of experience, grade level, challenges, and cultural contexts. Almost all participants mentioned former teachers as a source of inspiration and behaving as role models to imitate in their current classroom practices. However, some described how on their road to a successful career, they frequently had to endure frustrations, disappointments, and other forms of negative affect. The majority within this group was able to take charge of their affective states. They did it by transforming their frustrations in sources of motivation (Cardelle-Elawar et al., 2007; Weiner, 2005).

Second, as self-regulated educators, participants focused their identity on a combination of motivational factors as the foundation of the core values and beliefs of their sustainability in the profession. They attributed their competence to the development of a commitment that made them go beyond their contract duties. They had a clear sense of the standards and willingness to implement them to improve classroom practices. These findings are consistent with

the literature which suggests that teacher competence is the relation between the teacher's goal directed action and the kind of commitment of she/he considers worth undertaking to help students be successful (Day et al., 2006).

Given the outcomes of participants' self-reflections, it appears that their self-efficacy is examined in light of their expertise about the subject matter and their pedagogy to manipulate content tailored to their students' needs. Teachers believed they were able to use a variety of teaching strategies to relate various concepts especially in teaching diverse students. The majority expressed passion about their profession, showing they felt comfortable in producing lesson plans with appreciation for the instructional topic. Although they recognized the importance of performance goals to meet the standards, they were also mastery oriented. They believed in developing students' intrinsic motivation to nurture their self-worth (Boekaerts, 2006). It is important to note that when teachers are engaged deeply in self-assessment of their multiple roles and the challenges they encounter they strive to become more effective with their students from diversity background and the state of education requirements. These are manifestations of their self-identity commitment that has implications for their professional growth. It is also known that when teachers are engaged, in graduate classes, related to educational psychology, they more clearly think about who they are and who they want to become. Perhaps these self-reflections are already manifestations of the dynamic experiencing their "self" identity (Moore, 2008).

Third, participants' positive comments are evidence of the value of the dialogic interview and the IDEA Model both serving as self-inquiry mediators to foster understanding of their identity from a personal perspective. More important, the interview process was particularly relevant for two reasons. First, teachers were led to express their own voices, and clarified their belief systems through their peer comparison. Second, by having access to all of the narratives of their peers in class they increased their conviction that motivation to teach includes a long-term self-process.

In sum, participants recognized they learned a great deal about themselves, their students' strengths and limitations, the curriculum, teaching strategies, assessment and evaluation. As they became more consciously deliberate self-regulated teachers, they experienced a deeper understanding of their complexity of teaching based on the multiple roles they should play in the classroom. They specified their needs for improvement in each role. They described major barriers they were confronting during the process of becoming more effective teachers (Nevin, Bradshaw, & Cardelle-Elawar, 2009; Cardelle-Elawar & Nevin, 2003).

We conclude with the argument that teachers' motivation is the most crucial factor that influences the quality of education that students receive. Consequently, narrative inquiry can be groundbreaking method used to foster the development of teacher self-identity both from a personal perspective by knowing who they are and from the need to be intellectual risk takers with the development of new ideas from different motivational perspectives. We also hope new research can expand the construct on teacher identity by focusing attention on how a teacher experiences outside the classroom and perceptions of students, parents, and administration influence the formation of their identity.

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