9-1-2005

Fantasy, Vision, and Metaphor - Three Tracks to Teachers Minds

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Abstract

This paper explores how the three concepts of vision, metaphor, and fantasy serve educational research for a better understanding of teachers' minds regarding educational issues. Drawing upon data based on a review of the literature, the following has been found: a semantic comparison showed that the concepts were similar in their abilities to create visual images and function as communication media, but differed in origin, time orientation, reality reflection, activity orientation, and consensus creation. Empirical findings demonstrated the importance of question formulation, the researcher's position, and the scope of the study. In conclusion, the paper proposes how the different concepts might help in designing improved research and better educational usage of the concepts.

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This paper explores how the three concepts of vision, metaphor, and fantasy serve educational research for a better understanding of teachers' minds regarding educational issues. Drawing upon data based on a review of the literature, the following has been found: a semantic comparison showed that the concepts were similar in their abilities to create visual images and function as communication media, but differed in origin, time orientation, reality reflection, activity orientation, and consensus creation. Empirical findings demonstrated the importance of question formulation, the researcher's position, and the scope of the study. In conclusion, the paper proposes how the different concepts might help in designing improved research and better educational usage of the concepts. Key Words: Educational Fantasy, Vision, Metaphor, Teachers' Minds, and Open Coding

Introduction

The art of teaching attracts researchers to better understand its variables and intertwined connections. There is, however, a consensus that a teacher's mind is one of the main variables in the puzzling phenomenon of teaching (Munby, Russell, & Martin, 2001). According to Feuerstein, Tannenbaum, and Klein (1991), for example, teaching and learning are not separate actions, but learning is a process mediated by the teacher or parents at an early age. Through intentional mutuality, that is, providing meaning and transcendency explanations, the teacher creates some order in the phenomena students encounter, and provides tools for discovering connection and regularity in the world (Feuerstein et al.). Other research findings support this idea by showing that the ways chosen by teachers to explain and interpret knowledge affect students' learning (Munby & Russell, 1990, 1994), their achievements (Yair, 1997), and even their acquisition of gender and social roles (Spade, 2001).

The growing body of literature dealing with the teacher's mind and knowledge transmission does not come up with any simple answers regarding what this connection is, how it is developed, sustained, changed, and what effects it has on teaching (Munby et al., 2001). At the same time, a variety of concepts have been used to study the teacher's mind, including mental models (Strauss & Shilony, 1994), conceptual maps (Yukhnovetsky & Hoz, 2001), beliefs (Pajares, 1992), dreams (Strauch & Lederbogen, 1999), subject matter knowledge (Schwab, 1978), problem- solving, decision-making, beliefs, attitudes, basic assumptions, dispositions (Munby et al.), metaphors (Inbar, 1996; Munby, 1986; Munby & Russell, 1990), visions (Hammerness, 2001), and fantasy (Tubin, 2004).

The last three concepts; fantasy, vision, and metaphor are of special interest for me for two reasons: their relevance to my work and their particular semantic meaning.

Relevancy

As a researcher, lecturer, and educational consultant, I meet these concepts when dealing with the subject of innovative schools. As an educational consultant I have found that when I ask teachers and principals about their educational vision, they usually provide me with a mixture of metaphors, clichés, and dull visions. As a lecturer at principal training courses, I try to arouse my students' interest in the subject of innovative schools by asking them to fantasise about their "dream school." As a didactic activity it works very well, but as a researcher their answers leave me wondering what it was that they actually gave me: Vision? Fantasy? Metaphor?

In the role of a researcher I face considerable ambiguity regarding the concepts' usage and meaning in the educational literature. Some researchers worked within the positivist paradigm, trying to explain teachers' metaphors by context and situations (Ben-Peretz, Mendelson, & Kron, 2003; Inbar, 1996). Others use the interpretive approach, trying to discover the meaning teachers give to educational situations by their visions and fantasies (Hammerness, 2001; Tubin, 2004).

Additionally, different operationalizations and data collection methods have been used. Fantasy, for example, was defined as that which arises from poetry analysis in one study (McCormick, 2003) and as the content of educational fantasy (what would the "dream school" look like) in another (Tubin, 2004). Metaphors were once collected through a questionnaire asking, "The school is like…" (Inbar, 1996) or by letting the teacher choose from metaphorical pictures (Ben-Peretz et al., 2003). In one case, a one-time intervention for interviewing teachers and exploring their visions (Hammerness, 2001) was used. In another case, three different means of data collection were used for deducing pedagogical vision; individual interview, group meeting, and individual reflection, (Adalbjarnardottir & Selman, 1997).

The variety of paradigms, definitions, and methods indicate on the one hand that the researchers addressed different phenomena using vision, fantasy, and metaphor, while on the other hand the concepts overlap and synonymously indicate a common dominator. This confusion of simultaneous similarity and difference is the second reason for studying these concepts.

Semantic Meaning

Vision, fantasy, and metaphor have unique meaning and a common dominator which can obscure common language among researchers and impede the development of good theory regarding teaching and teachers' minds.

There are two prerequisites for developing good theory: one is the common agreements among researchers, regarding the paradigm in which the theory should be developed (Kuhn, 1962) and the second is the extent to which it connects fruitfully with the empirical world (Blumer, 1969). Epistemologists would argue that the two are complementary since the world, especially the one not within our immediate reach, is dependent on our paradigm, theory, and concepts (Kantorovich, 1993). Thus, the

concepts researchers use, and the connotation they give, are a matter of decisive importance.

Blumer (1969) suggested that good concepts in the social sciences are *sensitizing concepts*, which "give the user a general sense of reference and guidance in approaching empirical instances" (p. 147). This is in contrast to *definitive concepts*, which,

> refer precisely to what is common to a class of objects, by the aid of clear definition in terms of attributes of fixed bench marks… Whereas definitive concepts provide prescription of what to see, sensitizing concepts suggest directions along which to look. (p. 148)

For example, height as measured in inches or intelligence as measured by an IQ test are definitive concepts, while class as ownership of means of production (Marx & Engels, 1998) or teacher content knowledge as facts and concepts of subject matter (Schwab, 1978), are sensitizing concepts.

Vision, metaphor, and fantasy seem to be somewhere in between these two categories. They are not sufficiently definitive since the concepts are measured differently by context and research goal. They are not sufficiently sensitizing either, since they suggest too many directions in which to look, and frequently the same direction for different concepts. While Morgan (1986), for example, leads us to look for metaphor as "a way of thinking" (p. 12), Lakoff (1999) directs us to look for "a neural mechanism" (para. 5). On the other hand, both fantasy and vision are used to direct us toward an alternative and attractive future (Bennis & Nanus, 1985; McCormick, 2003).

Therefore, the aim of this study is to enhance the sensitizing meaning of vision, metaphor, and fantasy by analysing their semantic connotation and empirical usage in the educational literature. Clarification of the concepts will enhance their sensitizing value, adding to our ability toward developing a teachers' knowledge theory (Munby et al., 2001), assisting in designing better methods for the study of teachers' minds, and increasing better intervention programs for teachers and schools.

Focusing on the meaning researchers give to the concepts in their research papers places this study in the interpretive paradigm, which assumes that the truth is inside people's minds, and not "out there" as the positivist paradigm assumes (Lincoln & Guba, 1985). Moreover, enhancing the concepts' theoretical sensitivity is the main business of qualitative research (Strauss & Corbin, 1990). The best way of reaching sensitizing concepts is through what Strauss and Corbin call "open coding," which is based on the two analytic procedures of making comparisons and asking questions regarding the phenomenon's dimensions, levels, and its relationship with another.

In order to enhance the theoretical sensitivity of vision, fantasy, and metaphor I first propose an analytical typology to emphasize the commonalities among these three concepts. I will then inquire into the semantic similarity and differences between vision, fantasy, and metaphor. Finally I will seek their empirical usage. A discussion of the findings and implications for research, teacher education, and educational change closes this work. Accordingly, the research questions are

1. What is common to vision, fantasy, and metaphor compared with other concepts regarding teachers' minds?

2. What are the similarity and differences between the semantic meaning of vision, fantasy, and metaphor?

3. What are the similarity and differences between empirical usage of vision, fantasy, and metaphor?

Methodology

This is a qualitative study in the sense that it inquires into the interpretations researchers give to vision, fantasy, and metaphor when constructing theories and conducting studies on the teacher's mind, and in the sense that the researcher (me) is interactively connected with the study, both affecting the analysis and effected by the findings (Guba & Lincoln, 1981). The following section presents the methodology used to answer the research questions. First, I will present my conceptual framework regarding the common dominator of the three concepts, and then I will present the steps involved in the semantic comparison, and finally the methods used for analyzing the empirical usage.

To find an answer to the first research question, regarding the commonality of vision, fantasy, and metaphor compared with other concepts regarding teachers' minds, I conducted theoretical sampling (Strauss & Corbin, 1990). For this study I reviewed the following literature: Munby and Russell (1990), Munby and Russell (1994), Strauss and Shilony (1994), Yukhnovetsky and Hoz (2001), Pajares (1992), Hammerness (2001), Inbar (1996), Munby (1986), Strauch and Lederbogen (1999), Schwab (1978), and Tubin (2004). I chose other concepts with proven theoretical relevance, meaning that they were consistently present when the subject of teachers' minds was discussed. Among them were the mental model, conceptual map, problem- solving, decision-making, dreams, beliefs, attitudes, basic assumptions, dispositions, subject matter knowledge, and pedagogical knowledge. According to the limited resources of this study, it was not possible to conduct a comprehensive review of the literature, only a specimen search that would help sketch out the borders of the subject.

Assuming that vision, fantasy, and metaphor have a common dominator, I have looked for a primary inductive framework, which emerges from the comparison among the concepts. In doing so, I followed the grounded theory method (Glaser & Strauss, 1967; Strauss & Corbin, 1990) to ascertain what the concepts mean. During my reading of the literature I asked questions such as: Does the mental model refer to a way of thinking, viewing, or perceiving? Is decision-making regarding something specific or does it cover everything? I also looked for ways in which they are similar. I asked, "What is common to dream and vision?" "To dream and belief?" Similarly, I asked, "In what way do they differ?" "Are dispositions broader than mental models?" "Does problem-solving depend on basic assumptions or does it create them?"

To organize the data I categorized each concept according to its function (organizing element, communication medium), and nature (verbal, visual), which created a typology of four kinds of phrases used to study the teacher's mind. This typology compared vision, fantasy, and metaphor to all the other concepts.

In order to answer the second research question, regarding the semantic comparison between the concepts, I used several steps. First, I looked for the origin of each of the concepts and the discipline in which it is grounded. Then I used the literature to seek definitions of the concepts and examples of the qualities defined in the typology

(visual, verbal, organizing element, communication medium), thus providing a broad notion of the concepts. Finally, I summarized the similarity and differences in the concepts' semantic meaning by the variety of variables which emerged from the comparison.

For answering the third research question, regarding the empirical usage of the concepts, I extracted a variety of articles, using any of the three concepts, from the ERIC database and leading educational journals. The search focused on article titles from the past 20 years, and resulted in 22 papers that focused on vision, 10 that were dedicated to metaphor, and 5 that studied fantasy. Although the search definitions affect the quality of the results (different keywords in the search definition would probably produce different results), the sample was suitable for the study's exploratory goal of learning more about the concepts' connotation and practice usage.

My sampling included two steps. First, all the articles were screened according to their research population and only those which concentrated on teachers remained. Second, the most suitable and solid studies according to their samples, research tools, methodology, operationalization questions, and the conclusions drawn were chosen for further analysis and comparison.

Several strategies were used in this study for establishing the rigor of the data collection and analysis process. These included theoretical sampling and a transparency and substantive model as well as all techniques suggested by the qualitative scholars, Dawson (1979), Strauss and Corbin (1990), Guba and Lincoln (1981), and Stake (1995). For maintaining analysis validity (i.e., the degree to which my methodology studies the concepts' meaning and usage) I used several steps: First, theoretical sampling ensured the relevance of the articles chosen from the literature, and the relevance of the concepts chosen as a contrast to vision, fantasy, and metaphor (Dawson). Second, the constant comparative method of analysis (Glaser & Strauss, 1967) helped to reach most of the concepts' dimensions and aspects. Third, the theoretical saturation test (Strauss & Corbin) led to comprehensive analysis of each concept, which showed that the relationship between the concepts was well established and the concepts' meaning was dense for each concept that had no new data.

Reliability in the qualitative methodology refers to the degree by which other researchers can understand the unique specification of the research arena, follow the methodology used, and become familiar with the researchers' considerations, opinions, and point of view, which may affect the scientific process. To follow Drisko's (1997) recommendation, for limiting the researcher's bias through self-awareness, I maintained transparency of the steps I took as detailed above, and revealed my position and the context of the study (Guba & Lincoln, 1981).

Finally, I attended to generalizability by maximizing utility and usefulness of the three concepts' definitions (Stake, 1995). According to Strauss & Corbin (1990), generalization accrues if the resulting definitions suggest a substantive model, that is, one with a good explanation for the specific phenomenon under study. In this case, that is assessed by whether other researchers will find the definitions of vision, fantasy, and metaphor sufficiently sensitising.

Results

The results of the data analysis are presented in three sections, following the research questions: mapping the concepts, semantic comparison, and empirical inquiry.

Mapping the Concepts

As I examined the way concepts refer to teachers' minds in the literature, I came up with some observations. First, the concepts are not equivalent in their scope. Some, like the mental model and conceptual map, are much wider in scope than more specific concepts like metaphor, fantasy, and dreams, so I excluded them from the list of concepts. Second, there are concepts that refer to a specific cognitive process, like problem-solving or decision-making, which rather than affect the mind, they are a product of it. These concepts have also been excluded from the analysis. This left me with the following concepts: dreams, attitudes, beliefs, disposition, vision, metaphor, and fantasy (there are, of course, many more, but for the purposes of this study these will be the most relevant).

Using the constant comparative method of analysis (Glaser & Strauss, 1967), making comparisons (In what way are dream and fantasy alike or different?), and asking questions (When are the concepts used? For what purpose?) I found two distinguishing factors in the concepts; function and nature. *Function* relates to the role of the concept as an organizing element or a communication medium in understanding the teacher's mind. Beliefs and dispositions, for instance, serve mainly for studying the ways people organize the surrounding world in their mind, while attitude and vision usually serve for studying how teachers communicate these ideas to themselves and others. *Nature* refers to the concepts' quality as verbal or visual. While beliefs and attitude are verbal in nature, dreams and metaphor are visual images.

The combination of the two axes creates a typology that helps to distinguish dreams, for example, that serve mainly as a visual way of processing everyday experiences (Strauch & Lederbogen, 1999) from verbally organizing elements like dispositions (Bourdieu, 1990). Figure 1 summarizes this typology.

Figure 1. Typology of concepts used to study the mind.

		Function	
		Organizing element	Communication medium
Nature	Verbal	Dispositions, beliefs	Attitude
	Visual	Dreams	Vision, metaphor, fantasy

Whereas the previous section was devoted to finding the common denominator in vision, metaphor, and fantasy, in contrast with other concepts, the following section presents the similarity and differences found among them.

Semantic Comparison

Vision, metaphor, and fantasy are rooted in three different disciplines that shape their definition and semantic usage. Vision is a very common concept in leadership research that employs it to explain leadership phenomena as well as leader-follower relationships (Bennis & Nanus, 1985). Metaphor is a subject of research in cognitive study that explains the different views people have on the same observation (Morgan, 1986), and in the search for the origin and forms of the human mind (Lakoff, 1999). Fantasy is mainly used in psychology research for a better understanding of human behaviour and fear (Brakel, 2001; Eagle, 1999). The following are the detailed definitions.

Vision

According to Bennis and Nanus (1985), vision is a mental image that may be as vague as a dream or as precise as a goal or mission statement: The vision articulates a view of a realistic, credible, and attractive future. A condition that is better in some important ways than what now exists. With a vision, the leader provides the all-important bridge from the present to the future of the organization (p. 89).

Vision is usually used in reference to an organization, but there is also personal vision that "comes from within, it gives meaning to work, and it exists independent of the particular organization or group we happen to be in" (Fullan, 1993, p. 13). Other leadership authors have emphasised vision as an image of the future (Berson, Shamir, Avolio, & Popper, 2001) and as leader-follower sharing a perspective (Conger & Kanungo, 1998).

The visual nature of the vision makes it a very good communication medium between people and even between a person and himself/herself. Researchers have found that in the leader-follower relationship the vision inspires, reframes, and sets a strategic goal based on its visual qualities (Bennis, 1989; Bennis & Nanus, 1985; Conger & Kanungo, 1998). It has also been found that a personal vision helps in shaping teachers' desired future (Hammerness, 2001) and when shared, encourages teachers to work together towards cooperative goals (Harris, 2003).

Visions can be different in scope, range, distance, and content, and thus affect the ability of realizing them and making them come true (Berson et al., 2001; Hammerness, 2001). Moreover, vision is rare and only few have the capability of developing a well-articulated vision. Vision is common among result-oriented individuals, such as leaders, who use the vision to create focus and gain attention for the mission at hand (Bennis & Nanus, 1985). The authors also claim that it usually "turns out that the vision did not originate with the leader personally but rather from another" (p. 95), and is based on three sources of guidance: past experience, current happenings, and future trends.

Thus, vision is a reality-based picture of the future that has emerged and is rooted in the shared perception of the group, and has a motivational power for one and others.

Metaphor

Metaphor is an image that "implies a way of thinking and a way of seeing that pervades how we understand our world generally" (Morgan, 1986, p. 12). The metaphor helps to highlight certain features of reality while forcing others into the background, and thus points to the most relevant and important features of the situation.

Neisser (2003) states that metaphoric thought is an act of imagination, a transfer of meaning in which one thing is explained by being changed into another. Metaphoric seeing is a particular breed of comparison. "It is a comparison of 'what is it like' – not a direct likeness between the two subjects, but similarity in what it is like for us as conscious embodied agents" (p. 36). Metaphors are not just a replacement of one thing by other, but they are used to clarify abstract ideas by tangible, visual, and sensual images. This "commonplace association" does not need further explanation since no words can be more precise and better express meaning like a tangible metaphor (Neisser).

Recent cognitive approaches view metaphor in a much broader way as "a neural mechanism that allows us to adapt the neural systems used in sensory-motor activity to create forms of abstract reason" (Lakoff, 1999, para. 5). The origin of metaphors is in the body, adds Lakoff: "Anything we can think or understand is shaped by, made possible by, and limited by our bodies, brains, and our embodied interactions in the world. This is what we have to theorize with" (Lakoff, para. 5). According to Lakoff and Johnson (1980), most of the time the metaphorical process is unconscious. This may be true with regard to the general structure of cognition, but metaphors also play an important role as communication media. "They give flesh to the abstract and render it sensible" (Neisser, 2003, p. 39).

Thus, metaphor reflects a significant part of reality, and since many others share the same part in the same way, the metaphor can present a common insight. Although the metaphor helps to clarify and explain things, it does not have motivational power. Unlike a vision, metaphor is not usually inspirational since it is much more concentrated on the current situation and cannot tell much about the desired, or any, future.

Fantasy

Fantasy is a "propositional attitude in which there is no attempt to match the truth conditions of the proposition to what obtains in the world" (Brakel, 2001, p. 368). Fantasies are not reality-tested: They can be contradictory with respect to time and place specifications, they can be inconsistent with one another, and they can even be contradictory within themselves (Brakel).

Fantasy is mainly used in psychology research with regard to extreme situations. On the one hand, fantasies are connected to the forbidden, danger, or the impossible; like sex, change, or the unknown (Eagle, 1999). On the other hand, in stressed situations fantasy plays an essential role in protecting identity and reducing labeling (McCormick, 2003). In this sense, fantasies show an alternative way that has the power to affect present human behavior.

The origins of fantasy are in past and present experience as well as in the social conditions and experience of the individual. Fantasy is grounded in the social and cultural

norms that direct what is right and wrong, what is approved in everyday life, and what is thinkable only in fantasy and dreams.

Thus, fantasies play a communicative role, but mainly between a person and his or her own self. The visual nature of the fantasy helps it play this role by projecting a bright picture of improbable wishes. Yet, fantasy is a very private thought that may be weird or unacceptable for others because of its radical and unrealistic nature. The fantasy can influence one's life, especially as a thought but unlike a vision, not as a means of actualization.

To summarize, the connotation dissimilarities between the concepts are

1. Vision and metaphor are parallel in their compatibility with reality, while fantasy is free from constraints of time, place, and logic.
2. Vision serves to stimulate action and shapes the future, whereas metaphor and fantasy are descriptive in nature and do not necessarily motivate or stimulate action.
3. Good vision is based on shared perception; metaphor is more personal; and fantasy is personal, unique, and can even seem weird to others.

Table 1 summarizes this comparison between vision, metaphor and fantasy:

Table 1

Semantic Comparison of the Concepts

	Commun-ication media	Visual quality	Time orientation	Origin	Reflect reality	Activity orientation	Create consensus
Vision	With other	Picture of the future	Future	Others, past, present, and future	Reality-based	Motivate public action	Shared vision
Metaphor	With other and self	Image of the current situation	Present	Body, experience	Reality-rooted	Clarify the situation	Common insight
Fantasy	With oneself	Scenario of improba-ble alternat-ive	Time-free	Social norms and personal experience	Reality - free	Motivate private move	Private thought

Empirical Inquiry

A search of the ERIC database under the keywords teacher vision, teacher metaphor, and teacher fantasy, limited by title and journal articles, resulted in 22 items for vision, 8 for metaphor, and 5 for fantasy. Aware of the incompleteness of this search, I also searched the leading educational journals and some of the main authors in the area.

Eventually, I chose the following papers according to their interest and compatibility for demonstrating the educational use of the concepts. Table 2 presents a comparison of the studies by concept and characteristics.

Table 2

Comparison of Empirical Studies by Concepts and Characteristic

Study	Sample	Research tools	Questions asked	Conclusion
Teachers' visions				
Hammerness (2001)	16 teachers	Survey, interviews, reflective interview, classroom observations.	What is the content and character of your vision regarding ideal classroom practices?	Teachers' vision can expose inconsistencies between teachers' hopes and reality, and thus can help in teacher training and school improvement.
Adalbjarnardottir & Selman, (1997)	4 teachers	Individual interview, group meeting, individual reflection, teacher-researcher individual meeting.	Why do you participate in the program for developing students' interpersonal skills? Does it help? Has your attitude changed?	Teachers' articulated insight is developed through awareness dimensions, and can be enhanced by reflection on their role as fostering their students' interpersonal skills.
Teachers' metaphors				
Inbar (1996)	254 teachers 409 students	Questionnaires	Complete the sentences: the teacher is like.., the student is like.., the school is like...	Teachers' and students' metaphors reflect and shape reality; thus they point mainly towards directions for school reform
Martinez, Sauleda, & Huber, (2001).	50 experienced teachers 38 prospective teachers	Collaborative reflection in a small group (4-6 members).	How do you understand "learning"? (in personal metaphorical terms).	Sharing educational metaphors in a collaborative group of colleagues promotes teachers' professional development.
Ben-Peretz, Mendelson, & Kron, (2003)	60 teachers	Choose from 7 occupational drawings the one that most reflects self-image as a teacher.	Explain the choice of the drawing; suggest an additional occupation, which was not included in the set of drawings.	Metaphorical pictures could serve as an instructional tool in a teacher education program by eliciting the professional self and its reliance on the teaching context.
Teachers' fantasies				
Tubin (2004)	40 teachers	Structured assignments	How do teachers' fantasies help understand the constraints of the schooling system?	Teachers' fantasies reflect underlying trends and the social constraints of the educational field.

All the studies have a similar aim of revealing characteristics and contradictions of educational issues. At the same time they used vision, fantasy, and metaphor inconsistently, operated with a variety of research tools (e.g., interviews, questionnaires, structured assignments), exhibited a diversity of operational questions, and applied different scopes of studies (e.g., teachers, school, educational system).

Vision

Empirical studies usually examine vision as part of leadership research, looking for the role of the vision in educational leader behavior. The findings show, for example, that the vision has a significant effect on the follower (Geijsel, Sleegers, Leithwood, & Jantzi, 2003); that principals' support and congruence with department heads is a stronger predictor of teachers' support for the school's vision (Abolghasemi, McCormick, & Conners, 1999); and that principals influence teachers more through relationship than by vision (Barnett & McCormick, 2003). Much less is done with regard to teachers' vision. The following two papers were the only examples that I could find.

In the first paper, Adalbjarnardottir & Selman (1997) explored teachers' vision regarding the nurturing of their students' interpersonal skills in the classroom. The researchers, who conducted an intervention program in Iceland, followed four participant teachers and asked them about their motivation, classroom management abilities, and pedagogical vision. Four reflective interviews (individually and in a group) were conducted. The researchers found that the teachers' awareness was developed through four dimensions: externally based, personally based, relationship focus, and pedagogical conceptualization. They concluded that the "four developmental awareness dimensions can be used to study the increased differentiation in how teachers view their role" (Adalbjarnardottir & Selman, p. 426) and the reflection process can help the teachers to articulate their insights and vision.

In the second study, Hammerness (2001) explored how teachers' vision of ideal classroom practice is used to help understand the development of teachers' work and careers. She characterized teachers' vision according to three dimensions: focus (areas of interest and clarity of the vision), range (extent of the vision), and distance (from current activities). Sixteen teachers, of the 80 who participated in the educational program, described particularly powerful vision and were interviewed twice in two years. Content analysis was conducted based on the focus, range, distance, and context of the vision.

Results showed four consistent patterns that revolved around the distance between practice and degree of clarity of the vision. The researcher concluded that examining personal vision "helps teachers develop an understanding of what it takes to achieve their goals and may assist them in facing inevitable setbacks and protect them from disillusionment and discouragement" (Hammerness, 2001, p. 159). In this sense, both studies view vision as a tool and a product of teacher development.

Metaphor

Of the three tracks, metaphor is the most popular way to study teachers' minds. Researchers use metaphors for clarifying certain aspects of the educational institution (Inbar, 1996; Powell, Farrar, & Cohen, 1985), for elucidating the cognition and practice

linkage (Stofflett, 1996), for learning more about the teachers' views on the school and the teaching-learning process (Ben-Peretz, Mendelson, & Kron, 2003; Martinez, Sauleda, & Huber, 2001), and for discovering the metaphor role in constructing and reframing teachers' professional knowledge (Munby, 1986; Munby & Russell, 1990, 1994).

Inbar (1996) sheds light on the images and metaphors held by teachers and students for better understanding the challenges that face schools. Data collected from 409 students and 254 teachers during 1988, using a questionnaire, asked the participants to provide images by completing sentences such as: "the teacher is like…", "the student is like…", and "the school is like…" A total of 7,042 images were gathered and analyzed to obtain groups of salient metaphors. The results focused on the "free educational prison" metaphor and on the gap between teachers' and students' metaphors. The author concluded that revealing the contradictions and the multi-levels of the school's metaphors plays an important role in changing the learning-teaching process.

Martinez et al. (2001) analyzed the metaphorical conceptions of learning of 50 experienced and 38 inexperienced teachers in Spain. Their findings showed that 57% of the experienced teachers and 22% of the prospective teachers view learning as transmission of knowledge from the teacher as a source of knowledge to the empty container of the student; 38% and 56% (respectively) hold a constructive metaphor of the teacher as a facilitator and the student as a constructor. The remaining 5% and 22% respectively have a socio-historical perspective, viewing the teacher and the student as ants, collaborating to achieve beneficial results for all. The researchers concluded that training affects explicit knowledge, while the classroom experience affects tacit knowledge, which is more sustainable. "By disclosing the metaphorical base of thinking about teaching and learning we hope to assist teachers in bridging the gap between their implicit and explicit knowledge" (Martinez et al., p. 973), and thus promote educators' professional development.

The third study, by Ben-Peretz et al. (2003), investigated the relationship between the context of teachers' work and their views of themselves as professionals. Sixty Israeli teachers were asked to choose from seven drawings of other occupations and decide which one matched their professional image as teachers. Teaching context was found to have a significant impact on teachers' images of their professional selves: Teachers of low-achieving students preferred the animal keeper metaphor, while teachers of high-achieving students preferred the conductor metaphor. The researchers concluded that while the teachers' choice might be a rational response to their teaching situation, it might be dysfunctional from the students' point of view. They consider it "essential that both future teacher and experienced teachers become aware of these images, their origin, and the manner in which they impact on their teaching, so that they are able to intentionally change the images that shape their teaching" (Ben-Peretz et al., p. 287).

Fantasy

The use of fantasy in educational research is very rare. A study of students' fantasies from an inner-city high school found that through personification, fantasy, and metaphor students kept their identity from the monolithic labels of the school (McCormick, 2003). Another study using the concepts for examining the content of fantasies versus dreams of boys and girls between ages 9 and 15 found that in dreams

children portrayed themselves in everyday life, while in fantasies they imagined themselves as they would like to be (Strauch & Lederbogen, 1999).

The third study (Tubin, 2004) is the first to present use of the "educational fantasies" concept. In this study 40 educational fantasies of experienced teachers were analyzed based on Bourdieu's (1990) cultural capital theory. According to Bourdieu, habitus and cultural capital are products of certain conditions of one's social class and create the basic assumptions about the world, which in turn reproduce the social order. Assuming that educational fantasy can reflect these basic assumptions, the teachers were asked to design the school of their dreams, free from reality constraints such as money, time, and manpower. Content analysis was conducted based on the school's domains and the whole school model.

Results showed that while most of the fantasies were alike with regard to respecting student diversity, student choice, a variety of teaching methods, and a rich physical environment they differed with regard to time and space configuration, classroom size, and schoolyard. Additionally, in 75% of the fantasies the prevalent view was that the school's goal was to prepare the student for society, while in the other 25% there was an indication that school was a place for fulfilment of students' potential. The conclusion is that educational reforms are likely to succeed if they follow the trend toward greater diversity, choice, and pluralism, but leave space configuration unchanged. The implication points towards educational fantasy as a tool for discovering the social constraints imposed on schools and the influence they have on teachers.

Discussion

In this paper I have studied fantasy, vision, and metaphor as three tracks to studying teachers' minds, arguing that these three concepts are not sufficiently sensitizing (Blumer, 1969).

The results show that although the three concepts are well defined in the broader literature, their meanings with regard to teachers become narrowed: This stems from the way questions in the studies were asked. Hammerness (2001), for example, examined vision by asking teachers about ideal classroom practices, Tubin (2004) inquired into fantasy by asking teachers about the ideal school, and Martinez et al. (2001) studied metaphors by asking teachers how they understand learning. These questions are similar enough to produce similar answers and thus undermine the validity of their variability.

There are several possible explanations for this similarity. First, it could be argued that the questions were skewed to the school situation and therefore set up the conditions for the similarity. Second, the researcher's mind and position are also contributory factors to the similarity between vision, fantasy, and metaphor. The concepts the researchers choose to use and the methodology they have selected reveal their position: When the researchers are also teachers at an educational program, like Adalbjarnardottir and Selman (1997) and Martinez et al. (2001), they use vision and metaphor as developing tools to analyze teacher changes and for improving the program itself. When the researchers are outsiders, like Ben-Peretz et al. (2003), Tubin (2004), and Inbar (1996) metaphors or fantasies serve as indicators for the system under study (schools, teaching context, educational field) and place the researchers in the position of organizational

consultants, suggesting directions for improving the schools (Inbar), supporting teaching (Ben-Peretz et al., 2003), and discovering new trends in the educational system (Tubin).

Third, the different scope and aims of the studies, as well as the unit of analysis, could explain some of the confusion. Using metaphor to tell something about the entire school system (Inbar, 1996) is not like studying metaphors to explore the impact of the class on teacher perception (Ben-Peretz et al., 2003), or searching for personal vision to shed light on the internal process of the teachers' professional development (Adalbjarnardottir & Selman, 1997; Hammerness, 2001).

I do not suggest creating definitive concepts by always using vision, metaphor, and fantasy in the same way for the same purpose, or to unnecessarily broaden them to accommodate any purposes, but I would like to enhance the concepts' sensitivity in the following ways. I propose that metaphor should be used when the researcher seeks to explore teachers' realities and their remarkable elements by asking what the phenomenon under investigation is like for them and noting the analogies the teachers provide. I propose that vision become the way to trace teachers' desirable futures by asking for a realistic picture of this future and the ways to achieve those futures. I propose that fantasy be used as a way to reveal teachers' basic assumptions regarding their situations. The question used to elicit the assumptions should be about wishful alternatives, independent of constraints of time, place, and logic. These distinctions between vision, fantasy, and metaphor have several implications.

Educational Implications

Most of the studies conclude that visions and metaphors can promote professional development (Adalbjarnardottir & Selman, 1997; Ben-Peretz et al., 2003; Hammerness, 2001; Martinez et al., 2001; Munby, 1986; Munby & Russell, 1994). Assuming that metaphors are embodied in a person's experience (Lakoff, 1999), the assumption that awareness of these metaphors enables teachers to change their teaching intentionally is somewhat problematic. If the origin of the metaphor is rooted in experiences it might be a good idea to change these experiences, along with heightening awareness. Teacher training is not like Freud's psychotherapy, whose goal is to enable the patient to recall the experience to consciousness, confront it in a deep way, and thus discharge it. As another sociologist suggested (Merton, 1968), I believe that teachers' perception is constructed to a great extent by their role and environmental expectations (Hanson, 2001). Leading teachers to learn about their vision, fantasy, and metaphor, however, is not as much about increasing awareness, as it is about distinguishing between elements the teachers can change and those that are out of their control. Using vision, metaphor, and fantasy for teaching teachers their role expectations and hopes, and how to navigate between them, could greatly contribute to their professional development.

Teachers' awareness of their power also has to do with school reform. Metaphors could be an important part of a vision to direct school reform and motivate teachers to realize it (Hammerness, 2001; Harris, 2003; Inbar, 1996). Articulating teachers' personal visions as part of their teacher training but not as a part of their teacher roles, within the schools that employ them, could be a very frustrating experience for the teachers.

To summarize, using sensitizing forms of vision, metaphor, and fantasy can help teachers' teachers to plan training that enhances teachers' ability to analyze the

institutional environment (Hanson, 2001), assist educational leaders to use metaphors for promoting a vision, help teachers to recognize a fantasy when they meet it, and avoid the frustration accompanying efforts for its fulfillment.

Scientific Implications

Clarifying the semantic meaning of vision, fantasy, and metaphor could help the scientific process in several ways. First, it enhances common languages and agreement among researchers, and supports parallel efforts to develop better theory regarding teachers' knowledge (Munby et al., 2001). Second, it improves the concept's validity and fruitful linkage to the empirical world (Blumer, 1969). Given that we talk about three different worlds, the tangible educational environment, teachers' perceptions, and researchers' knowledge, using the sensitized definition and asking the appropriate questions can assist researchers in planning a better study of the teacher's mind.

Third, clarifying the concepts can help develop grounded theory regarding the function of the visual communication medium (vision, fantasy, and metaphor) for teachers. In this paper, I have only begun walking this line by employing open coding and labeling three categories from the research literature. Completion of this stage needs to be followed by axial coding, which develops the relationship between the concepts and a conditional matrix, which connects the grounded theory to its proper context (Scott, 2004; Strauss & Corbin, 1990). For the moment, this paper suggests definitions for three sensitizing concepts which, if found useful by other researchers, would make it worth the effort.

This study emerged from my research needs to put vision, metaphor, and fantasy in order and has helped in doing so. Nevertheless, in the course of the study I realized that some of the concepts' ambiguity emerged from the multiplicity of roles I and other researchers play as a researchers, lecturers, consultants, and high-ranking officials. This situation raises the question of whether agreed upon sensitizing concepts among all these roles is at all possible. Additionally, the study helped me realize that the fantasy I was holding, that if only I could label reality sufficiently clearly and sensitizingly I could also change part of it, was fallacious.

All in all, the study helped me to understand more deeply the difficulties in reaching a sensitizing definition. Since variation in the meaning of each concept will always remain due to contextual, cultural, and personal differences, the efforts required for reducing such ambiguity and enhancing the common language are twice as important. I hope this study offers some useful support along this track.

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Article Citation