TEACHERS’ CONCEPTUAL METAPHORS FOR MENTORING

DISSERTATION

the Degree Doctor of Philosophy in the Graduate

School of The Ohio State University

By

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* * * * *

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ABSTRACT

The purpose of the present study was to understand teachers’ thinking about mentoring. The study examined what teachers metaphorically conceptualize with respect to mentoring. To achieve the goals, two research questions were asked: (1) What were the teachers’ metaphors concerning mentoring that are used in their everyday language, and (2) what were the major concepts perceived by the teachers’ use of metaphors regarding mentoring? Contemporary metaphor theories were employed in this study. The present study examined the issues regarding the metaphors for mentoring that teachers unconsciously use in their everyday languages. Specifically, the study addressed how teachers conceptualized mentoring through various metaphors in terms of the relationship between mentor and student teachers.

Ten elementary school teachers in an urban setting in Ohio participated in the study. Using a maximum variation sampling method, teachers who had diverse backgrounds with respect to teaching and mentoring experiences were selected. The years of teaching experiences of the participants ranged from two to approximately 30 years. The number of student teachers in the yearlong program of a university in Ohio who the participants mentored ranged from zero to twelve.
Interview was the primary method for data collection. Interviews were conducted once for each participant in December 2002 and once more in April 2005. Each interview lasted for 30 to 45 minutes. Interview protocols consisted of three parts: background questions, main theme (good mentor), and sub-themes (mentoring strategies, contents of mentoring, lessons from mentoring, and model teacher as a mentor). Each theme (main theme and sub-themes) contained a series of core questions; probing questions were asked during the interviews when necessary. The procedures for data analysis included: identification of target area, identification of metaphors, reconstructing metaphorical concepts, and interpretation. Issues of validity and trustworthiness were also addressed.

The findings of the present study revealed that the participating teachers used various metaphors about mentoring and student teaching. Those metaphors pertained to the relationship of mentor and student teachers and can be grouped into two categories: *Interpersonal Relationship Metaphors* and *Power Relations Metaphors*. The *Interpersonal Relationship Metaphors* were: student teachers as family members, mentor as a friend, mentor as an owner, mentor as a container, and mentor as a builder whereas the *Power Relations Metaphors* were: mentoring as a journey, student teaching as a discovery, mentoring as a symbiotic relationship, mentoring as sharing, mentoring as giving, student teaching as war, mentor as a coach, mentor as a big sister, mentor as a
flexible entity, mentor as a container, mentor as a builder, mentoring as watching, student teacher as a caterpillar, student teacher as an entertainer, student teacher as a flower, mentor as a gardener, and mentor as a nurturing nature.

These metaphors were related to two concepts of a good mentor: a non-authoritative mentoring approach and professional development. The metaphor analysis revealed that the participants believed, by permitting student teachers to implement their own teaching styles, a more equal and interpersonal relationship with student teachers should be established and would produce more successful mentoring. Moreover, the metaphor analysis demonstrated that this non-authoritative mentoring approach was intertwined with mentor teachers’ professional development in a sense that mentor teachers could learn from student teachers and have a better chance to renew their (mentor teachers) teaching.

The present study has implications for inservice teacher education. Based on the assumption that metaphor is a reflection of daily actions and thoughts, awareness of conceptual metaphors can facilitate mentor teachers’ reflection on their mentoring purposes, processes, and practices. In essence, this reflection contributes to resolving problems, articulating discrepancies between ideal and current mentoring situations, and ultimately, enabling the mentors to grow in their views and actions of mentoring. Another
implication of the present study is the importance of establishing a strong, healthy relationship between mentor and student teachers for successful mentoring. Establishing interpersonal relationships and sharing the decision making process with student teachers may improve mentoring practices.
Dedicated to my parents, sisters, wife, and Jesus
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CHAPTER 1

INTRODUCTION

Since Aristotle’s era, the concept of metaphor has been falsely understood as separate from everyday language or literal meanings. Lakoff (1993) criticized this separation:

In classical theories of language, metaphor was seen as a matter of language, not thought. Metaphorical expressions were assumed to be mutually exclusive with the realm of ordinary everyday language: everyday language had no metaphor, and metaphor used mechanism outside the realm of everyday conventional language. …… [However,] the locus of metaphor is not language at all, but in the way we conceptualize one mental domain in terms of another. (p. 202, 203)

Many other scholars regarded metaphor in a similar manner (e.g., Efron & Joseph, 2001; Lakoff & Johnson, 1980; Ortony, 1993; Steen, 1999; Taylor, 1984, Weade & Ernst, 1990). That is, this comparatively new insight about the concept of metaphor yielded the notion that metaphors reflect peoples’ perspectives and, by analyzing their metaphors, it is possible to see how people view the world. Based on this approach, the present study
assumed that teachers’ everyday language on mentoring contained many metaphorical expressions and, by analyzing the metaphorical expressions, teachers’ mentoring perspectives could be uncovered.

Though there have been metaphor studies in education (e.g., Berliner, 1990; Bullough, 1991), two aspects have remained relatively unexamined. Most educational studies on metaphors focused on one of the following three areas: the participants’ own development of metaphors (metaphors that were suggested by the participants in the studies reviewed), researchers’ suggestions and the participants’ selections of metaphors (researchers showed a few metaphors and the participants selected their favorite metaphors), or authors’ suggestions of metaphors (metaphors that were suggested by the authors). However, these studies did not address metaphors that are unconsciously used in everyday language, as described by Lakoff and Johnson (1980). Secondly, there were various educational research studies that dealt with metaphors in K-12 education, special education, counseling education, and teacher education; however, there was a lack of metaphor studies that focused on mentoring. If one is to grant that metaphors in everyday language reflect one’s perspective, the examination of teachers’ metaphors—which are embedded in their everyday language—could reveal their perspectives on mentoring.

Purpose of the Study

Conceptual metaphors unconsciously structure the metaphor users’ thinking and give meanings to their actions (Lakoff, 1992; Lakoff & Johnson, 1980; Paine, 1995). Also, Lakoff (1993) maintained, “our everyday behavior reflects our metaphorical understanding of experience” (p. 204). These notions implicate that metaphor is closely
related to both thought and behavior. The purpose of the present study was to understand teachers’ conceptualization of mentoring via metaphors and to make informed their possible subsequent behaviors. The present study aimed at examining how teachers metaphorically conceptualize mentoring. Because the metaphors were spoken in the context of mentoring, it was highly possible that the metaphors inherently conveyed preconceived thinking about mentoring.

Significance of the Study

This study extended the literature on mentoring, specifically in the use of metaphors in mentoring situations. It also extended the literature on metaphor studies in education; among the existing studies, only a few were based on the metaphors of everyday language. It was of interest to link teachers’ metaphors embedded in ordinary languages to mentoring situations. Previous metaphor studies on mentor teachers or student teachers tended to focus on consciously developed metaphors. However, the focus here was on unconsciously used metaphors.

Conceptual metaphor theorists (e.g., Lakoff & Johnson) have argued that metaphors reflect the way in which the user’s conception is structured. If a mentor teacher finds that his or her unconsciously used metaphors do not correspond to his or her desired and ideal mentoring beliefs, the mentor teacher might speculate on what should be done to improve the concept and practice of mentoring or use of metaphors.
Research Questions

Two major research questions were of interest: (1) What were the teachers’ metaphors concerning mentoring that are used in their everyday language of mentoring, and (2) What were the major concepts perceived by the teachers’ use of metaphors regarding mentoring?

Definitions of Terms

Mentor: Mentor or mentor teacher means the P-12 teachers who work with student teachers. Although cooperating teacher is an interchangeable term, only mentor or mentor teacher was consistently used in this study.

Student teacher: student teacher or mentee means the M.Ed. students who were placed in P-12 schools for student teaching. Although these student teachers were addressed as interns at the time of student teaching, student teacher was consistently used in this study.

Synopsis of Chapter 2

Chapter 2 introduces various types of metaphors – implicit, explicit, embedded, suggestive, generative, conduit, structural, orientational, and ontological.

Implicit and explicit metaphors are distinguished by one attribute: whether or not the referent exists in the same clause or sentence (Steen, 1999). For example, in the sentence, ‘Today’s students go to the factory everyday,’ the word, factory, is an implicit metaphor because what factory represents is not expressed in the sentence. In contrast,
the literal referent of ‘Today’s schools are factories’ is schools. This case is an explicit metaphor. However, the distinction of reference does not separate the former and latter from embedded metaphors such as ‘my teacher is always open to new ideas.’

Embedded metaphors are not traditionally defined as metaphors; normally one is not even aware of them, because most of them have become common colloquialisms. ‘My teacher is always open to new ideas’ shows how a metaphor can be used, but also how the usage can be hidden. Embedded metaphors more or less include the concepts of conduit metaphor, structural metaphor, orientational metaphor, and ontological metaphor because all of these concepts share embeddedness as an important characteristic. The concept of embedded metaphor was created in this study because no single metaphor type containing the embeddedness of all metaphor types mentioned above has been constructed by scholars. Suggestive metaphors are intentionally used by the metaphor users. It is an answer to the question What is your metaphor? Therefore, users are very aware of their uses of metaphors. Suggestive metaphors in many cases are explicit metaphors such as My metaphor, teacher is a gardener, should be modified now. The concept of suggestive metaphor was also created in this study because suggestive metaphors need to be contrasted with embedded metaphors in that suggestive metaphors do not have embeddedness.

Generative metaphors are the metaphors that invent new ideas (Schön, 1993). For example, the metaphor a teacher is a gardener spawns other metaphors such as school is
a garden and students are plants. Educators and policymakers develop new ideas about how to cultivate students. In this way, the concept of generative metaphor is important in that it directly accounts for how metaphors can affect a particular area.

Conduit metaphors imply that human thoughts and feelings can be transferred from one person to another person or a place (Reddy, 1993). For example, ‘That knowledge finally came through to me’ is expressed as if the entity of knowledge can move through a human body (specifically, the head).

Structural metaphors assume that one concept is metaphorically structured in terms of another (Lakoff & Johnson, 1980). For example, in metaphors such as my student teacher always challenges me, but I have been the winner every time we fight, mentoring is structured in terms of fighting.

Orientational metaphors have a spatial orientation such as up-down, in-out, forward-backward, and so on (Lakoff & Johnson, 1980). As indicated by a teacher’s social status has not been as high as it should be, social status is regarded as one that can be up or down in American culture.

Ontological metaphors are used when an abstract concept is regarded as a concrete entity that has discrete boundaries (Lakoff & Johnson, 1980). In She finally found happiness in her current workplace, the abstract concept of happiness is treated as if it can be found somewhere. Conduit metaphors, structural metaphors, orientational metaphors, and ontological metaphors share the notion that metaphorical expressions can be deeply embedded in everyday discourse; one may not be aware of them unless the metaphors are systematically analyzed and emphasized to the users.
Chapter 2 also contains a review of metaphor studies in education. A few studies on embedded metaphors were reviewed - most of them were conducted by Munby (1986, 1987). His research was largely influenced by Lakoff and Johnson; in addition, his works confirmed the concepts of ontological metaphor and conduit metaphor. Examples include lesson as a moving object (*I finally got to the point*), grades as commodities (*They get a C on the test*), and learning and mind as a conduit metaphor (*The kids are picking up the information*).

In contrast to the research on embedded metaphors, research on suggestive metaphors has been more extensively and diversely conducted in the field of education. As a result, many metaphors have been suggested by the authors and the participants such as: teacher as supervisor of complex technology (Cohen & Lotan, 1990), teacher as executive (Berliner, 1990), teaching and learning as problem solving (Shuell, 1990), classroom as a learning setting (Marshall, 1990a), and so on. In addition to a review of metaphor studies, Chapter 2 includes a review of research on mentoring.

Synopsis of Chapter 3

Chapter 3 pertains to research methods, design, and analysis. Some of the features of a qualitative study that Eisner (1998) suggested are presented. First, *the self as an instrument* feature was adopted in the present study. This feature was grounded in the perspective that experiences are subjective and that researchers perceive and interpret what they experience. This feature enables a researcher to use his or her subjectivity. Second, *attention to particulars* was also taken into account. This means that a qualitative
researcher does not (or may not) aim at generalizing the results but pays attention to local themes. The feature of attention to particulars was relevant because this study focused on the personal uses of particular metaphors rather than on the generalization of the results.

A research genre called *language and communication* (Marshall & Rossman, 1999) was adopted by the present researcher. The *language and communication* genre usually deals with speech events and interactions. Microanalysis is a primary research method in the *language and communication* genre. With this focus, the researcher is more interested in the language the participants used. In addition, the study included features of *individual lived experiences* as well. In the *individual lived experiences* genre, researchers attempt to “capture the deep meaning of experience in their own words” (Marshall & Rossman, 1999, p. 61). In-depth interviews are the primary research method in the *individual lived experiences* genre.

Chapter 3 also described the characteristics of the participants. The participants of the present study consisted of ten elementary school teachers in an urban setting in Ohio. All ten teachers were involved in weekly teacher meetings coordinated by a university professor and an elementary school teacher, who was not a participant in this present study. The participants were diverse in terms of the amount of teaching experiences: two years to approximately 30 years.

Interviews were the primary research methods for data collection. For the interviews, the *standardized open-ended interview* approach (interview questions and orders of the questions were established with rigor in advance) and the *interview guide* approach (interview themes were established in advance but new questions could be
asked during interviews) were adopted, both of which were developed by Patton (2002). In this study, interview questions were prepared in advance, but some related probing questions were also asked. The types of interview questions were mostly experience and behavior questions “to elicit behavior, experiences, actions, and activities” (Patton, 2002, p. 349-350) and opinion and value questions – “questions aimed at understanding the cognitive and interpretive processes of people” (Patton, 2002, p. 350). These questions pertain to “opinions, judgments, and values” (Patton, 2002, p. 350). Feeling questions to get information about emotion (Patton, 2002) and background/demographic questions to identify characteristics of interviewees (Patton, 2002) were included as well.

The interviews for data analysis were conducted during the 2002-2003 and 2004-2005 school years. Twelve elementary school teachers participated in the first interview. The twelve teachers were interviewed once during the 2002-2003 school year. Ten of the twelve teachers were interviewed once more during the 2004-2005 school year. The data for the two teachers who did not participate in the second interview were not used for the present study. Typically, each interview lasted for 30-45 minutes.

The procedures for data analysis were, according to Schmitt (2005): (1) to determine a target area or a topic (i.e., mentoring), (2) to identify metaphors – what is a metaphor and what is not, (3) to reconstruct metaphorical concepts – to group each metaphor into some concepts, and (4) to interpret the metaphorical concepts.

To ensure validity and trustworthiness, the present researcher adopted Kvale’s (1995) seven stages of interview investigation: thematizing, designing, interviewing,
transcribing, interpreting, verifying, and reporting and Schmitt’s (2005) trustworthiness steps for a metaphor study. For ethical reasons, all participant names are pseudonyms and audio-taping was conducted with the participants permission.

Synopsis of Chapter 4

Chapter 4 reported the metaphors that were discovered in the teachers’ language about mentoring. This chapter detailed the conceptual metaphors regarding mentoring that were embedded or suggested in the participants’ interview transcripts. The first research question of the present study was: What are the teachers’ metaphors concerning mentoring that are used in their everyday language? In investigating this research question, the present researcher found twenty metaphors. Five of the metaphors were related to interpersonal relationships between mentor and student teachers; these metaphors emphasized affective aspects or personality issues involved in mentoring. Seventeen of the metaphors were related to power relations between mentor teachers and student teachers; these metaphors highlighted if and to what extent mentor teachers share in the decision-making processes with student teachers. Two metaphors (mentor as a container and mentor as a builder) belonged to both the Interpersonal Relationship group and Power Relations group. The results were as follows:

Interpersonal Relationship Metaphors: student teachers as family members, mentor as a friend, mentor as an owner, mentor as a container, and mentor as a builder

Power Relations Metaphors: mentoring as a journey, student teaching as a discovery, mentoring as a symbiotic relationship, mentoring as sharing, mentoring as giving, student teaching as war, mentor as a coach, mentor as a big sister, mentor as a
flexible entity, mentoring as watching, student teacher as a caterpillar, student teacher as an entertainer, student teacher as a flower, mentor as a gardener, mentor as nurturing nature, mentor as a container, and mentor as a builder.

Examples of the metaphors found in the interview transcripts included the following:

- Mentoring as a journey (You’re trying to lead them down this little path.)
- Mentoring as giving and student teaching as receiving (That teacher gave me the opportunity to do some student teaching.)
- Mentor as a family member (I want them [student teachers] to feel like these [students in the classroom] are their children.)
- Mentor as an owner (My mentor always has this calm, coolness about him.)
- Mentor as a flexible entity (I am flexible and try to let them do new things.)
- Mentor as a container (I need to be open about that.)
- Mentor as a builder (Building that relationship with the student teachers is important.)
- Mentoring as watching (See what they feel comfortable doing.)
- Student teacher as flower (It [student teacher] needs to grow and you [mentor teacher] need to keep nurturing and nourishing it.)
The second research question was: *What are the major concepts perceived by the teachers’ use of metaphors regarding mentoring?* The twenty aforementioned metaphors are directly or indirectly related to the concepts of a non-authoritative mentoring approach and enhanced professional development. A non-authoritative mentoring approach is one in which mentor teachers permit student teachers to implement their (student teachers) own ideas in the classroom. Most participants of the present study preferred this non-authoritative mentoring approach and perceived it as a major issue in mentoring. In other words, the participants revealed their beliefs that less hierarchical structure and good interpersonal relationships would produce successful mentoring. The metaphors in the *Power Relations* group reflected this issue well. Professional development was another major issue that the participants perceived via metaphors. The metaphors showed that the mentor teachers utilized mentoring as a chance to enhance their professional development by learning new ideas from student teachers. A non-authoritative mentoring approach and mentoring as professional development seemed to be interrelated concepts in that mentor teachers learned from student teachers by permitting them (student teachers) to implement new ideas in classrooms.

In addition to the metaphors and their relation to non-authoritative mentoring and professional development, other meaningful findings across the participants were discussed in Chapter 4. First, the present study revealed that the participants used a variety of metaphors to express a similar concept. For example, the teachers used various metaphors to express their concerns about building reciprocal, equal relationships with student teachers allowing the student teachers try their own approaches. Second, there
were cases in which different participants used the same metaphor to express different concepts. For instance, one mentor used *mentoring as giving* metaphors to express her willingness to let the student teachers try their own ideas (as in *giving opportunity*), whereas another mentor used the same metaphor to express her willingness to provide student teachers with more active supervision.

Synopsis of Chapter 5

Chapter 5 explored how the metaphor findings of this study compared with those from the related literature, reviewed in Chapter 2. The metaphors that were theorized by scholars, such as implicit, explicit, generative, conduit, structural, orientational, and ontological metaphors, were discussed as they were reflected in the findings of the present study. The metaphor studies in the field of education supported the findings of this study.

The present study has several implications for teacher education. First, the contemporary metaphor theories can be applied to inservice teacher education for mentor teachers. If teachers become more aware of the metaphors they use to conceptualize mentoring, the concrete and familiar source domains that metaphors provide can promote better understanding of what it means to be a mentor. This awareness may lead teachers to reflect on their mentoring practices, and perhaps to better evaluate the differences between their actual mentoring and their ideal mentoring experience. Second, the findings of the present study showed that the metaphors of the participants were about relationships with student teachers. This finding indicates that building a strong, healthy relationship between mentor teachers and student teachers is essential to produce
effective mentoring. Specifically, the fact that the majority of the metaphors were *Power Relations Metaphors* strongly implies that mentor teachers’ willingness to share the decision-making processes with student teachers may facilitate student teacher learning and thereby, successful mentoring. Third, the data revealed that willingness of mentor teachers to share the decision-making processes with student teachers can benefit mentor teachers themselves. By establishing less hierarchical relationships and being willing to permit student teachers to try out their own ideas in the classroom, mentor teachers can enhance their own professional development.

**Limitations of the Study**

The limitations of the study mainly relate to generalizability. The present study is a qualitative study that focused on particular teachers in a particular setting. Therefore, the results of the study may not be the same as those of studies conducted with different teachers in different settings. In addition, the participants of the study were not randomly selected. This can cause generalization issues, thus limiting the scope and applicability of the findings.

Another limitation was that the research method relied solely on interviews. Other methods such as observations and journal writing can provide more comprehensive views on metaphors in mentoring. These methods could not be used in the present study due to time constraints.

There was also a limitation in selecting participants. Although the participants’ background as a teacher and a mentor were taken into account, the participant pool was limited to teachers involved in the weekly meetings. Therefore, how other teachers from
different schools and districts as well as teachers, who were not involved in the weekly meetings, metaphorically conceptualize the concept of mentoring was not studied. Also, there might have been a taping effect. That is, participants might have been affected by the fact that they were recorded. When research participants are recorded, they might provide statements that are different from those in situations in which they are not recorded.
CHAPTER 2

LITERATURE REVIEW

One of the benefits of examining metaphors is to uncover personal and practical knowledge that people pass on through metaphor usage (Efron & Joseph, 2001). Metaphors, as a vehicle to represent teachers’ thinking, are very useful but a complicated concept to research. To obtain satisfactory results, related literature is reviewed to establish a framework and to present a better understanding of metaphor-related issues.

The purpose of this chapter is to show how various aspects and perspectives on metaphors are interrelated. First, language is examined; specifically, how it functions in relation to human thinking and action. Definitions and metaphor meanings, as they relate to the construction of meaning in life, are addressed. In addition, the partiality of metaphors, a concept in the field, is explained.

Second, various concepts of metaphors are introduced and used to analyze various usages, components, and effects. Concepts of implicit and explicit metaphors, embedded and suggestive metaphors, generative metaphor, conduit metaphor, structural metaphor, orientational metaphor, ontological metaphor, and metonymy are examined.
Third, how the concept of metaphor has been applied to educational research is explored. Some of the research studies are empirical and others are not, but they are all significant to understanding educational approaches related to metaphor.

Background Knowledge

This section addresses introductory knowledge about metaphors; specifically, how language functions as a part of life. Then, the reasons metaphors are important in life are discussed. Finally why metaphors should be carefully selected and used due to their partiality is examined.

Functions of language. Language is not merely a means to describe things. Language and experience are so interactive that it is difficult to discern what is language from what is experience; language sometimes, creates its own reality (Hawkes, 1972; Taylor, 1984). Language plays a critical role in people's lives and reflects their experiences. Taylor (1984) pointed out the importance of language use:

Language did not simply reflect changes in certain underlying realities. Instead, through its classifications, categorizations, and codes, it helped to constitute these realities, shaping our experiences and judgments about the nature of phenomena, providing not merely the currency of circulation and exchange, but the values symbolized by that currency. (p. 4)

In this sense, the language use of a person can be a predictor of that person's subsequent actions that are based on his or her values embedded in his or her language. Lakoff and Johnson (1980) argued in a similar vein that:
… our conceptual system is not something we are normally aware of. In most of the little things we do every day, we simply think and act more or less automatically along certain lines. Just what these lines are is by no means obvious. One way to find out is by looking at language. Since communication is based on the same conceptual system that we use in thinking and acting, language is an important source of evidence for what that system is like. (p. 3)

Metaphor Importance. There exists a long-standing belief that metaphors are a figurative, linguistic expression and an abnormal ornament of use of language. That is to say, it was (or still is) a common belief that metaphors are not a part of ordinary everyday language but rather a figurative, decorative, and beautifully-refined, unique language function that can found in literature, especially in poems and allegories. In this narrow sense, metaphors are regarded as only literary devices (Gannon, 2001).

However, the origin of the word metaphor is from the Greek word metaphora, which is comprised of meta meaning ‘over’ and pherein meaning ‘to carry’ (Hawkes, 1972; Ortony, 1975). Therefore, according to Hawkes (1972), metaphor means “a particular set of linguistic processes whereby aspects of one object are ‘carried over’ or transferred to another object, so that the second object is spoken of as if it were the first” (p. 1). There is no implication of language decoration in the meaning of the word metaphor.

An increasing number of scholars, from various fields, acknowledge that metaphor is a reflection of conceptualizing one thing in terms of another in written or spoken discourse (Efron & Joseph, 2001; Lakoff & Johnson, 1980; Steen, 1999; Taylor,
Metaphors are also used to explain abstract concepts as if they are not abstract but concrete (e.g., Knowledge is food.). In contrast with the common belief that metaphor is more or less poetic, Lakoff and Johnson (1980) argued that metaphors are so pervasive that they govern thought, action, and conceptual systems. Given that people think, act, and interpret their experiences relying on their conceptual systems, their thoughts, actions, and experiences are inevitably metaphorical because conceptual systems per se are metaphorical.

Metaphors mirror how people view the world and why they act in a particular manner. As a reflection of individual and cultural morality and values, it is through metaphors that people reveal and better relate conscious and subconscious concepts. Metaphors are an essential tool to conceptualize complex and ambiguous concepts concretely and sometimes, visually (Dickmeyer, 1989). For example, when asked what teaching is, the answer is difficult to formulate, let alone relate, because teaching is an abstract concept. But when teachers are asked about their metaphors for teaching, the teachers might answer, ‘teaching is like conducting an orchestra.’ Through this, a listener can better understand the abstract concept by visualizing the image of a conductor and an orchestra. Weade and Ernst (1990) also emphasized the visualization aspect of metaphors. They argued that because metaphors provide visual images that deliver perspectives and frames of reference, people make sense of complicated concepts and construct meanings through metaphors. In addition, by examining metaphors, one can
understand how meanings and realities are constructed, and how metaphorical codes can
give meaning to action, and can predict subsequent actions. (Efron & Joseph, 2001;

Far from being a mere linguistic decoration, metaphor comes to be seen as a
ubiquitous feature of our thinking and our discourse, the basis of the conceptual
systems by means of which we understand and act within our worlds. (p. 5)

In this sense, a dictionary definition of a metaphor such as “a figure of speech in which a
word or phrase that ordinarily designates one thing is used to designate another, thus
making an implicit comparison” (American Heritage Dictionary, 1994, p. 524) does not
contain the core aspect of metaphor because it fails to support the conceptual functions of
metaphors and the embeddedness of metaphors in people’s lives. That is, metaphor
functions not only to designate a thing, but also, much more importantly, to influence and
reflect how one views the world and how he thinks and acts. The point here is that
dictionaries do not contain the deeper roles that metaphors play in people’s lives.

Uncovering the nature and aspects of metaphor is a difficult goal to achieve.
Metaphor is a complicated concept and contains many aspects. Partiality of metaphor is
one example. In the next section, how metaphors can only convey parts of a targeted
concept is explained.

Partiality of metaphor. There is an aspect about metaphor that is important to
consider. When people say A (targeted concept) is B (metaphor), it should be considered
that A and B are different entities or concepts. That is, B does not account for all of the
aspects of A. B just emphasizes a particular part of A. Thus, metaphor functions as
colored glasses in that people using a particular metaphor focus on particular aspects that fit into the metaphor (Efron & Joseph, 2001; McGowan & Powell, 1990).

For this reason, selection and use of metaphors should be cautious (Earl, 1995; Efron & Joseph, 2001; Lakoff & Johnson, 1980; Weade & Ernst, 1990). To address this problem, Weade and Ernst (1990) suggested that a set of metaphors portraying actors (teachers, students, etc.), artifacts (materials, contents, etc.), social arrangement (grouping, placement), a multiplicity of roles and goals, and the nature of the social context should be taken into account to describe adequately classroom life. Because one metaphor does not show a complete picture – partiality of metaphor, one particular metaphor may explain one thing but hide another. For example, when one adopts a metaphor, argument as war, he or she highlights the contentious (i.e., areas of disagreement) aspects of an argument, but he or she may lose sight of cooperation (i.e., areas of agreement) aspects in that an argument is not always conducted against enemies of war (Lakoff & Johnson, 1980).

Lakoff and Johnson (1980) described the partiality of structural metaphors as follows:

… if we look at structural metaphors of the form A is B (e.g., LOVE IS A JOURNEY, THE MIND IS A MACHINE, IDEAS ARE FOOD, AN ARGUMENT IS A BUILDING), we find that B (the defining concept) is more clearly delineated in our experience and typically more concrete than A (the defined concept). Moreover, there is always more in the defining concept than is carried over to the defined concept. Take IDEAS ARE
FOOD. We may have *raw facts* and *half-baked ideas*, but there are no *sautéed, broiled, or poached ideas*. In *AN ARGUMENT IS A BUILDING* only the foundation and outer shell play a part in the metaphor, not the inner rooms, corridors, roof, etc. We have explained this asymmetry in the following way: the less clearly delineated (and usually less concrete) concepts are partially understood in terms of the more clearly delineated (and usually more concrete) concepts, which are directly grounded in our experience. (pp. 108-109)

Therefore, a concept is only partially structured by a metaphor and can be extended only in particular ways (Lakoff & Johnson, 1980).

**Various Metaphors**

In this section, various kinds of metaphors are discussed. First, the focus is on how implicit and explicit metaphors are defined and how they function in sentences and in contexts. Then, the concepts of embedded and suggestive metaphors are discussed. Finally, the concepts of metonymy, generative metaphors, conduit metaphors, structural metaphors, orientational metaphors, and ontological metaphors are examined.

**Implicit and explicit metaphors.** Steen (1999) distinguished implicit metaphors and explicit metaphors, arguing that not all metaphors can be directly observed and recognized in phrases, clauses, or words. Typical metaphors are comprised of a primary subject (a characterized part) and a secondary subject (a characterizing part) and imply similarities between them. But, in some cases, a characterized part is missing in a sentence. For example, “I walked to the place where the bird of prey hung ready over the
“crowd” (Steen, 1999, p. 82) is an implicit metaphor because it does not contain the primary subject. On the contrary, “The helicopter is a bird of prey” (Steen, 1999, p. 83) is an explicit metaphor because the sentence contains both the primary subject and the secondary subject. According to Steen, “if the referent is not expressed in the same clause” (p. 84) it is an implicit metaphor. In contrast, “if the literal referent of a metaphor is expressed in the same clause” (p.84), it is an explicit metaphor.

Context of metaphors. Black (1962) argued that “recognition and interpretation of a metaphor may require attention to the particular circumstances of its utterance” (p. 29). This remark seems to emphasize the significance of the context of metaphors. Given that metaphor is not only a figurative expression but also a reflection of a conceptual structure, one can explore how specific people in specific contexts conceptualize things that they face by analyzing both explicit and implicit metaphors. In many cases, because there is no referent anywhere in the text, one can infer the meanings from the context (Steen, 1999).

The following sentence is an example: ‘We are loud at home.’ Whether or not this is a metaphor is not clear because there is no consideration of a context. If the speaker talks about the place where she is actually living, it would be unlikely to be a metaphor. However, if the person is referring to football games in her hometown that could mean something like, ‘We cheer the Packers loudly in our Green Bay stadium;’ this sentence is a metaphor. Hence, metaphors should be inferred from the context; when there is no referent in the text, the metaphor is implicit.
The role of context is critical in explicit metaphors as well as in implicit metaphors to infer the meanings of the metaphors. As in the example below, a sentence may not clearly reveal the context. In this case, listeners understand the context surrounding – not within – the sentence, and the sentence can deliver the meaning that the speaker intends to deliver. In the following example, “His wife is his mother!” (sentence cited from Miller, 1993, p. 381), reader inferences may be akin to something like ‘What? Did this man marry his mother? I can’t believe it!’ To make this statement a metaphor, a context needs to be given to the reader. The context for the metaphor can be within the sentence or outside, for example, probably prior to, the sentence. If the context is given outside the sentence, that sentence would become a metaphor as in: ‘Did you see his wife? His wife is just as talkative as his mother. Both women can talk all day long. Moreover, his wife very much resembles his mother. They look like mother and daughter! Personalities, looks, just everything! His wife is his mother! Maybe he just wanted to marry a woman like his mother!’ Now the sentence, “His wife is his mother!” is surrounded by ample contextual information and becomes an explicit metaphor (the referent wife exists in the sentence).

The context of the metaphor can also exist within the sentence as in: ‘Ha Ha Ha! His wife is so his mother!’ Two things were added to the original sentence - Ha Ha Ha and so. Whether Ha Ha Ha is considered as being within or outside the sentence, there is no specific information regarding why his wife is (like) his mother here. Nevertheless, it can be recognized that his mother is actually not his wife. There are some things that affect people’s recognition in this example. First, in American culture or subcultures (or
in most other cultures), a man marrying his own mother is not an amusing event. Readers recognize that the sentence is a kind of a joke and notice that his wife and his mother are two different women. That is to say, readers know that the statement “His wife is his mother” is not true in reality but it is true in the speaker’s perception of noticing the resemblances of two women, which is a form of explicit metaphor.

Second, the idiomatic expression so played a contextual role within the sentence for readers to recognize that the sentence is a metaphor, that is, his wife is not his mother. English speakers know what it means when a person says It's sooooo John! John must have done something funny that he is likely to do, but other people are not so likely to do. When two potentially different people (in theory, readers do not know yet they are different people) are mentioned in a sentence (e.g., his wife and his mother) and mediated by so as in this case, readers can imagine that two different people have similar, specific behaviors frequently enough to confirm the speaker’s perception of their resemblance.

Hence, not only in implicit metaphors, but also in explicit metaphors, contexts play an important role in one’s understanding of metaphors. Although there must be a referent in explicit metaphors, contexts still help people notice that what they heard or read was a metaphor. However, there is always a danger that the contextual role is underestimated when analyzing explicit metaphors.

Embedded metaphor. The term, here, is used to indicate the idea that metaphors are so widespread in everyday life that people are even unaware of their usage, in both hearing and formulating them. In contrast with the concept of metaphor as a literary expression, the concept of embedded metaphors regard metaphors as embedded in
everyday life; analyzing them makes them overt. In a research setting, embedded metaphors can be contrasted with suggestive metaphors, which are explained in the following section.

Whereas suggestive metaphors are the products of direct questions about metaphors (e.g., an answer to the question *What is your metaphor for mentoring?*) or the academic authors suggesting metaphors for academic or educational purposes (e.g., a journal article with a phrase *I suggest teacher as an executive metaphor*), embedded metaphors are acquired without asking the direct questions about metaphors. In this sense, embedded metaphors and suggestive metaphors apparently are related to research methods. On the other hand, these concepts of metaphors also have something to do with research purposes or researchers’ interests. In other words, it depends on whether researchers aim at finding embedded metaphors in everyday conversations or they are suggesting appropriate metaphors for particular concepts. In order to discuss the concept of embedded metaphor in more detail, it is necessary to examine the work of Lakoff and Johnson.

Lakoff and Johnson’s book, *Metaphors We Live By* (1980), is not only influential in general metaphor studies, but is also a major inspiration for the research of the present study. Lakoff and Johnson argued that metaphors are pervasive in individual’s thoughts and actions, which are structured metaphorically. Because individuals metaphorically base their everyday experiences on their conceptual systems, they conduct their lives according to what their own metaphors dictate as reasonable and rational. However,
because conceptual systems are not obvious, the language that individuals use must be analyzed to make these systems explicit. By doing so, it becomes possible to grasp how and why individuals think and act in the way they do.

One of the most influential aspects of Lakoff and Johnson (1980) for the present study is their attention to ordinary words that are normally not regarded as metaphors. Some examples are “I don’t have the time to give you” (p. 8) and “The meaning is right there in the words.” (p. 11). Because typical metaphors are in the form of A is B (love is oxygen, for example), individuals tend to think they can easily recognize metaphors. However, metaphors are not always overt. In many cases, individuals do not realize that they are using metaphors everyday. Have, give, and even in as in the above examples are evidence of metaphors that are embedded in everyday language. Without a deep understanding of metaphors, it is hard to notice that the phrase I don’t have the time to give you is a metaphor. Given that individuals traditionally recognize metaphors as poetic and figurative, this kind of sentence looks too normal to be perceived as a metaphor. Once admitting that these ordinary languages are metaphors, it seems to be impossible to communicate without using metaphors. This is why Lakoff and Johnson argued that individuals live by metaphors. Communication that is devoid of metaphors is simply inconceivable.

Claiming that “the essence of metaphor is understanding and experiencing one kind of thing in terms of another” (p. 5), Lakoff and Johnson (1980) described what they call structural metaphor by demonstrating that people in America think and talk about argument in terms of war. “He attacked every weak point in my argument” (p. 4) is one
of many examples. According to Lakoff and Johnson, “we talk about arguments that way because we conceive of them that way – and we act according to the way we conceive of things” (p. 5). Also, as shown in this example, “metaphors come out of our clearly delineated and concrete experiences and allow us to construct highly abstract and elaborate concepts” (p. 105). This illustrates that human conceptual systems can be understood by investigating language that is unavoidably metaphorical. In addition, Lakoff and Johnson (1980) argued that human word choices that make metaphorical sense are not random. Rather, metaphors are unconsciously, yet systematically, selected by individuals. That is, metaphors can be categorized by the patterns of their use (conduit metaphors, orientational metaphors, etc., for example).

Lakoff and Johnson (1980) found that metaphorical concepts are coherently systematic and that language conveys metaphorical concepts that are correspondingly systematic and coherent. For example, metaphors like time is money (that flat tire cost me an hour.), time is a limited resource (you’re running out of time.), and time is a valuable commodity (I lost a lot of time when I got sick) form a single system in that money is a limited resource, and limited resources are a valuable commodity.

Suggestive metaphor. Suggestive metaphor is like a direct, less embedded answer to the question, What is your metaphor for … ? It is not like the attempt to find embedded metaphors and their meanings in substantial data. If a researcher remarks, I think a metaphor for teacher is … and it should be applied to teacher education because… this is a suggestive metaphor. Also, if a researcher asks teacher education students to develop
their own metaphors and reports the results, then the metaphors suggested by the students are suggestive metaphors. Suggestive metaphors are more similar to developing or creating metaphors than discovering and interpreting metaphors.

**Metonymy.** Although metonymy is not exactly a kind of metaphor, the concept is introduced here because metonymy is also pervasive in language expressions. Metonymy performs similar functions as a metaphor. Lakoff and Johnson (1980) defined metonymy as “one entity to refer to another that is related to it” (p. 35), and they view the function of metonymy as “to conceptualize one thing by means of its relation to something else” (p. 39). Individuals organize thoughts and actions in terms of metonymic concepts (Lakoff & Johnson, 1980).

Metonymy differs from the personification of ontological metaphors (see the ontological metaphor section below) in that metonymy does not imply human qualities. Consider this example, “The *ham sandwich* is waiting for his check” (Lakoff & Johnson, 1980, p. 35). There is another kind of metonymy that refers to the part for the whole, which is usually called synecdoche, as can be seen in “We need a couple of *strong bodies* for our team” (Lakoff & Johnson, 1980, p. 36).

Lakoff and Johnson (1980) explained how metaphor and metonymy are different and how metonymy can function like a metaphor:

Metaphor and metonymy are different *kinds* of processes. Metaphor is principally a way of conceiving of one thing in terms of another, and its primary function is understanding. Metonymy, on the other hand, has primarily a referential function, that is, it allows us to use one entity to
stand for another. But metonymy is not merely a referential device. It also serves the function of providing understanding. For example, in the case of the metonymy THE PART FOR THE WHOLE there are many parts that can stand for the whole. Which part we pick out determines which aspect of the whole we are focusing on. When we say that we need some good heads on the project, we are using “good heads” to refer to “intelligent people.” The point is not just to use a part (head) to stand for a whole (person) but rather to pick out a particular characteristic of the person, namely, intelligence, which is associated with the head.

Thus, metonymy serves some of the same purposes that a metaphor does, and in somewhat the same way, but also allows one to focus more specifically on certain aspects of what is being referred to. It is also like a metaphor in that it is not just a poetic or rhetorical device. Metonymic concepts (such as THE PART FOR THE WHOLE) are part of the ordinary, everyday way people think, act, and talk.

Similar to metaphors, metonymy reflects cultural aspects. For example, “We need some new faces around here” (Lakoff & Johnson, 1980, p. 37) in which face refers to a person is a common metonymy used in the American culture. Similar to metaphor, metonymy occurs systemically in the language, not by chance or as an isolated event (Lakoff & Johnson, 1980). Examples such as “We don’t hire longhairs” (THE PART FOR THE WHOLE), “He’s got a Picasso in his den” (PRODUCER FOR PRODUCT), “The gun he hired wanted fifty grand” (OBJECT USED FOR USER), etc. (Lakoff & Johnson, 1980, p. 38) reflect cultural systematcity. That is why when individuals think of
a Picasso picture, they also think of his historical influences, fame, life, and so on (Lakoff & Johnson, 1980). Metonymy influences people’s thoughts and actions by relating one thing to another.

Just as in the cases of metaphor, metonymy is grounded in individuals’ experiences and is more distinguishable than metaphor because of its more direct involvement in physical and causal relations (Lakoff & Johnson, 1980). The PRODUCER FOR PRODUCT metonymy such as “He’s got a Picasso in his den” is an example that shows its causal and physical association between producer (Picasso) and product (a Picasso’s painting), which is what people experientially recognize (Lakoff & Johnson, 1980, p. 38).

**Generative metaphor.** Schön (1993) suggested that generative metaphors distinguish two traditional perspectives on metaphors. One is the perspective that metaphor is so poetic that it needs to be explained in ordinary language. The other tradition regards metaphor as a reflection of people’s views on the world, that is, “how we think about things, make sense of reality, and set the problems” (p. 137). In this latter sense, metaphor is “a product … and a process by which new perspectives on the world come into existence” (p. 137).

Schön (1993) focused on social policy issues, arguing that problem setting is more critical than problem solving. He believed that metaphors play a critical role in problem setting situations. For example, a government officer may see slums as blight whereas another government officer may see it as community. These different problem
settings can lead to different social policies about slums, that is, different problem solutions. The former person may want to destroy the slum whereas the latter may want to preserve it.

According to Schön (1993), “every instance of metaphor making is an instance of SEEING-AS, though not every instance of SEEING-AS involves metaphor making” (p. 141). For instance, *teaching as gardening* can have restructured meanings and understandings so that *teaching* and *gardening* share some similar features. Thus, *teaching* can be explained in terms of *gardening*. This SEEING-AS perception would be called a *mistake* if there were no restructured metaphorical meaning.

Generative metaphors generate a new perception of a feature. In Schön’s (1993) view, *painting as masking surface* is not a generative metaphor because it does not generate a new perception and does not invoke invention. On the contrary, *paintbrush as pump* is a generative metaphor because it gives rise to a new perception by comparing two totally different things – paintbrush and pump. The key characteristic is that generative metaphors can generate new ideas that have not been thought before. In this sense, Schön’s generative metaphors are more than linguistic expressions. Paintbrush-as-pump is linguistically a metaphor but it is not just a linguistic expression in that it leads to the invention of new paintbrushes.

Schön (1993) also argued that there is a process in establishing generative metaphors as can be seen in the following:

It would be seriously misleading, then, to say that, in making their generative metaphor, the researchers first “noticed certain similarities between paintbrushes
and pumps.” For the making of generative metaphor involves a developmental process. It has a life cycle. In the earlier stages of the life cycle, one notices or feels that A and B are similar, without being able to say similar with respect to what. Later on, one may come to be able to describe relations of elements present in a restructured perception of both A and B which account for the preanalytic detection of similarity between A and B, that is, one can formulate an analogy between A and B. Later still, one may construct a general model for which a redescribed A and a redescribed B can be identified as instances. To read the later model back onto the beginning of the process would be to engage in a kind of historical revisionism. (p. 142-143)

Another interesting aspect of generative metaphor is its normative aspect (Schön, 1993). In housing policy issues, for example, the urban housing situation can be seen as a disease on one hand, and also can be seen as a natural community. What lies beneath here is the meanings of the metaphors (urban housing situation as a disease or urban housing situation as a natural community) and the likely consequent actions following the metaphors. Disease is negative, should be avoided, cured, and even destroyed forever, hopefully. In contrast, a natural community is one that should be preserved and protected. Thus, in a generative metaphor, the government that defines the urban housing as a disease is likely to destroy the urban community and renew it. A government that sees the urban housing as a natural community is likely to support the community. Generative metaphors in many cases are normative and evaluative, and determine what should be
done next. “The obviousness of what is wrong and what needs fixing” (p. 148) is the culmination of generative metaphor’s normative aspect in the field of social policy (Schön, 1993).

Generative metaphors may lie deep at the bottom of awareness that individuals may be unaware of them. For example, according to Schön (1993), when individuals define an urban housing situation as a disease, they may not use terms such as disease or health. The idea that it is a disease may be embedded in the story that they tell rather than overtly saying urban housing situation is a disease. Therefore, to be aware of generative metaphors, it is imperative to discover the metaphorical expressions that embed main metaphors such as urban housing situation is a disease by carefully paying attention to the story that the tellers speak (Schön, 1993).

Conduit metaphor. According to Reddy (1993), English speakers possess the notion that human thoughts and feelings can be transferred from one person’s head to another. In this transferring, language functions as a conduit because language is regarded as a vehicle to carry human thoughts and feelings. Based on this idea, Reddy categorizes conduit metaphors in two frameworks – major framework and minor framework. Then he sorted these frameworks into four and three sub-categories, respectively.

In the first sub-category of the major framework, conduit metaphor implies that “human language functions like a conduit enabling the transfer of repertoire members from one individual to another” (Reddy, 1993, p. 189). The following sentences serve as examples:
You know very well that I gave you that idea.

Your real feelings are finally getting through to me.

Apparently, your reasons came through to John quite clearly. (p. 189)

Because language is conceptualized as a conduit to transfer human thoughts and feelings, what successful human communicators, good speakers for example, achieve is the successful transfer of their thoughts and feelings to the listeners.

Second, conduit metaphors imply that “in speaking or writing, humans place their internal repertoire members within the external signals, or else fail to do so in unsuccessful communication” (Reddy, 1993, p. 190). A few examples include:

It is very difficult to put this concept into words.

Harry always fills his paragraphs with meaning.

Never load a sentence with more thought than it can carry. (p. 190)

According to Reddy (1993), English speakers tend to unconsciously perceive words as an object like a box. As a box is, so is a word – an object that has an inside and an outside. Individuals can put their thoughts and feelings into words, and the thoughts and feelings can stay inside the words. This is represented well in the first example above, “It is very difficult to put this concept into words.” In this example, words is regarded as an object that has an inside like a box. Therefore, individuals can put a concept into a box called words.
Third, conduit metaphor implies that “signals convey or contain the repertoire members, or else fail to do this in unsuccessful communication” (Reddy, 1993, p. 191). Some examples are:

His words carry little in the way of recognizable meaning.

His letter brought the idea to the French pilots.

In terms of the rest of the poem, your couplet contains the wrong kind of thoughts.

If words have an inside and an outside as a box does, human thoughts and feelings inside a box called *words* can be carried from one space to another (Reddy, 1993). This is well represented in the first example, “his words carry little in the way of recognizable meaning.”

Fourth, conduit metaphors imply that “in listening or reading, humans find repertoire members within the signals and take them into their heads, or else fail to do so in unsuccessful communication” (Reddy, 1993, p. 192). Some examples are:

I have to struggle to get any meaning at all out of the sentence.

Can you really extract coherent thoughts from that incredible prose?

John says that he cannot find your idea anywhere in the passage.
In order to achieve successful communication, not only should speakers or writers clearly transfer their ideas, but also listeners or readers should be successful in catching and understanding what speakers or writers mean. The first example, “I have to struggle to get any meaning at all out of the sentence” demonstrates what the reader should do for communication. This imaginary reader is struggling to communicate with the imaginary writer because the reader has difficulty in extracting meanings from the sentence that the writer wrote. Therefore, the ability of the readers or listeners to obtain meaning is an essential part of communication.

Whereas these subcategories of the major framework of conduit metaphors assume that ideas exist in the human head, or in words spoken or written, the subcategories of the minor framework of conduit metaphor show that the ideas flow into or are picked up from the spaces between human heads (Reddy, 1993). The conduits, in the case of the minor framework, do not link one head to another, but link a head to a space that contains ideas (Reddy, 1993). In other words, the minor framework does not deal with transferring meanings between speaker and listener or writer and reader. Instead, it is assumed that there exists an imaginary space. A person moves his or her thoughts to this space, the person picks up thoughts that exist in this space, or the thoughts just exist in the space, independent of the person. The three sub-categories of the minor framework of conduit metaphor and their respective exemplary sentences are described below.
First, the conduit metaphor implies that “particularly when communications are recorded or delivered in public, speakers and writers eject their repertoire members into an external ‘space’” (Reddy, 1993, p. 194).

I feel some responsibility to get these ideas out where they can do some good.
Can you set the latest idea down on paper and let me take it?
Interesting ideas just seem to pour out of that man. (pp. 194-195)

Second, conduit metaphor implies that “repertoire members are reified in this external ‘space’, independent of any need for living humans to think or feel them” (Reddy, 1993, p. 195).

That concept has been floating around for centuries.
In America, ideas tend to move from the coasts to the middle of the country.
These feelings found their way to the ghettos of Rome. (pp. 195-196)

Third, conduit metaphors imply that “the reified repertoire members may or may not find their way once again into the heads of living humans” (Reddy, 1993, p. 197).

You have to absorb Plato’s ideas a little at a time.
It was a notion I didn’t catch right away.
Different ideas come to mind in a situation like this. (p. 197)
Conduit metaphors are so pervasive in English language use that English speakers can hardly avoid them. According to Reddy (1993), even seemingly neutral sentences like, “communicate your feelings using simpler words” (p. 177) can be easily translated into a conduit metaphor by using a simple word like in; that is, “communicate your feelings in simpler words” (p. 177). If English speakers try to avoid every conduit metaphor in their language use, their expressions would become clumsy or fail to deliver the subtle nuances of the intended meanings. In short, conduit metaphors are an essential and often employed part of English communication.

Lakoff and Johnson (1980) criticized Reddy’s concept of conduit metaphor, saying that it fails to account for the cases where contexts should be taken into account to determine the meaning of a sentence. They suggested two cases and cited them as objections to the conduit metaphor classification.

First, suppose a host says to a guest “please sit in the apple-juice seat” (Lakoff & Johnson, p. 12). If a third-party person does not know that there are three orange juices and one apple juice on the breakfast table, the sentence has no meaning to the third-party person. Second, the sentence, “We need new alternative sources of energy” (Lakoff & Johnson, p. 12) would have different meanings depending on whether an oil company owner says it or when an environmentalist says it. Despite Lakoff and Johnson’s criticism of conduit metaphors, conduit metaphor is an important concept in that it reveals how English speakers tacitly use metaphors in everyday languages.
**Structural metaphor.** The structural metaphor concept is perhaps Lakoff and Johnshon’s (1980) foremost metaphor classification. They defined it as “cases where one concept is metaphorically structured in terms of another” (p. 14). Because the concept of structural metaphor was outlined in an earlier section, the description below is brief.

As shown in the definition of structural metaphor, in American culture, the concept of argument is often metaphorically structured in terms of the concept of war. That is to say, when people argue, they act as if they are conducting a war by attacking, defending, and counterattacking. This is present during and after arguments and, furthermore, participants usually claim that they did attack, defend, and counterattack – but only metaphorically (Lakoff & Johnson, 1980). This is evidence of a structural metaphor, in that it structures people’s ways of thinking, acting, speaking, and understanding. By looking into the structural relationship of the concept of argument and the concept of war, one can understand that “the concept is metaphorically structured, the activity is metaphorically structured, and, consequently, the language is metaphorically structured” (Lakoff & Johnson, 1980, p. 5).

Eubanks (2005) found that people who are against economic globalization use metaphors such as *corporate rule* or *corporations are governments* (p. 177). For example, a remark such as “the transnational elites who will run the institutions [WTO, IMF, and so forth] that will *rule the world*” reflects this type of metaphor (Eubanks, 2005, p. 178). Interestingly, Eubanks (2005) found that advocates of economic globalization use totally different metaphors such as “open markets,” “capital flow,” “the
invisible hand,” and so on, instead of “corporate rule” or “market fundamentalism” (p. 188). This implies that different perspectives can lead to different metaphors, and different metaphors can reflect different perspectives.

Goldwasser (2005) examined so-called classifiers of the ancient Egyptian scripts and found that ancient Egyptians used the classifiers as metaphors. The classifiers were used to write scripts but ancient Egyptians did not use the classifiers when they speak. For example, monkey-shaped and bull-shaped classifiers (these classifiers were written but not spoken in actual lives) indicated anger. Monkey-shaped classifiers meant that somebody expressed his anger loudly, but the angry man was not dangerous, just as monkeys are loud but not dangerous. In contrast, bull-shaped classifiers meant that somebody expressed his anger quietly, but the angry man was dangerous, as bulls are quiet but dangerous once they are angry. Monkey and bull represent the ancient Egyptians’ metaphors for angry but the monkey and the bull were not a verbal part of the word (Goldwasser, 2005). This is an important finding because the fact that those metaphors (classifiers) were not actually spoken indicates that metaphors reside at the conceptual level rather than the linguistic level. Goldwasser declared this finding as confirming “the independence of metaphor from language” (p. 104).

El-Sawad (2005) examined the metaphors about employees’ working and organizational life in their companies. He found some patterns to their metaphorical expressions: spatial and journey metaphors (“reached a dead end”, p. 28), competition metaphors (“rat race”, p. 28), horticultural metaphors (“grow in an organization”, p. 29), lifer/imprisonment metaphors (“like doing a prison sentence”, p. 30), military metaphors
(“on my parachute”, p. 31), school-like surveillance metaphors (“nice boy to
management”, p. 32), Wild West metaphors (“slotted in as a sort of outsider”, p. 33), and
nautical metaphors (“rock the boat”, p. 34).

**Orientational metaphor.** An orientational metaphor “organizes a whole system of
corcepts with respect to one another” (Lakoff & Johnson, 1980, p. 14). These metaphors
have “spatial orientation: up-down, in-out, front-back, on-off, deep-shallow, central-
peripheral” (Lakoff & Johnson, 1980, p. 14). According to Lakoff and Johnson (1980),
“these spatial orientations arise from the fact that we have bodies of the sort we have and
that they function as they do in our physical environment” (p. 14). They give an example
of this type of metaphor as HAPPY IS UP, which engenders a sentence such as “I’m
feeling up today” (p. 14).

Lakoff and Johnson (1980) argued that orientations observed in metaphors are
coherently based on people’s cultural and physical experiences, and do not occur by
chance. Some examples that Lakoff and Johnson (1980) provided are:

**CONSCIOUS IS UP; UNCONSCIOUS IS DOWN**

Get *up*. Wake *up*. I’m *up* already. He *rises* early in the morning. He *fell* asleep. He
*dropped* off to sleep. He’s *under* hypnosis. He *sank* into a coma.

Physical basis: Humans and most other mammals sleep lying down and stand up
when they awaken. (p. 15)
HEALTH AND LIFE ARE UP; SICKNESS AND DEATH ARE DOWN

He’s at the peak of health. Lazarus rose from the dead. He’s in top shape. As to his health, he’s way up there. He fell ill. He’s sinking fast. He came down with the flu. His health is declining. He dropped dead.

Physical basis: Serious illness forces us to lie down physically. When you’re dead, you are physically down. (p. 15)

The influences of cultural experiences on metaphorical expressions can be seen even in the fields of natural sciences and engineering. A term such as “high-energy particles” is the result of a cultural aspect “more is up” (Lakoff & Johnson, 1980, p. 19), which is an orientational metaphor. The more is up metaphor is deeply rooted in Western culture, but other cultures may have a different orientation about more.

Lakoff and Johnson (1980) elucidated the relationship between culture and metaphor by arguing that “the most fundamental values in a culture will be coherent with the metaphorical structure of the most fundamental concepts in the culture” (p. 22). They showed how cultural values establish a coherent system with orientational metaphorical concepts by arguing that “more is better” is consistent with MORE IS UP and GOOD IS UP (p. 22). Concepts such as MORE IS BETTER, MORE IS UP, and GOOD IS UP seem to be deeply rooted in American culture as expressed in “my income rose last year” (more is up) and “he does high-quality work” (good is up) (Lakoff and Johnson, 1980, p. 22).
16). In contrast, because LESS IS BETTER is not a typical concept in American culture, the examples of LESS IS BETTER are hardly found to be coherent with other concepts similar to MORE IS UP or GOOD IS UP.

Different cultures may have different priorities on values. Certain religious minority subcultures emphasize LESS IS BETTER instead of MORE IS BETTER, which is a more mainstream value. However, if they share another mainstream value VIRTUE IS UP, then MORE IS BETTER is still valid in their communities because probably the more virtue, the better to them (Lakoff & Johnson, 1980). This can happen because “the value system is both internally coherent and, with respect to what is important for the group, coherent with the major orientational metaphors of the mainstream culture” (Lakoff & Johnson, 1980, p. 24). However, the use of orientational metaphors such as ACTIVE IS UP and PASSIVE IS DOWN could be reversed, depending on cultural differences, because “the major orientations up-down, in-out, central-peripheral, active-passive, etc., seem to cut across all cultures, but which concepts are oriented which way and which orientations are most important vary from culture to culture” (Lakoff & Johnson, 1980, p. 24).

Lakoff and Johnson (1980) maintained that no metaphor can be adequately expressed without an experiential basis. They explained the role of experiential basis as follows:

The role of the experiential basis is important in understanding the workings of metaphors that do not fit together because they are based on different kinds of experience. Take, for example, a metaphor like UNKNOWN IS UP; KNOWN IS
DOWN. Examples are “That’s up in the air” and “The matter is settled.” This metaphor has an experiential basis very much like that of UNDERSTANDING IS GRASPING, as in “I couldn’t grasp his explanation.” With physical objects, if you can grasp something and hold it in your hands, you can look it over carefully and get a reasonably good understanding of it. It’s easier to grasp something and look at it carefully if it’s on the ground in a fixed location than if it’s floating through the air (like a leaf or a piece of paper). Thus UNKNOWN IS UP; KNOWN IS DOWN is coherent with UNDERSTANDING IS GRASPING. (p. 20)

In addition to the internal systematicity of orientational metaphors that has been introduced so far, there is an external systematicity. For example, the GOOD IS UP metaphor has something to do with well-being and, therefore, metaphors such as HAPPY IS UP, HEALTH IS UP, and ALIVE IS UP are coherently and systematically related to the GOOD IS UP metaphor (Lakoff & Johnson, 1980). In general, some orientational metaphors - “high status”, for example - are such indispensable metaphorical expressions in American culture that people can hardly replace them with another type of metaphor (Lakoff & Johnson, 1980, p. 18).

**Ontological metaphor.** Ontological metaphorical expressions occur when people try to impose substances and entities with discrete boundaries on abstract concepts such as events, activities, emotion, and so on (Lakoff & Johnson, 1980). According to Lakoff and Johnson (1980):
Understanding our experiences in terms of objects and substances allows us to pick out parts of our experience and treat them as discrete entities or substances of a uniform kind. Once we can identify our experiences as entities or substances, we can refer to them, categorize them, group them, and quantify them – and, by this means, reason about them. (p. 25)

Ontological metaphors tend to fulfill human purposes such as referring, quantifying, identifying aspects, identifying causes, setting goals and motivating actions (Lakoff & Johnson, 1980). Examples are as follows:

**Referring**

My *fear of insects* is driving my wife crazy.

We are working toward *peace*.

**Quantifying**

It will take *a lot of patience* to finish this book.

There is so *much hatred* in the world.

**Identifying aspects**

The *ugly side of this personality* comes out under pressure.

The *brutality of war* dehumanizes us all.
Identifying causes

The *pressure of his responsibilities* caused his breakdown.

He did it out of *anger*.

Setting goals and motivating actions

He went to New York to *seek fame and fortune*.

I’m changing my way of life so that I can *find true happiness*.

(Lakoff & Johnson, 1980, pp. 26-27)

Ontological metaphors immerse individuals in a culture and make them think of things in terms of those metaphors as if they are direct descriptions of phenomena (Lakoff & Johnson, 1980).

Lakoff and Johnson (1980) further suggested that a “container metaphor” is a kind of ontological metaphor. As the human body is a kind of a container that has an inside and an outside with a bounded surface, individuals view other things as a container, even if they do not have an inside and an outside. Once a thing is viewed as a container, quantification of the substance in the container follow as in “there’s a lot of land in Kansas” (Lakoff & Johnson, 1980, p. 30). Also, even substance, itself, in a container, can be a container. This is exemplified by the example of a person entering a tub of water. Here, water is not merely a substance in a container, (i.e., a tub), but also a container itself that contains a person who gets into it (Lakoff & Johnson, 1980).
Lakoff and Johnson (1980) found that, in ontological metaphors, people’s visual fields are regarded as a container. In other words, individuals’ fields of visions are confined to what they can see, and thus, are defined as a territory of their visions, that is— a container (Lakoff & Johnson, 1980). “The ship is coming into view” and “he’s out of sight now” are among the representative examples of this metaphorical concept (Lakoff & Johnson, 1980, p. 30).

Ontological metaphors are used to grasp events, actions, activities, and states; events and actions as objects; activities as substances; and states as containers (Lakoff & Johnson, 1980). In these following examples, the text within brackets are added by the present researcher.

Are you going to the race? [event as object]

There was a lot of good running in the race. [activity as substance]

He’s coming out of the coma. [state as container] (Lakoff & Johnson, 1980, pp. 31-32)

How did you get into window-washing as a profession? [activity as substance and container for the action]

I put a lot of energy into washing the window. [activity as container for the energy or materials required for the activity] (Lakoff & Johnson, 1980, p. 31)

Examples such as “his theory explained to me the behavior of chickens raised in factories” (p. 33) and “inflation is eating up our profits.” (p. 33), show that people think

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of nonhuman entities in terms of human characteristics. Lakoff and Johnson (1980) called this ‘personification’ and treatment as “the most obvious ontological metaphors” (p. 33). Personification is an ontological metaphor in that humans are an entity that has an inside and an outside.

Lakoff and Johnson (1980) further argued that “inflation” (in the above example) implies not only “a person” but also “an adversary.” Therefore, individuals come to think of how to cope with inflation, and many ideas emerge. This aspect of personification seems to be similar to Schön’s (1993) generative metaphors. His example of “paintbrush as pump” suggested that when the two different concepts (paintbrush and pump) are related to each other to make a metaphor, other ideas emerge (“how can we make paint evenly come out through the brushes?” instead of “how can we make paint smoothly attached to the wall?”). Ontological metaphors and generative metaphors have something in common in that both metaphors can produce many subsequent ideas. As the “inflation as an adversary” metaphor produce ideas of how to cope with inflation, so does the “paintbrush as pump” metaphor produce ideas of how to make a good paintbrush.

In general, personification leads people to look at different aspects of a person according to different metaphors. Because personification is based on human characteristics, it helps individuals understand abstract and complicated concepts easier (Lakoff & Johnson, 1980).
Summary. Table 1 summarizes and illustrates the concepts and examples of various kinds of metaphors.

<table>
<thead>
<tr>
<th>Metaphor Types</th>
<th>Concepts</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implicit metaphor</td>
<td>Metaphors in which literal referent is not expressed in the same clause</td>
<td>Today’s students go to a factory everyday.</td>
</tr>
<tr>
<td>Explicit metaphor</td>
<td>Metaphors in which literal referent is expressed in the same clause</td>
<td>Today’s schools are factories.</td>
</tr>
<tr>
<td>Embedded metaphor</td>
<td>Metaphors that are embedded in everyday discourse. Usually speakers are not aware of their use of the metaphor</td>
<td>My teacher is always open to new ideas.</td>
</tr>
<tr>
<td>Suggestive metaphor</td>
<td>Metaphors that are suggested by speakers who intentionally use the metaphors. Usually suggestive metaphors are the form of answer to “what is your metaphor?”</td>
<td>My metaphor, “Teacher is a gardener” should be modified now.</td>
</tr>
<tr>
<td>Generative metaphor</td>
<td>Metaphors that generate new ideas. Usually characterizing part and characterized part are two totally different entities.</td>
<td>If teachers (characterized part) are gardeners (characterizing part), then school is a garden, and students are plants. Therefore, teachers need to come up with ways to cultivate the students.</td>
</tr>
<tr>
<td>Conduit metaphor</td>
<td>Metaphors that indicate human thoughts and feelings are transferred from one person to another</td>
<td>That knowledge finally came through to me.</td>
</tr>
<tr>
<td>Structural metaphor</td>
<td>Cases where one concept is metaphorically structured in terms of another</td>
<td>My student teacher always challenges me. But I have been the winner every time we fight. (mentoring in terms of fighting)</td>
</tr>
<tr>
<td>Orientational metaphor</td>
<td>Metaphors that have spatial orientation such as up-down, in-out, etc.</td>
<td>A teacher’s social status has not been as high as it should be.</td>
</tr>
<tr>
<td>Ontological metaphor</td>
<td>Metaphors that are formed when abstract concepts are imposed substances and entities with discrete boundaries</td>
<td>She finally found happiness in her current workplace.</td>
</tr>
</tbody>
</table>

Table 1: Concepts of various metaphors
The concepts of implicit and explicit metaphors have been suggested by Steen (1999). According to Steen (1999), explicit metaphor referred to the metaphors in which “referent is expressed in the same clause” (p. 84) whereas implicit metaphor referred to the metaphors in which “referent is not expressed in the same clause” (p. 84). For example, a sentence like “today’s schools are factories” is an explicit metaphor because the referent, *schools* is clearly stated in the sentence. In contrast, “today’s students go to factories everyday” is an implicit metaphor because the referent of factories, ‘schools’ is left out.

Generative metaphor was also a concept developed by Schön (1993). These tend to generate other related metaphors and lead to a new “invention” as seen in the *paintbrush as a pump* metaphor and the *urban housing situation as a natural community* metaphor. *Invention* can be an invention of a new object (i.e., an improved paintbrush), a new perspective of policymaking (i.e., preserving urban communities), or others. One of the reasons why generative metaphors can bring about a new invention is because a generative metaphor and its referent are normally regarded as having totally different characteristics. Therefore, once people can see one thing in terms of another that is regarded as totally different, new perceptions can be generated. For example, if individuals see teachers as gardeners, which are regarded as two totally different and unrelated concepts, then, other metaphors can be generated such as school as garden, students as plants and so on. A new perception on education is generated as well as new
subsequent educational practices (e.g., new lesson plans, new classroom management plans, and so on). Teachers will come up with ideas of how they cultivate students as they cultivate plants.

Conduit metaphors, developed by Reddy (1993), referred to the concept that human thoughts and feelings can be, like a conduit, transferred from one person or place to another person or place. For example, “she got most of the ideas from him” implies that the ideas were transferred from him to her. Conduit metaphors, like Lakoff and Johnson’s various metaphors, are so pervasive that the metaphor users are not aware of their uses.

Lakoff and Johnson (1980) introduced three kinds of metaphors: structural metaphor, orientational metaphor, and ontological metaphor. Structural metaphor is probably Lakoff and Johnson’s (1980) core concept. It can be defined as “cases where one concept is metaphorically structured in terms of another” (p. 14). According to Lakoff and Johnson (1980), metaphor is not merely a part of language but a reflection of systematically structured thoughts. For example, expressions such as defend your position and his bombastic attack in the debate demonstrate that the concept of argument is structured in terms of the concept of war (Lakoff & Johnson, 1980). Orientational metaphors have “spatial orientation such as up-down, in-out, front-back, on-off, deep-shallow, central-peripheral” and so on (Lakoff & Johnson, 1980, p. 14). Expressions such as high social status and low-achieving students demonstrate that concepts such as social status and achievement level are thought in terms of height. Ontological metaphors tend to bestow on abstract concepts an entity that has discrete boundaries (Lakoff & Johnson,
1980). For example, a sentence such as *She finally found happiness* treats an abstract and invisible concept like *happiness* as if it has a concrete and visible object that can be *found*.

Embedded and suggestive metaphors were created by the present researcher for this study. Embedded metaphor refers to metaphors that are so embedded in everyday language that people are not usually aware of their uses. Because of this unawareness, embedded metaphors tend to be overlooked until they are analyzed. Most conduit metaphors, structural metaphors, orientational metaphors, and ontological metaphors are likely to be embedded metaphors. Suggestive metaphors are metaphors that the users are clearly aware of. In the present study, the typical suggestive metaphors are the participants’ answers to the interview question, “What is your metaphor for mentoring?” In these cases, the participants develop their own metaphors and are clearly aware of their uses of these metaphors.

**Educational Metaphors**

Whether they are empirical or not, studies on metaphors in the field of education mainly deal with how to extract educational implications from the metaphors that participants use and the metaphors that researchers suggest. These research studies might help educators or teacher educators develop more responsive teaching and learning agendas for the actual processes of teaching and learning.

*Embedded metaphors in education.* Munby’s works are discussed here because they are very well known in the area of metaphor studies. Munby’s (1986, 1987) research on metaphor and teacher knowledge were heavily influenced by Lakoff and Johnson.
Munby and Russell (1990) argued that metaphor provides a theoretical device for grasping the nature of teacher knowledge and for revealing their worldview and construction of reality.

In one of his studies, Munby (1986) developed his own research method; some of these elements are taken and used in the present study (for example, copying and pasting metaphors in the transcripts and establishing metaphor concepts, see Data Analysis section). He examined interview transcripts from a teacher. Initially, he made a list of metaphorical expressions that the teacher used, and then he wrote memos about his impressions on the metaphorical figures. He called the former a concordance file and the latter a memo file.

Munby (1986, 1987) conducted a data analysis, based on Lakoff and Johnson’s notions of metaphors. That is, he found that teacher’s speech was characterized by ontological metaphors, orientational metaphors, and conduit metaphors. As a result, “lesson as a moving object” (“I might move on”, “I finally got to the point”, for example) was a common trend found in the analysis. “Moving object” metaphor was a frequent example in Lakoff and Johnson’s (1980) book when they explicated how time is metaphorically structured in this culture (time is a moving object as in “as time goes by”). “Grades as commodities” (“they get a ‘C’ on the test,” p. 209) is another example of Lakoff and Johnson’s influence on Munby’s (1986) research. Commodity was also Lakoff and Johnson’s (1980) idea in time is a valuable commodity. Another example is Munby’s (1986) “learning and mind as a conduit metaphor” (“the kids picking up the information,” p. 208).
Munby and Russell (1990) also conducted a comparison of two teachers’ different metaphors and their different approaches to teaching. One teacher repeatedly used a metaphorical expression *share* whereas the other teacher emphasized *scientific process* as the primary metaphor. This research showed that different metaphors can represent different thinking and actions.

Munby’s research has important implications for metaphor studies. Whereas many education researchers who are engaged in metaphor studies have suggested their own explicit metaphors (Berliner’s “teacher as executive,” for example), Munby paid attention to teachers’ ordinary words that have been typically overlooked even by metaphor researchers. The present researcher’s only criticism of Munby’s works is the difficulty of understanding the implications of his research. Although Munby reported a metaphor such as “lesson is a moving object” similar to Lakoff and Johnson’s “time is a moving object,” the educational implications are not clear. To address this limitation, Munby should have focused more on questions such as ‘Where is the moving object going?’ ‘How is the moving object moving?’ ‘Why does the teacher construe a lesson as a moving object?’ and so on. Although Munby probed for some meanings of metaphors when he reported that a teacher used metaphors to describe what happened in her lesson (for example, “you *push* a little quicker,” Munby, 1986, p. 205, *italics* added), it seems that his primary focus was to confirm Lakoff and Johnson’s frameworks for metaphors.

Wickman and Campbell (2003) explored embedded metaphors in a similar vein. They analyzed a video-recorded counseling situation that occurred between Carl Rogers
and his client. The researchers found metaphors similar to those of Lakoff and Johnson (1980) – for instance, metaphors such as “self as a container” (for example, “I feel there are some areas that I don’t even accept” (Wickman & Campbell, 2003, p. 18).

Campbell and Enckell’s (2005) research focused on ontological metaphors. They examined what metaphors were used by violent individuals and how these metaphors functioned. For example, a violent person who had a mental illness described the situation in which he hit his wife as “I just wanted to punch the blackness.” Based on Freud’s theory (1985), the researchers argued that the violent person’s experiences (experience is an abstract concept) of poor parenting during his childhood became a concrete reality. In other words, this person perceived an abstract concept (experiences of poor parenting) as a concrete black object. When he punched the blackness (this blackness was actually his wife), he perceived that he was punching a black object of poor parenting.

**Suggestive metaphors in education.** Suggestive metaphor studies have been more dominant in education (e.g., Cochran-Smith, 2002; Wright, Sundberg, Yarbrough, Wilson, & Stallworth, 2003). The metaphors in suggestive metaphor studies tend to be suggested by researchers or research participants rather than embedded in everyday language.

Bullough (1991) exemplified three metaphors from his teacher education students, which were husbandmanship, devil’s advocate, and butterfly. He found that the metaphors were related to students’ prior experiences, and these metaphors changed as time went by. Bullough (1991) argued that, given that teacher education’s impact on the
students are limited because of the students’ prior experiences, metaphor study in the program could help students to become engaged in critical reflection. Bullough, with Stokes (1994), applied the concept of metaphor to another group of teacher education students and uncovered a few individual students’ metaphors such as teacher as bridge builder and teacher as artisan. In addition to these metaphors, Bullough, with Stokes (1994), found that almost every student’s conception of teaching had been changed over the course of teacher education.

Cohen and Lotan (1990) suggested a metaphor, teacher as supervisor of complex technology. That is, they carefully distinguished their metaphor from the supervisor of factory workers who “carry out routine, predictable, and boring tasks (p. 83)” by contrasting it with supervisors in science and engineering labs. According to them, differentiation (the number of elements that operate at the same time) and uncertainty (the degree of predictability and routineness of the tasks) are two dimensions of technology. As differentiation and uncertainty of tasks in a classroom increase (the tasks are not routine but more complex in this case), it is more possible and desirable that the teachers delegate more authority over the students and conduct less direct supervision.

Berliner’s (1990) metaphor of teacher is the teacher as executive. He disagreed with the criticism of his metaphor from other scholars such as Fenstermacher and Soltis (1986), who characterized the metaphor as behavioristic. Berliner (1990) argued that this resulted from the misunderstanding of more humanistic aspects of contemporary management theories. He matched 10 characteristics of executive’s functions with teacher’s functions - planning, communicating goals, regulating the activities of the
workplace, creating a pleasant environment for work, educating new members of the work group, articulating the work of the site with other units of the system, working with other adults, motivating work group members, evaluating performance, and developing budgets. As teachers conduct these functions, they play an executive’s role.

Shuell (1990) suggested a metaphor for teaching and learning as problem solving and argued that this metaphor is more representative of the concept of teaching and learning rather than teaching and learning as memorization of facts or activities.

Marshall (1990a) developed a metaphor, the classroom as a learning setting, with cognitive and social constructivist views of learning. By contrasting his metaphor with the classroom as a work and play setting, he argued that learning could be more meaningful. According to Marshall, there are three essential qualities of learning settings, which are goals, satisfaction, and authority relationship. Whereas the goal is to produce tangible outcomes in work settings, learning itself becomes the goal in learning settings. Therefore, the acquisition and construction of knowledge and skills for self-development is encouraged. As for the quality of satisfaction in learning settings, satisfaction comes from pride of self-development resulting from construction or acquisition of new knowledge, whereas in work settings, monetary reward and increased status are the sources of satisfaction. Finally, in learning settings, authority relationship is less hierarchical and based on the concept of shared knowledge and learners’ active role as a knowledge constructor, whereas in working settings, authority relationship is based on status, held expertise, and assurance of efficient production.
Imagery and metaphors. Teachers’ images and metaphors for teachers, students, teaching, or other education-related objects are worth investigating in that they make sense of complicated teaching and learning processes and help teachers reflect on their practices (Earle, 1995). Although most of the metaphor studies in education are related to this objective, the studies in this area are unique in that the researchers tend to ask the participants to choose among drawing images or written metaphors that the researchers presented.

Weade and Ernst (1990), by showing preservice teachers a photo, focused on not only what preservice teachers referred to in their metaphors but also to that which they did not refer. That is, the researchers found that, whereas preservice teachers’ images of classroom life included involvement with children, participation, and step-by-step procedures of activities, they did not refer to what children were learning.

Inbar (1996) investigated the images and the metaphors about students, teachers, principals, and schools generated by K-12 students and teachers and compared the differences of metaphors between the students and the teachers. He elicited from the data the educational prison metaphor. When Inbar asked about the image of students, captive student is the most common image among students whereas most of the educators selected flora and fauna, which describes students as plants and animals to cultivate. Students tended to see themselves as prisoners whereas the educators’ images of students were receptacle, clay in the potter’s hand, and flora and fauna.

Ben-Peretz et al. (2003), showing seven caricature-type drawings of occupations (shopkeeper, animal trainer, judge, puppeteer, entertainer, animal keeper, and conductor),
asked two groups of teachers (30 teachers for each group) in vocational schools to choose one drawing that fits best their image of a teacher. The two groups of teachers were divided into teachers of high-achieving students and teachers of low-achieving students. The researchers considered the impact of the different teaching contexts on their images. They found that the contexts did significantly matter. Most teachers of high-achieving students tended to more emphasize the “conductor” roles, one of which is to harmonize the entire class and to be responsible for the individual performances as well. In contrast, many teachers of the low-achieving students tended to choose the “animal keeper” role. The teachers in this group who chose animal keeper emphasized the caretaking role of teachers rather than a supporting role to promote students’ academic achievements.

Other works about metaphors in education. Metaphors suggest how to interpret situations and their relevant solutions, should a problem exist (Shuell, 1990). Marshall (1988) argued that metaphors indicate theories about the nature of objects and events. In other words, when an event occurs, the nature of the event, which is usually not clearly observable, could be understood by exploring metaphors. In this sense, it can be said that metaphors link theory to practice. In educational settings, teachers can benefit from understanding the nature of objects and events. By exploring metaphors, teachers can be more aware of who they are and what they think. Moreover, teachers can reflect on how they represent or modify their thoughts and actions on beliefs, contradictions, and dilemmas that they face in schools and classrooms. Thus, metaphor can provide teachers with a way to reflect on their practice and help them improve it (Munby & Russell, 1990).
Sfard (1998) insightfully elicited two metaphors from research on learning and warned of the danger of choosing only one. According to Sfard, most of the research on learning embeds either one of the two metaphors for knowledge or learning – acquisition metaphors or participation metaphors. In acquisition metaphors, knowledge is regarded as a property that can be transferred or carried and learning is to obtain that property. In contrast, in participation metaphors, learning is like becoming a member of a community by participation as Lave (1988) suggested. Sfard (1998) maintained that these two seemingly conflicting metaphors are not incompatible although researchers tend to ignore one of them. Sfard (1998) asserts:

When a theory is translated into an instructional prescription, exclusivity becomes the worst enemy of success. Educational practices have an overpowering propensity for extreme, one-for-all practical recipes. ……

Because no two students have the same needs and no two teachers arrive at their best performance in the same way, theoretical exclusivity and didactic single-mindedness can be trusted to make even the best of educational ideas fail. …… It seems that the most powerful research is the one that stands on more than one metaphorical leg. An adequate combination of the acquisition and participation metaphors would bring to the fore the advantage of each of them, while keeping their respective drawbacks at bay. Conversely, giving full exclusivity to one conceptual
framework would be hazardous. …… A metaphor that has been given hegemony serves as an exclusive basis for deciding what should count as “normal” and what is “anomalous,” …… (pp. 10-11)

Sfard (1998) suggested a possibility of the coexistence of the two metaphors. After all, people may say, the AM [acquisition metaphor] and the PM [participation metaphor] make incompatible ontological claims about the nature of learning. To this, Kuhn, Rorty, and many other contemporary philosophers would respond that the metaphors are incommensurable rather than incompatible, and because “incommensurability entails irreducibility [of vocabularies], but not incompatibility” (Rorty, 1979, p. 388), this means a possibility of their peaceful coexistence. Science and mathematics are a rich source of examples showing that such an option is not purely theoretical. …… In the final account, however, the choice made by individual researchers would probably depend mainly on what they want to achieve. If, for example, one’s purpose is to build a computer program that would simulate human behavior, then the acquisition metaphor is likely to be chosen …… If, on the other hand, one is concerned with educational issues – such as the mechanisms that enable successful learning or make its failure persistent, then the participational approach may be more helpful …… (p. 11)
Marshall (1990b) argued that, by focusing on the metaphors and the images that teachers use, the teachers can become aware of their belief systems. He maintained that, by investigating metaphors, student teachers can increase their reflection on teaching and reconceptualize problematic situations. Marshall remarks:

Yet we are often unaware that metaphors, like the belief systems they represent, may structure the way we perceive situations and events. As a consequence, metaphors may influence our actions and the responses by others to our actions. …… Potential solutions may, therefore be constrained by the particular metaphor with which a problem is framed. If we become cognizant of the metaphors that guide our thinking and action, we may be able to identify both those metaphors that do not match the problematic situations we are trying to resolve and those metaphors that result in unproductive actions. (p. 128)

By examining the metaphors in the language uses of student teachers, it might be possible to find the causes of problems that student teachers face and help them become aware of the discrepancy between their superficial discourse and subconscious conceptualization of education. Hence, one of the ultimate goals of incorporating metaphor studies into teacher education is to help teacher education students find subconscious thoughts that lead them to particular actions in classrooms.

Collins and Green (1990) found a set of metaphors in their examination of the construction of meanings between a teacher and elementary school children. As
constructivists, the researchers viewed the classroom, teacher-student interactions, and the process of teaching and learning as constructed. The examples of the metaphors the researchers found were:

- the classroom as constructed
- the teacher as laying a foundation
- meaning as built by teachers and students “through” the actions and interactions of teacher and students
- the classroom as a culture
- knowledge as both constructed and acquired through participation
- life in classrooms as patterned
- people in classrooms as being either insiders or outsiders

These metaphors were tacit and embedded in the researchers’ observations.

Tobin (1990) conducted another metaphor study within a constructivist perspective and found that assisting a teacher to conceptualize her teaching roles with new appropriate metaphors (teacher as social director, researcher, or mentor, for example) can lead to significant changes in teaching practice and even overnight success.

Carter (1990) derived the results of how metaphor functions in cooperating teacher-novice teacher conversations after investigating 45 cooperating teachers. She found five functions of metaphors: “Metaphors served to communicate not only knowledge but also associated affect about the task of classroom management” “Metaphors helped teachers approximate more closely the realities and demands of classroom management” “Metaphors were useful in describing the mental activity
required of teaching; activity that is difficult, if not impossible, to communicate via literal meaning” “Cooperating teachers used metaphors to show how conceptions of teaching are reflected in teachers’ actions” and “Metaphors illustrated how teachers reasoned about problems that presented themselves daily in classrooms” (p. 111-112).

Visual art, popular culture, films, music, and fictional literature can often inspire metaphors or, at least, are often the subjects within metaphors relating other ideas (Goldstein, 2002; Tunison, 2003). Comparing the reality of education with a blockbuster sci-fi film *The Matrix*, Cook-Sather (2003) criticized the two dominant metaphors in American education, which are education as production and education as cure. The education as production metaphor views schools as factories, curriculums as assembly lines, teachers as factory workers or machines, and students as products (Cook-Sather, 2003).

The education as cure metaphor sees school as a hospital, teachers as medical doctors, and students as patients. The problem with this construction of schools, is that it defines students as sick people who need remedy and that it assumes the disease is widespread. In both metaphors, students are only passive recipients (Cook-Sather, 2003). Arguing that schools should engage students in educational reform, Cook-Sather emphasized making both educators and students free from a prejudice that things are taken for granted and unchangeable.

When the school becomes a space within which students can actively compose and re-constitute themselves, the school can become a revolutionary site that can open up more diverse ways for students to
understand and participate in the world. Like Neo [main character of the film, The Matrix], they can imagine other worlds, and they can imagine and recreate themselves as other selves in those other worlds. (Cook-Sather, 2003, p. 962)

**Summary.** Munby is probably one of the most well-known researchers to apply Lakoff and Johnson’s perspective to educational research. His research findings supported not only Lakoff and Johnson’s concepts such as orientational metaphor but also their specific examples such as “lesson as a moving object” (Munby’s finding) versus “time as a moving object” (Lakoff and Johnson’s example). Munby’s works have important implications for education, particularly teacher education.

In comparison to the research on embedded metaphors, research on suggestive metaphors has been widely and more diversely conducted among education or teacher education researchers. The results of research are diverse: teacher as supervisor of complex technology (Cohen & Lotan, 1990), teacher as executive (Berliner, 1990), classroom as a learning setting (Marshall, 1990a) and so on.

Some researchers (e.g., Ben-Peretz et al. 2003; Inbar, 1996; Weade & Ernst, 1990) conducted metaphor studies by offering visual images or written metaphors that represented certain images. In these studies, research participants selected metaphors that most represented their perspectives or offered the researchers those images that were most representative of the participants’ perspectives. Clay in the potter’s hand, flora and fauna, orchestra conductor, and animal keeper, are among the prominent metaphors in this area. These tend to be suggestive rather than embedded metaphors.
Sfard (1998) compared two dominant metaphors in the educational research community – acquisition metaphor and participation metaphor. He suggested the possibility of compatibility of these two types of metaphors. Cook-Sather (2003) criticized two traditionally accepted metaphors in American society – education as production and education as cure.

Cognition and Metaphor

Several quantitative researchers (e.g., Boroditsky, 2000; Bowdle & Gentner, 2005; Gibbs & O’Brien, 1990) have investigated human cognition with respect to the use of metaphors. Boroditsky (2000) found that spatial information was metaphorically used to understand temporal information (e.g., “In March, May is ahead of us,” p. 27) whereas temporal information was not necessarily used to understand spatial information. This asymmetrical association between time-domain and space-domain is due to the fact that source domains (space, in Boroditsky’s experiments) are usually more concrete and experiential than target domains (time, in Boroditsky’s experiments).

Bowdle and Gentner (2005) found that conventionality (novel vs. conventional) and grammatical form (metaphor vs. simile) affected subjects’ comprehension time. Novel figuratives (e.g., Friendship is [like] wine) tended to take a longer time to be comprehended than the conventional figuratives (e.g., Faith is [like] an anchor).

Gibbs and O’Brien (1990) found that their subjects had consistent mental images for different idioms that have similar figurative meanings (e.g., blow your stack, flip your lid, and hit the ceiling for to get angry). The subjects’ mental images for these idioms were “some force causes a container to release pressure violently” (Gibbs & O’Brien,
The reason why subjects had a similar mental image of the idioms was due to the presence of preexisting conceptual metaphors such as *mind is a container* and *anger is heat*. Therefore, when the subjects conceived of *to get angry* in terms of *blow your stack, flick your lid, and hit the ceiling*, they had an image that mind explodes by anger as if a heated container explodes.

Quantitative metaphor researchers, both empirically and theoretically, have demonstrated the existence and roles of conceptual metaphors (Boroditsky, 2000; Gibbs, 1992, 1996; Gibbs & O’Brien, 1990; Gibbs & Nayak, 1991). These researchers supported the work of Lakoff and his colleagues (Lakoff, 1987; Lakoff & Johnson, 1980; Lakoff & Turner, 1989) by indicating that conceptual metaphors are usually based on bodily experiences. Individuals tend to comprehend abstract concepts in terms of more easily understood embodied experiences. For example, a conceptual metaphor, *anger is heat*, that links idioms such as *blow your stack, flip your lid, and hit the ceiling* to the meaning of *to get angry* is not arbitrary, but based on the bodily experience that the bodies of individuals become hot when angry. This is why *anger is heat* becomes a common conceptual metaphor but *heat is anger* is not common. This is also the reason why spatial information is commonly used in thinking about time, but temporal information is not necessarily used in thinking about space, resulting in an asymmetrical association between time-domain and space-domain. Space is based on more concrete experiences than time. In essence, these quantitative metaphor researchers empirically showed how conceptual metaphors are cognitively processed and why concepts are metaphorically structured.
Metaphor and Creativity

A number of psychologists have been interested in the relationship between metaphor and creativity. Some tend to regard the ability to comprehend and produce metaphors as almost identical to creativity or they believe that creativity is typically reflected through metaphors (e.g., Seitz, 1997; Westcott, 1977). Shibles (1979) cited Aristotle to emphasize that notion: “The greatest thing by far is to be a master of metaphor … It is the mark of genius” (p. 244). Shibles (1979) even argued, “To be creative is merely to improve our abilities to use metaphor” (p. 245). In the same vein, Miall (1987) asserted that metaphors included all the features of the creative thought processes. MacCormac (1986) claimed that creative poets and scientists can “change the normal way of conceiving things and reconceiving them in a new conceptual system expressed in highly suggestive metaphoric language” (p. 181). Marschark et al. (1987) demonstrated that deaf children were much more creative in non-literal sign languages than was previously assumed. These researchers showed that deaf children’s use of metaphors reflect their creativity. Lubart and Getz (1997) focused on the emotional factors of creative thoughts. That is, people tended to produce novel metaphors when they describe intense feelings. All of these research studies reflect the assumption that creative people exhibit a high ability to make use of metaphors.

Miller (1996) maintained, “metaphors are an essential part of scientific creativity because they provide a means for seeking literal descriptions of the world” (p. 113). This
assertion implies one of the values of metaphors – to assist in comprehending abstract and unfamiliar concepts. In a similar vein, Harrington (1980) reported that metaphorical thought processes facilitated creative thinking.

Sawyers et al. (1992) found a positive relationship between metaphoric comprehension and IQ. In general, metaphoric comprehension is regarded as related to creativity. Creativity is known to be related to divergent thinking. In contrast, IQ is related to convergent thinking. Thus, Sawyer et al. found a positive relationship between divergent thinking (metaphorical comprehension) and convergent thinking (IQ). Necka, Stocki, and Wolski (1990) found no significant relationship between students’ creativity levels and their response speed and error rate in selecting metaphorical expressions. The researchers showed pre-cues – for example, “love is a drug” – and then had the subjects choose a correct answer from four analogies – for example, “drink is to tea as love is to (1) heroin, (2) friendship, (3) mug, and (4) addict” (Necka, Stocki, & Wolski, 1990, p. 104). This finding was also unexpected in that a significant relationship between creativity and metaphors was not found.

In general, researchers, using the concepts of metaphor and creativity, seem to hold a more traditional perspective on metaphor, focusing on the deliberate use of language. The following quote from Shibles (1979) can be contrasted with Lakoff and Johnson’s more contemporary perspective, focusing on the embeddedness of metaphors in ordinary language use.
To write poetry is to talk funny. It is to use metaphor, to deviate from ordinary language. People who do this are either poets, lovers, philosophers, or just plain mad. To be creative is to use mad metaphor. (p. 244)

By making clear that metaphor is not ordinary language, Shibles’ argument is not supported by contemporary metaphor theories, which postulate that the metaphor is everywhere in ordinary language.

Some creativity researchers have adopted more contemporary approaches that reflect metaphors in ordinary language at an unconscious level. Kusa (1998) argued that figurative expressions – metaphors and proverbs – were used as creative products and as tools of communication. According to Kusa (1998), “as creativity is understood to be a potential for recombination of old, familiar elements into new configurations – the phenomenon which can be found in proverbs and metaphors – then figurative expressions can be taken as indicators of creativity in everyday life” (p. 318). Ambrose (1997) suggested the unification of creativity with help from metaphoricians. He maintained that a variety of theories of creativity have their own metaphors. For instance, Ambrose (1997) asserts that, “creative thought emerges from fluid-like conceptual slippage along the fault lines of the mind” (p. 263). By capturing the metaphors, Ambrose believed that creativity researchers have a better understanding of each other and can contribute to unifying their theories. De Mink (1995), adopting Lakoff and Johnson’s model, argued that creative thinking should be analyzed for definitive metaphors. He also maintained
that, in order to improve their creative potential, it was necessary to look for unconscious hidden metaphors and develop new ones if their hidden metaphors prevent them from attaining their goals.

Review of Mentoring Literature

Mentoring practices and research on mentoring have been prolific since 1980s when the idea of mentoring was attractive to reformers and scholars (Gold, 1996). Effective mentoring helps students or novice teachers acquire appropriate skills and techniques that are required to meet the needs of children, parents, schools, and communities. Mentoring also helps retention of teachers as well (Feiman-Nemser, 1996; McCormick & Brennan, 2001; Whitaker, 2000). The benefit of mentoring is also evident to mentor teachers. There are reports that mentor teachers utilized mentoring as a chance to develop professionalism and refresh their career by renewing interest in teaching (e.g., Davis, Resta, Higdo, & Latiolais, 2001; Osgood, 2001). In this section, various definitions of mentoring and trends of mentoring research are discussed. Also, the manner in which metaphors are implicated in research on mentoring is highlighted.

Definitions of mentoring. The origin of the term, mentor came from an epic, Odyssey, which characterized the traditional meaning of mentoring (Harris, 2000; Merriam, 1983). In the classic story, an old man called Mentor established father-like relationship with young Telemachus by saving the young man’s life with his advice. Since then, mentoring has referred to strong emotional ties between the trusted old and the young, resulting in transfer of specific skills.
Levinson (1979) also attempted to define mentoring using metaphors. Some instances of metaphors in terms of functions are teacher, sponsor, host, guide, exemplar, counselor, and supporter and facilitator of the realization of the dream. In the beginning, young people recognize themselves as a novice or apprentice to an expert. In that process, novices acquire more expertise and responsibility with time; eventually, the balance between a mentor and an apprentice becomes equal. Finally, the novice will leave the mentor as a full-fledged person (Levinson, 1979). Levinson maintained that “mentoring is defined not in terms of formal roles but in terms of the character of the relationship and the functions it serves” (p. 98). Other definitions of mentoring are “a caring and supportive interpersonal relationship between an experienced, more knowledgeable practitioner (mentor) and a less experienced, less knowledgeable individual (protégé or mentee) in which the protégé receives career-related and personal benefits” (Henry, Stockdate, Hall, & Deniston, 1994, as cited in McCormick & Brennan, 2001, p. 132) and “a long-term individualized process in which an experienced professional provides support and guidance to a beginning teacher” (Black & Puckett, 1996, as cited in McCormick & Brennan, 2001, p. 132).

No matter what the definitions are, the mentor-apprentice relationship as noted above is considered important. Cognitive apprenticeship is an instance that introduces the concept of the mentor-apprentice relationship to cognitive work such as teaching. Cognitive apprenticeship is based on the idea that knowing and doing are inseparable, and learning results from acting in a particular situation (Brown, Collins, & Duguid, 1989). Researchers (e.g., Brown, Collins, & Duguid, 1989; Chaiklin & Lave, 1996; Lave,
1988; Rogoff & Lave, 1984; Scribner & Cole, 1973) have criticized the assertion that formal schooling has separated learning from everyday life activities or informal learning. Abstract concepts are the products of the interaction of a specific culture and, therefore, activity, concept, and culture are interdependent and inseparable (Brown, Collins, & Duguid, 1989).

Individuals learn not only specific skills but also ways of thinking and acting, knowledge and beliefs, and proper language inherent to a particular community of culture through mentoring. Levinson’s functions of mentoring and its metaphors could be expanded to the idea that a student teacher learns instructional skills, forms, and beliefs related to the roles of professional teachers, and is fully immersed in the specific context with the mentor’s support. Furthermore, Collins, Brown, and Newman (1989), by suggesting three phases of cognitive apprenticeship, seemed to embody Levinson’s conception of mentoring. These phases are modeling, coaching, and fading. Through this process, mentors exhibit their cognitive activities to student teachers, support students’ activities, and reduce their leading role when students are accustomed to the activities.

Gehrke (1988) suggested an interesting definition of mentoring as gift-giving; this thought was influenced by Marcel Mauss, who was a nephew of Emile Durkheim (a noted social theorist). Gehrke’s conception of mentoring did not exactly reflect the essence of Mauss (Mauss, 1954/1988), which is, for example, that the social fabric is not differentiated in simple societies and that gift-giving is not volitional but obligatory.
According to Hyde (1979) and Gehrke (1988), there are several characteristic phases of gift-giving and receiving in mentor-protégé relationships: creation, awakening, commitment to labor, and passing the gift.

The primary gift created by a mentor is “a new and whole way of seeing things” (Gehrke, 1988, p. 192). By declaring that this gift of wisdom is not accomplished overnight, and that it is embedded in the mentor’s work with the protégé, Gehrke (1988) implied that student teachers not only learn instructional and management skills, but also are immersed in the new setting through mentoring and student teaching.

As Howey (1988) emphasized, the term mentor indicates “experienced teachers who are selected to assist beginning teachers adjust to their first year(s) of teaching” (p. 209). This conception of mentoring cannot be geared to either Levinson’s narrow vocational sense of mentoring or Gehrke’s special mentor-protégé relationship as a gift giver. What needs to be done here is not a process of superficially identifying a list of things for mentors to do. Rather, to explicate the nature of mentoring and mentor, as can be taken from the previous discussions, it is necessary to discover what it means to assist student teachers and learn from mentors.

Although the definitions of mentor and mentoring are numerous, one critical aspect of mentoring cannot be ignored – student teachers learn from mentors via mentors’ perspectives, beliefs, ways of thinking, and comprehensive views of teaching, learning, and learning-to-teach. Mentoring should be viewed as the transmission and construction
of beliefs whether the perspective is broad or narrow. In the narrow vocational perspective of the term *mentor*, such as Levinson’s definition, the concept of beliefs is ubiquitous.

Each mentor teacher is unlikely to respond to a similar problem in the same fashion because they have different individual life histories and they have worked in different contexts (Carter & Doyle, 1996). If student teachers accept a mentor’s beliefs, they would be responding to a mentor’s individual or cultural belief system. In a broad sense, mentoring will be different across countries and, in a narrow sense, it might be different according to individual teachers. Therefore, each mentor is engaged in the individual and cultural transmission of his or her beliefs under the name of mentoring, whether it is based on a national culture, norm, and belief system or a classroom.

The transmission of beliefs, alone, is not enough to explain the phenomenon of student teaching in that student teachers, even though they are loyal enough to follow their mentors, are not a clone and sometimes may resist such an adoption of ideas. Thus, the construction of beliefs rather than the transmission is more evident in student teaching. In addition, given that mentoring and student teaching occur simultaneously, the co-construction of beliefs by mentor and student teacher can be possible. Mentoring and student teaching might be defined as the transmission and construction of beliefs and belief systems regarding teaching, learning, and learning to teach through a more competent teacher’s guidance.
Mentoring in sociocultural perspectives. It is interesting that much of the mentoring-related empirical research has borrowed theoretical frameworks from sociocultural perspectives. Although researchers label the theoretical frameworks differently (e.g., sociocultural theories of learning, social constructivist theory, social constructivism, etc.), they, to some degree, share common concepts that emphasized knowledge construction, environmental influences, and interactions among people. Constructivism and sociocultural perspectives seemed to be the popular labels used by mentoring researchers (e.g., Boreen & Niday, 2000; Orland, 2001; ten Dam & Blom, 2006; Wang & Paine, 2001).

Although sociocultural perspectives and constructivism are not necessarily interchangeable, these two perspectives are related. For example, Boreen and Niday (2000) claimed that their perspective is based on Vygotskian social constructivist theory. Wang and Paine (2001) cited Rogoff (1990) and Lave and Wenger (1991) using sociocultural theories of learning. Considering that Vygotsky (1978) has had a strong influence on researchers, who prefer the sociocultural perspective or social constructivism, these two frameworks are closely linked to each other and are influential in research on mentoring. In addition, these frameworks have been adopted in research about mentoring relationship and teacher thinking (e.g., Boreen & Niday, 2000; Dever et al, 2000; Orland, 2001; Stanulis & Russell, 2000). This may reflect the fact that research on teacher thinking has been influenced more by those two frameworks and that research on mentoring relationship tends to focus on collaborative construction of knowledge and relationship.
Considering these sociocultural and constructivist perspectives, mentors need to recognize that student teachers learn knowledge, skills, and strategies by doing. Therefore mentors should encourage student teachers to participate in activities that expert teachers are involved in. Student teachers should be allowed to be engaged in activities (for example, a mentor teacher may have student teachers only assist and observe him or her before allowing them to teach), and gradually to extend their activities and have full responsibility. Immersion into the culture of the community, which includes the acquisition of ways of thinking and behaving and using proper language, will motivate student teachers to attain knowledge, skill, and strategies essential for teaching and learning. Full responsibility resulting from active participation leads student teachers to identify themselves as the actual members of the community.

The notion of guided participation (Rogoff, 1990) and cognitive apprenticeship (Brown, Collins, & Duguid, 1989) can be helpful. If a mentor guides student teachers in their zone of proximal development, student teachers can continue to develop and to achieve goals with the mentor’s support. In this manner, student teachers gradually approach full engagement, and ultimately identify themselves as the members of the community. Hence, mentors successfully help student teachers possess and use the cognitive tools required to conduct teachers’ jobs. In the cognitive apprenticeship, mentors model their thinking and behaviors to make them explicit and then coach the student teachers to practice the activities. Finally, mentors reduce their role and withdraw it in the end.
Wang and Paine (2001), researching a novice teacher’s change through mentoring, found that three factors contributed to successful mentoring. First, a clear focus throughout different stages of the novice prompted learning to teach. Second, the mentor used modeling, analyzing, and reflecting on the novice’s teaching, for example, of mathematics. Third, the mentor used the concept of zone of proximal development to improve the novice’s learning to teach. The research successfully showed that a sociocultural perspective helped both the mentor and the novice achieve the goal. Wang (2001) even clearly ascertained the contextual influences in mentoring processes by comparing mentors from three different countries – America, England, and China. According to Wang, mentors’ beliefs, patterns of interactions, and foci of topics were different in different contexts. For example, American mentors stressed understanding student diversity and learning; British mentors emphasized adapting to the department culture and its way of doing things; and Chinese mentors focused on understanding subject matter in the national curriculum and texts. These results showed how mentoring can be affected by contextual factors.

Boreen and Niday’s (2000) case study, grounded in the interest of mentoring culture and teacher thinking, evaluated preservice and inservice teachers’ characteristics. According to these researchers, preservice teachers were much more concerned about assessment, classroom management, and diversity. Preservice teachers also adhere to the specifics of the individual unit plans whereas experienced teachers are more interested in long-range issues. The mentor teachers frequently used modeling, illustrating, affirming, questioning, qualifying, and reflecting as their mentoring strategies. Orland (2001) found
that a novice mentor went through developmental stages or shifts toward collaboration with student teachers. Stanulis and Russell’s (2000) findings revealed that the mentor teacher’s interference of student teaching is desirable if both sides establish trust, but, at the same time, interference can cause conflict as well. Conducting a case study with two pairs of mentors and first-year teachers, Dever, Johnson, and Hobbs (2000) identified five evolutionary stages of the mentoring relationship. In the first stage, mentors and mentees expressed initial concerns and joys, and then they built a sense of team in the second stage. In the third stage, both sides felt that their teamwork was effective. In the fourth stage, however, their roles began to change, and new concerns emerged. In the final stage, mentees went on their own.

A few research studies are based on critical-oriented theories or perspectives. For example, Jackson (2001), using feminist poststructural theory for her research, described how a student teacher shifted her position between two opposing cooperating teachers. In that process, the experiences, the power, and the discourses made the student teacher’s perspectives local, specific, and open to multiple interpretations. Duffy (2001) focused more on student teaching in a multicultural setting and found that the power conflict between the student teacher and the African American students could be pacified by the student teacher’s taking herself out of the position of being the sole authority in the diverse classroom.

One of the noticeable research findings was reported in Feiman-Nemser (2001). Feiman-Nemser is unique in that she applied a Deweyian concept to mentoring practices in her analysis of a veteran mentor’s mentoring. The term used by Feiman-Nemser,
“educative mentoring” was based on Dewey’s (1938) education experiences - that educators should lead children to future growth and richer experiences. Feiman-Nemser found that educative mentoring promoted novice teachers’ development by encouraging a disposition of inquiry, attention to student thinking and understanding, and disciplined talk about problems of practices.

**Research on mentor teachers and student teaching.** Student teaching has been regarded as the most influential and culminating factor in teacher education programs (Clark, Smith, Newby, & Cook, 1985; Hoy & Woolfolk, 1989; Pelletier, 2000; Wilson, 2006). Among the triad of student teaching composed of university supervisor, mentor teacher, and student teacher, the influence of the mentor teacher on the classroom performances of student teachers, vis-à-vis university supervisor, is greater (Emans, 1983; Zimpher, deVoss, & Nott, 1980). However, researchers are uncertain if the effect of mentor teachers on student teachers is desirable (Emans, 1983; Feiman-Nemser, 1983; Glassberg & Sprinthall, 1980; Koehler, 1985; Lanier & Little, 1985). Glassberg and Sprinthall (1980) depicted student teachers as becoming “more authoritarian, rigid, impersonal, restrictive, arbitrary, bureaucratic, and custodial by the end of their student teaching experience” (p. 31). Wilson and Readence (1993) found that not only mentor teachers’ but also student teachers’ background and prior educational experiences are the influential components of the development of preservice teachers. Researchers argued that systematic mentoring programs could improve mentor teachers’ skills and
knowledge and lead to student teachers’ success (e.g., Brooks, 2000; Evertson & Smithey, 2000). In addition, clear statements of what the mentoring program expects with respect to the behaviors of mentors can be beneficial to student teachers (Osgood, 2001).

Some of the mentoring research dealt with relationship issues. The interest of mentoring relationship tended to imply that many mentoring and student teaching relations have been unfruitful due to the inappropriate relationship between mentors and mentees. In this sense, several researchers (e.g., Gore, 1991; Graham, 2006; Lemma, 1993; Veal & Rikard, 1998; Zuckerman, 2001) underscored collaborative, equal relationships between mentor teachers and student teachers, that is, shared decision-making. Mentor teachers’ willingness to learn and share new ideas from student teachers is valuable for successful mentoring and also for the mentor teachers’ professional development (Beck & Kosnik, 2000; Duquette, 1994; Goodfellow & Sumson, 2000; Hamlin, 1997; Siebert, Clark, Kilbridge, & Peterson, 2006; Sinclair, Dowson, & Thistleton-Martin, 2006; Veal & Rikard, 1998). Affective aspects of mentoring are found to be important for mentees to learn from mentors (Graham, 2006; Stanulis & Russell, 2000). In a similar vein, to assist student teachers, it is necessary to enable them to relax and feel at home (Veal & Rikard, 1998).

**Implications of metaphor.** As discussed previously, several mentoring researchers suggested metaphors for mentoring. For example, Levinson (1979) conceptualized mentor as teacher, sponsor, host, guide, exemplar, counselor, supporter, and facilitator of the realization of dream. The mentor-as-guide metaphor was also found in an interview with a participant in a study conducted by Osgood (2001). A mentor teacher in
Bullough’s (2005) research identified herself as “mom” (p. 148) or a “nurturer” (p. 152) whereas her student teachers viewed her as a “colleague” (p. 151) and “friend” (p. 151) with an equal relationship framework that coincided with Lemma’s (1993) findings. In Veal and Rikard’s (1998) work, it was mentor teachers who used the mentor-as-friend metaphor. A mentor teacher in Lemma’s (1993) research underscored the “sharing” (pp. 334-335) of expertise, philosophy, and ideas with student teachers as a mentor teacher’s important role. Gehrke (1988) remarked that mentoring is gift-giving. Ten Dam and Blom (2006) adopted the participation metaphor (learning as participation) from a sociocultural perspective and applied the concept, learning by participation, to mentoring situations. These research studies exhibited the link of metaphors to mentoring, but studies that focused on embeddedness of metaphors for mentoring were rare.
CHAPTER 3

METHODOLOGY

This was a study of metaphor usage by teachers. Metaphors are like the air we breathe - they are everywhere, but people do not consciously recognize them (Lakoff & Turner, 1989). The focus was to investigate the metaphors of mentoring that are embedded in the interview responses of teachers. For the most part, these metaphors are so embedded, that even the metaphor users do not recognize them as metaphors.

Although many metaphor studies have been conducted in various fields, there has been little research on metaphors embedded in teachers’ discourses. Most of the metaphors in the literature were suggested by either the researchers or their participants. These metaphors may be meaningful and useful for preservice teachers. However, these metaphors were not unconsciously used ones that were embedded in everyday language. There were only a few research studies in education that shared an approach similar to what was used in the present study (Munby, 1986, for example). The present study examined the metaphors of mentoring that were embedded in teachers’ discourse via an analysis of interview transcripts.
This chapter describes the methodology. First, two features of qualitative research and their relevance to this study are discussed. The features are *the self as an instrument* and *attention to particulars* (Eisner, 1988). Second, how this study primarily adopted *language and communication* research genre and included some characteristics of *individual lived experience* research genre is explained. Third, the relevant methodology regarding participant choice and their relative backgrounds is provided. Fourth, the chapter describes the manner in which the data were collected. Also discussed are the manner in which the standardized open-ended interview and the interview guide approaches were used and the types of interview questions – experience and behavior questions, opinion and values questions, feeling questions, and background/demographic questions – that were formed. Fifth, the procedure of data analysis is described. Of interest is the manner in which metaphorical expressions were interpreted, and how validity and trustworthiness issues were addressed (Kvale, 1995; Schmitt, 2005). Ethical considerations are also considered.

**Qualitative Study Features**

Eisner (1998) articulated a few features of a qualitative study. One of his key features, *the self as an instrument*, is explained best by the following selection:

> My emphasis is due to the fact that the features that count in a setting do not wear their labels on their sleeves: they do not announce themselves. Researchers must see what is to be seen, given some frame of reference and some set of intentions. The self is the instrument that engages the situation and makes sense of it. This is
done most often without the aid of an observation schedule; it is not a matter of checking behaviors, but rather of perceiving their presence and interpreting their significance (Eisner, 1998, p. 33-34).

The concept, *self as an instrument* depends on the researcher’s subjectivity. Individual researchers have different experiences and their interpretations are constructed from their different experiences. In other words, different experiences produce different interpretations and different interpretations make research subjective. However, this does not rule out the possibility that researchers share commonly held views and perspectives.

This study espoused the concept, the *self as an instrument*, in that the subjectivity of the present researcher was utilized in this study, specifically, in determining which metaphors were more meaningful in each teacher’s mentoring and in interpreting what the teachers tried to tell about mentoring through their embedded metaphors. In this sense, the researcher functioned as an instrument in this study.

*Attention to particulars* was also a feature relevant to this study. Eisner (1988) explained this feature by contrasting it with statistical research. To statistical researchers, the particulars are means for developing generalizations. In contrast, qualitative researchers attempt to understand how particular participants think, believe, and act in specific situations instead of generalizing the findings. Thus, it is important to pay attention to the personal uses of particular metaphors by participants.

Research Genre

Marshall and Rossman (1999) divided qualitative genres into three areas: individual lived experience, society and culture, and language and communication. In
examining individual lived experiences, researchers attempt to “capture the deep meaning of experience in their own words” (p. 61). The focus of inquiry is through individually lived experiences; then, in-depth interviews are the primary strategy, although other methods such as journal writing may be used. If researchers are interested in society and culture, they will likely adopt a case study strategy and focus on groups or organizations. Case study “entails immersion in the setting and rests on both the researcher’s and the participants’ worldviews” (Marshall & Rossman, 1999, p. 61). In the language and communication genre, a microanalysis is often conducted through data recording. Speech events and interactions are the focus of inquiry (Marshall & Rossman, 1999).

For the present study, the researcher adopted characteristics mainly from language and communication and also included some features of individual lived experience. In addition, this study used the research tool of microanalysis for the language and communication genre in that the focus was on personal uses of metaphor rather than on expanding the analysis units to culture and society. With respect to individual lived experience, the focus was on individuals, not interactions, which is usually the focus of language and communication. Because of the focus on individuals and their discourses, the interview became an appropriate research strategy. It was necessary to be attentive to the stories of the participating teachers (Schön, 1993).

Sites and Participants

The participants of the study were elementary school teachers who were involved in weekly meetings where a university professor, graduate students, and classroom teachers discussed various educational issues. The present researcher attempted to solicit
diverse participants according to their teaching and mentoring experiences, trying to follow Patton’s selection strategy - *maximum variation sampling* (Glesne, 1999).

Maximum variation sampling strategy aims at including a range of variation in factors that matter to researcher, participants, and the research (Glesne, 1999). However, Glesne (1999) recommended that researchers do not excessively include too many configurations of the variables, focusing on only the elements of particular importance to the study. In this sense, the focus of the selection strategy would be on participants’ teaching and mentoring experiences regarding how long they had taught and how many student teachers they had had because of the potential influence on conceptions of mentoring.

Due to this significance, experiences of teaching and mentoring of participants needed to be taken into consideration as a potential effect on mentoring (Sinclair, Dowson, & Thiestleton-Martin, 2006) and metaphors for mentoring.

Ten teachers participated in the study. Table 2 provides background information about the teachers’ teaching and mentoring experiences and grade levels. Of the ten participants, three teachers (Lee, Gretchen, and Mary) had at least 19 years of teaching experiences and at least six student teachers from the yearlong teacher education program of a university in Ohio. Two teachers (Daisy and Maggie) had many years of teaching experiences, which were 29 and 13 years, respectively, but they had only three and one student teachers, respectively, from the yearlong program at the time of the interviews. Three teachers (Linda, Katrina, and Wendy) had teaching experiences, ranging from only
three to five years, and had only one or two student teachers from the yearlong program. Two teachers (Ashley and Sarah) had only two and three years of teaching experiences, respectively, and had no student teachers at the time of the interviews.

<table>
<thead>
<tr>
<th>Name</th>
<th>years of teaching experience</th>
<th># of student teachers*</th>
<th>grade level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lee</td>
<td>19</td>
<td>6</td>
<td>kindergarten**</td>
</tr>
<tr>
<td>Gretchen</td>
<td>about 30</td>
<td>6-7</td>
<td>administration</td>
</tr>
<tr>
<td>Mary</td>
<td>20</td>
<td>12</td>
<td>administration</td>
</tr>
<tr>
<td>Daisy</td>
<td>29</td>
<td>3</td>
<td>kindergarten</td>
</tr>
<tr>
<td>Maggie</td>
<td>13</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Linda</td>
<td>4</td>
<td>1-2</td>
<td>kindergarten, 2</td>
</tr>
<tr>
<td>Katrina</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Wendy</td>
<td>3</td>
<td>2***</td>
<td>1, 3</td>
</tr>
<tr>
<td>Ashley</td>
<td>2</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Sarah****</td>
<td>3</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

Note 1*: The number of the student teachers from the yearlong program of a university in Ohio
Note 2**: Lee was retired and was a substitute teacher at the time of the second interview.
Note 3***: Wendy had no mentoring experience at the time of the first interview, but had mentoring experience with two student teachers at the time of the second interview.
Note 4****: All participants except Sarah are European-American females. Sarah is an African-American female.

Table 2: Participating teachers’ backgrounds

All participants worked at the same elementary school in an urban school district in Ohio. Except for one former student teacher, who is an African-American, all of the teachers were European-American females. Four teachers (Linda, Wendy, Ashley, and Sarah) were former student teachers of the yearlong program of the university, which was required for a teaching license.
Three teachers were kindergarten teachers, and one of them (Linda) was teaching second grade when the second interview was conducted. Three teachers taught first grade, and one of them (Wendy) shifted to third grade when the second interview was conducted. There were two second grade teachers, including Linda, and one third grade teacher, who was Wendy. One teacher taught fourth grade. Two teachers were actually not teaching children; they were in administrative roles to assist classroom teachers. These two teachers relied entirely on their past mentoring experiences when they talked about mentoring.

Instrumentation

Because metaphor studies on mentoring-based everyday language were hardly found, interview protocols had to be constructed for this study. To determine the issues of mentoring among the teachers, the researcher attended the weekly meetings of the teachers and discussed mentoring (see Timeline section below). For the pilot study, the researcher interviewed five teachers. Based on the results, interview questions were revised by the present researcher. For example, questions that the teachers did not understand, or those that seemed to be irrelevant to mentoring were eliminated. Questions that elicited each teacher’s concept of his or her best or effective mentoring were retained. Therefore, most interview questions were focused on the notion of effective mentoring. The teachers could tell their stories of mentoring in various ways because they answered several questions concerning one theme. The interview questions used in the present study coincided with those used in other empirical studies about mentoring (e.g.
Graham, 2006; Lemma, 1993; Richardson-Koehler, 1988; Veal & Rikard, 1998; Zanting, Verloop, & Vermunt, 2001). However, the interview questions of the present study did not emerge from other research studies.

The interview approach of this study combined aspects from both the interview guide and standardized open-ended interviews (Patton, 2002, see interview approach section below). For the interview guide approach, a main theme and a few sub-themes of mentoring were delineated for both interviews, and each theme included a few core questions (see Appendix). These core questions represented the characteristics of the standardized open-ended approach.

Most core interview questions of the first interview were used again in the second interview, but a few questions were added or omitted in the second interviews (see Appendix). This occurred because, during the first interview, the present researcher noticed that some questions did not elicit the participants’ thinking about mentoring, whereas other questions needed to be added for the same reason. This procedure is consistent with the protocol developed by Patton (2002). Both the first and second interviews contained background questions, a main theme (good mentor), and sub-themes (mentoring strategy, contents of mentoring, lessons from mentoring, and model teacher as a mentor). Each theme (e.g., the main theme and sub-themes) consisted of several core interview questions. Only one sub-theme (partnership with university in mentoring) was eliminated in the second interview because it was less relevant to mentoring.
Different probing questions were added, depending on each interviewee’s interests, during both interviews (Veal & Rikard, 1998). Appendix reveals sample interview questions that include the probing questions. This approach was also based on Patton’s (2002) interview guide approach. According to Patton (2002):

The interview guide provides topics on subject areas within which the interviewer is free to explore, probe, and ask questions that will elucidate and illuminate that particular subject. Thus, the interviewer remains free to build a conversation within a particular subject area, to word questions spontaneously, and to establish a conversational style but with the focus on a particular subject that has been predetermined. (p. 343)

Probing questions are an integral part of unstructured interviews such as the interview guide approach. This exemplifies the notion that interviewing is a “conversation with a purpose” (Kahn & Cannell, 1957, p. 149). Qualitative interviews are “much more like conversations than formal events with predetermined response categories. The researcher explores a few general topics to help uncover the participants’ views” (Marchall & Rossman, 1999, p. 108). This approach was also used by Mailnowsky (1989). According to Fontana and Frey (1994), “Malinowsky has some general topics he wishes to know about, but he does not use closed-ended questions or a formal approach to interviewing” (p. 366). Therefore, probing questions were spontaneously asked during the interviews as part of the natural flow of conversation between the present researcher and the participants.
Although the core questions were almost the same for the first and second interviews, each interview was not exactly the same. This was intended by the present researcher. In contrast with rigorously structured interview studies, the present study – and many other qualitative studies as well – did not intend to conduct data analysis by interview questions. The focus of data collection was whether or not the stories that the participants were telling corresponded to the main theme or the sub-themes. Interview questions per se were not the units of analysis. They played a role as prompts to elicit the stories of mentoring with metaphors from the participants.

Data Collection

In this section, data collection procedures are described. First, the timeline of the data collection is provided. Second, the approaches used in interviewing the participants are explained. Specifically, the manner in which Patton’s (2002) interview guide and standardized open-ended interviews were used together is described. Then, the manner in which the interview questions of this study were developed based on the types of interview questions suggested by Patton (2002) is discussed.

Timeline. Prior to the data collection, the researcher participated in the teachers’ weekly meetings in an inquiry group focused on mentoring. The researcher discussed effective mentoring and teaching with the participants (or other teachers in the inquiry group). Through these meetings and discussions, the researcher delineated the issues regarding mentoring that were of concern to the mentor teachers. These issues were reflected in the interview questions later to elicit metaphorical expressions.
2002-2003 Academic Year: Twelve teachers were invited to participate. All were introduced by one of the coordinators at the weekly meetings. Interviews were conducted in December 2002, once for each participant, and each interview lasted between 30 to 40 minutes. All twelve participants worked at the same elementary school. On some days, two or three interviews were conducted, but on other days, one or no interview was conducted. It took approximately two weeks to finish the twelve interviews.

2004-2005 Academic Year: Ten of the original 12 teachers participated in the follow-up interviews, which were conducted in April 2005. Interviews were conducted once for each teacher, and each interview lasted for about 40 minutes. All of the ten participants worked at the same elementary school as in the previous interviews in 2002-2003 school year. On some days, two or three interviews were conducted, but on other days, one or no interview was conducted. It took approximately two weeks to finish the ten interviews.

Interview approaches. Interview was the primary research method in this study. Interview is effective for identifying people’s cognitive and ideational categories (Pelto & Pelto, 1978) and for understanding the things that are important to the participants (Wolcott, 1995). Interview is appropriate to explore what participants experience and how they think, feel, and react to, and interpret their experiences and the world surrounding them (Bogdan & Biklen, 2003; Seidman, 1998). Seidman (1998) maintained that interviewing assumes “the meaning people make of their experience affects the way they carry out that experience” (p. 4).
As discussed previously, this study combined Patton’s (2002) two interview approaches, which are the interview guide and the standardized open-ended interview. Patton (2002) stated that the interview guide reveals areas to be explored during the interview. It is different from totally unstructured interviews in that the interview guide maintains predetermined areas for questions. That is, the interviewer has already determined the areas to be covered during the interview. Also, it is different from fully structured interviews in that, in the interview guide approach, the interviewer does not have predetermined interview questions. Instead, the interviewer has predetermined areas or topics. Therefore, the interview questions in the interview guide approach are usually spontaneous ones. But for the most part, the spontaneous questions are related to the predetermined areas (Patton, 2002).

The standardized open-ended interview or fully structured interview includes interview questions that are specifically developed in advance (Patton, 2002). In these interview approaches, interviews proceed with “the same questions – the same stimuli – in the same way and the same order, including standard probes” (Patton, 2002, p. 344). When a researcher wants to eliminate the variations in data caused by different interview questions, the same questions should be asked in the same order (Patton, 2002). Sometimes the same questions need to be asked across different time periods. To compare the answers, the questions should remain the same (Patton, 2002). Patton (2002) stated some strengths of the standardized open-ended interview. One of them is, “the interview is highly focused so that interviewee’s time is used efficiently” (Patton, 2002, p. 346). Credibility is another strength of this approach. That is, “collecting the same
information from each person poses no credibility problem when each person is understood as a unique informant with a unique perspective” (Patton, p. 347). However, the standardized open-ended interview poses problems when the interviewer needs to ask important questions that he or she did not prepare in advance. The standardized open-ended interview approach is so rigid that the questions are fixed ahead of time, and the interviewer tends not to ask additional questions (Patton, 2002).

Patton (2002) suggested that the interview approaches are not exclusive, but can be combined. For example, by combining the interview guide and the standardized open-ended interview approach, the interviewer can predetermine core questions on one hand (the standardized open-ended approach) and ask additional questions according to the predetermined areas or topics during the interview on the other hand (the interview guide approach) (Patton, 2002). This combined approach uses advantages from both approaches. The combined approach guarantees more flexibility during the interview (the interview guide approach), and at the same time enables the examiner to obtain the same information from a number of interviewees (the standardized open-ended approach). One of the examples of a combined approach was used by Becker, Geer, Hughes, and Strauss (1961) and Denzin (1978). Denzin (1978) cited the major point of Becker et al (1961):

We used an interview guide, asking each student 138 questions. … But we left room for the free expression of all kinds of ideas and did not force the student to stick to the original list of questions or to answer in predetermined categories.

(Becker et al., p. 61)
Interviews were conducted at two different times: December 2002 and April 2005. To obtain the responses to the same questions at different times, the core interview questions were predetermined in advance (see Appendix). Teachers have limited time because of their busy and changing schedules. Predetermined core interview questions enabled the researcher to efficiently obtain information within a limited time. By obtaining the same information from the same questions at different times, consistency of the data between the first and second interviews was ensured. However, because of the inflexibility of the standardized open-ended interview, the interview guide approach was also used. Some questions were spontaneously added during the interviews. The spontaneous interview questions were not predetermined. The spontaneous questions that were important to particular participants were asked (Veal & Rikard, 1998). Probing questions were added to facilitate the interviews. Bogdan and Biklen (2003) underscored the value of probes.

Good interviews are those in which the subjects are at ease and talk freely about their points of view. …… Transcripts are filled with details and examples. …… The interviewer may ask for clarification when the respondent mentions something that seems unfamiliar, using phrases such as, “What do you mean?” “I’m not sure I am following you.” “Could you explain that?” The interviewer also probes the respondent to be specific, asking for examples of points that are made. (p. 96)

By using spontaneous or probing questions, the researcher could utilize an approach that is more effective and complete than the standardized open-ended interview.
The areas for the interviews were focused on the concepts of effective mentorship. In general, the interview questions were given to the participants in a similar order. In addition, Wolcott’s (1995) suggestions – “make questions short and to the point” and “plan interviews around a few big issues” (pp. 111-113) – were considered.

Types of interview questions. Patton (2002) categorized interview questions into six types: 1) experience and behavior questions, 2) opinion and value questions, 3) feeling questions, 4) knowledge questions, 5) sensory questions, and 6) background/demographic questions. Most interview questions used in the present study were either one of experiences and behavior questions or opinion and value questions. Feeling questions and background/demographic questions were used as well.

Experience and behavior questions are “questions about what a person does or has done to elicit behavior, experiences, actions, and activities that would have been observable had the observer been present” (Patton, 2002, pp. 349-350). The following questions are examples of experiences and behavior questions used in this study.

- How do you help your student teachers to become the best teachers they can be?
- How have you grown as a mentor?
According to Patton (2002), *opinion and values questions* are “aimed at understanding the cognitive and interpretive processes of people” (p. 350) and such questions “ask about opinions, judgments, and values” (p. 350). The following questions are examples of opinion and value questions used in this study.

- What do you think are the qualities of a good mentor?
- Did your student teaching experiences affect your mentoring?
- What are your strengths and weaknesses as a mentor?

Feeling questions are to obtain information on the “feeling responses of people to their experiences and thoughts” (Patton, 2002, p. 350). The following questions were the feeling questions used in this study.

- Can you give me an episode when you were happy with your student teacher?
- Can you give me an episode when you were not happy with your student teacher?

Background/demographic questions are used to “identify characteristics of the person being interviewed” (Patton, 2002, p. 351), and these questions “help the interviewer locate the respondent in relation to other people” (Patton, 2002, p. 351). The following questions are the background/demographic questions that were used.
- Can you tell me about yourself, your teaching experiences, and the grade level you teach?
- How many student teachers have you had?

The question, “how many student teachers have you had?” is seemingly a knowledge question, but it is a background/demographic question in that the question is aimed at obtaining information related to the participants’ background about mentoring experiences.

Data Analysis

In this section, the procedures for analyzing data and addressing each research question are described. Systematic qualitative metaphor analysis suggested by Schmitt (2005) was used. There have been debates among qualitative researchers regarding how much subjectivity and self-reflection should be involved and how much methodical procedure should be maintained (Schmitt, 2005). Schmitt argued that his development of systematic metaphor analysis is a reciprocal approach between subjectivity and a methodical procedure. Schmitt’s (2005) systematic metaphor analysis is a step-by-step empirical analysis of the theory of Lakoff and Johnson (1980). The present study adopted the analysis stages and strategies suggested by Schmitt (2005).
Identification of target area. This stage is quite simple and starts at the very first phase in research. It concerns the determination of a topic. The target areas of the present study were mentoring, mentor, student teaching, and student teacher. This stage of a metaphor study is a starting point to answer the question, “How is the term [e.g., mentoring, in the present study] experienced and conceptualized?” (Schmitt, 2005).

Collection of background metaphors. This step included searching for metaphors about mentoring and teaching within the existing literature. According to Schmitt (2005), a broad range of written materials can be examined for metaphors regarding the target areas. In the present study, the target areas were mentoring, mentor, student teaching, and student teacher; however, the literature review included metaphors relating to education and teaching in general. In addition, the present researcher incorporated a review of metaphor research studies in disciplines outside of education (e.g., psychology).

Identification of metaphors. Several metaphor researchers have divided words into those with literal meanings and those with metaphorical meanings (e.g., Pragglejaz Group, 2007; Schmitt, 2005; Steen, 1999). For example, the Pragglejaz Group (2007) systematically determined whether a word is a metaphor or not, by comparing its contextual meaning and basic (literal) meaning. According to Schmitt (2005), to identify a word or phrase as a metaphor,
a. a word or phrase, strictly speaking, can be understood beyond the literal meaning in the context; and

b. the literal meaning stems from an area of sensoric or cultural experience (source area)

c. which, however, is transferred to a second, often abstract, area (target area) (p. 371)

For example, if a teacher says, “That teacher opened up her library and used a lot of resources to teach children”, the word, library, does not make sense with its literal meaning here because the teacher does not actually open up any library. Library is a source area by itself. This source area can be transferred to a target area such as the possession of various teaching skills and repertoire. Therefore, library is identified as a metaphor. According to a practical procedure suggested by Schmitt (2005), the present researcher copied and pasted the metaphors concerning mentoring to make a separate metaphor list and continued until all metaphors relevant to mentoring were included in the list. Although Schmitt (2005) suggested that metaphors that are not relevant to the target area (e.g., mentoring, in the present study) do not have to be copied and pasted, the present researcher included in the list those metaphors that were vague in terms of relevancy because of the need to conduct a more thorough investigation.

Reconstructing metaphorical concepts. Reconstruction of metaphorical concepts is the process of grouping metaphors into a few concepts. Schmitt (2005) suggested metaphors that share the same source area and target area can be sorted into the same
metaphorical concept with the heading “target is source” (p. 373). For example, consider “A good mentor should be open-minded to new ideas” and “That mentor teacher shuts himself off to what student teachers brings from university.” These two metaphors share the same source area (container that can be open and shut off) and the same target area (mentor teacher). Therefore, these metaphors can be grouped into one metaphorical concept with the heading “Mentor is a container.” This process produces competing metaphorical concepts instead of a single dominant concept (Schmitt, 2005). The existence of competing metaphorical concepts on a target area is natural because any one metaphor cannot explain every aspect of one thing (Lakoff & Johnson, 1980; Lakoff & Turner, 1989; Schmitt, 2005). Also, competing metaphorical concepts prevents researchers, relying on a single metaphorical concept, from overinterpreting (Schmitt, 2005). This stage of reconstructing metaphorical concepts requires “the subjective ability to find or revise appropriate linguistic constructs” (Schmitt, 2005, p. 373). Therefore, “the reconstruction of metaphorical concepts, for which Lakoff and Johnson do not formulate any rules, is more open to subjective influences than the identification of metaphors” (Schmitt, 2005, p. 373).

**Interpretation.** The present study adopted interpretation strategies of metaphors suggested by Schmitt (2005). First, *comparison of metaphorical concepts* can provide insights into how each participant uses different (or similar) metaphors about the same target area (e.g., mentoring). For example, one participant may view a mentor teacher as someone who *has* something whereas another participant may see a mentor teacher as someone who *gives* something. Interpretation of metaphors includes this difference.
Second, *implicit sub-division and values* opens a possibility that a metaphor may have sub-metaphors. For example, *student teacher as a life form* has sub-divisions such as *student teacher as a caterpillar* and *student teacher as a flower*.

Third, *metaphorical resources* indicates that a metaphorical concept can be used in different situations. Schmitt (2005) discussed how the concept of *masculinity* was used when a man metaphorically described his masculinity in drinking, but later, this man also metaphorically used his masculinity to overcome alcoholism. In other words, this man metaphorically emphasized his manliness both in drinking and in quitting alcohol. In this case, *masculinity* becomes a resource of metaphors.

Fourth, *limits to the use of metaphor* is based on the notion that any single metaphor cannot explain every aspect of a concept (Lakoff & Johnson, 1980; Schmitt, 2005). A metaphor shows one aspect but hides others. The *limits to the use of a metaphor* strategy is related to what a metaphor conceals.

Fifth, *conflicts between metaphorical models* assumes that different people are likely to choose different metaphors. Different metaphors can be conflicting. People are likely to select their preferred metaphors among the conflicting ones. For example, Eubanks (2005) found that those who are against economic globalization and those who are for it used different metaphors. The former used the metaphors such as *corporate rule* or *corporations are governments* whereas the latter used the metaphors such as *open markets* or *capital flow*.

Besides the above strategies, Schmitt (2005) also argued “not only the analysis of metaphors but also the reaction that metaphors cause need to be analyzed” (p. 379) and
“metaphor analysis can be well complemented by procedures for the analysis of content” (p.379). Therefore, even if sentences do not include metaphors for the target area (mentoring), they may need to be analyzed or cited as evidence for the reaction that metaphors cause. The research questions in the present study were addressed by the stages and strategies discussed in this section.

Validity / Trustworthiness

Validity or trustworthiness have been one of the most important issues among qualitative researchers (Altheide & Johnson, 1994). Kvale (1995) developed the concept of validity of craftsmanship for interview studies. Schmitt (2005) articulated several steps to ensure trustworthiness of metaphor studies. This section discusses these validity and trustworthiness issues and demonstrates how these concepts were applied to the present study.

Validity of interview study. Kvale’s concept of “validity as quality of craftsmanship” defined validity in terms of “whether a study investigates the phenomena intended to be investigated” (1995, p. 26). Kvale’s concept of validity was designed to move the concept “from correspondence with an objective reality to defensible knowledge claims” (1995, p. 26). Kvale emphasized that, within a craftsmanship concept of validity, validity should be achieved throughout the entire process of knowledge production, not just in the final product. In addition, “The craftsmanship of research and the credibility of the researcher becomes decisive as to whether other researchers will rely on the findings reported” (Kvale, 1995, p. 26).
Kvale (1995) suggested seven stages of interview investigation and their relevant issues of validity: thematizing, designing, interviewing, transcribing, interpreting, verifying, and reporting (pp. 27-28). The definition of these stages and how they were applied to this present study are discussed below.

**Thematizing.** The validity of an investigation rests on the soundness of the theoretical presuppositions of the study and on the logic of the derivations from the theory to the specific research questions of the study. (Kvale, 1995, p. 27)

The present study was based on the assumption that there must be metaphors that are embedded in teachers’ discourse on mentoring because using metaphors is unavoidable. This assumption has been supported both theoretically (e.g. Lakoff & Johnson, 1980) and empirically (e.g. Munby, 1986; 1987). From this theoretical assumption, specific questions for research emerged, such as *if there are embedded metaphors in teachers’ discourse, what are they?*

**Designing.** From a knowledge perspective, validity involves the adequacy of the research design and the methods used for the topic and purpose of the study. From an ethical perspective, validity of a research design relates to the value of the knowledge produced to the human condition. (Kvale, 1995, p. 27)

To ensure validity at this stage, the present researcher adopted legitimate methods of sampling, interview questions, interview approach, and analysis procedures widely used by qualitative, mentoring, or metaphor researchers. In terms of research methodology, the present study relied on interviews rather than other qualitative research methods such as observation and the review of existing documents. This approach was adopted because
teachers’ metaphors are usually best represented by means of spoken language samples. In qualitative research studies, in general, written language techniques such as journal writing and fieldnotes from observations have been widely used. However, interviewing is the most efficient way to collect a rich amount of spoken language data in a short period of time. Interviewing was the appropriate method for this metaphor study because it enabled the present researcher to collect ample metaphorical expressions in teachers’ discourse of mentoring within a limited timeframe.

*Interviwing*. This involves themes as the trustworthiness of the subjects’ reports and the quality of the interviewing with a careful questioning and a continual checking of the information. (Kvale, 1995, p. 27)

To ensure validity, triangulation of data sources was conducted. Patton (1990) suggested triangulation of data sources, which is “checking for the consistency of what people say about the same thing over time” and “comparing the perspectives of people from different points of view” (p. 467).

This concept of triangulation of data sources was applied to the present study through the development of various interview questions that were seemingly different from each other, but actually concerned the same theme of good mentoring. Thus, the participants came to answer the various questions that addressed the same theme repeatedly. In addition, the present researcher asked the same questions or themes to each participant in two separate interviews to determine whether the metaphors were consistent.
Also, the participants’ potential differences, according to different backgrounds (e.g., the teachers’ experiences of mentoring and teaching), were considered. Because the participants had a wide range of teaching and mentoring experiences, the researcher could obtain diverse information.

In this triangulation, as Patton (1990) pointed out, an important consideration is not to expect that everything remains the same even after repeated interviews and comparison of various views; they are likely to be different. Qualitative researchers’ validity through triangulation of data sources should focus on the explanations of what make the differences and how (Patton, 1990).

Transcribing. Here the choice of linguistic style of the transcript raises the question of what is a valid translation from oral to written language. (Kvale, 1995, p. 27)

Transcribing the interview data in this study followed a thorough word-to-word approach. Whatever the participants said – including non-language sounds such as laughing and coughing – was directly transcribed for all audible portions of the interviews.

Interpreting. This involves the issues of whether the questions put to a text are valid and of the logic of the interpretation. (Kvale, 1995, p. 27)

To ensure validity in this stage, the present researcher adopted interpretation techniques for metaphor research which were suggested by Schmitt (2005). Those techniques included comparing and categorizing metaphors, using non-metaphorical statements, analyzing similar metaphors that might have different meanings, and
analyzing different metaphors that might have similar meanings. The interpretation of the data was based on the assumption that if a metaphor is repeated within a participant’s discourse or among the participants, that metaphor should be considered to be significant.

*Verifying.* This entails the concrete analyses of validity in the knowledge produced, a reflected judgment as to what forms of validation are relevant in a specific study, and a decision on what is the relevant community for a dialogue on validity. (Kvale, 1995, p. 27-28)

Patton (1990) maintained that testing rival explanations can be done both inductively and logically. According to Patton, “inductively it [testing rival explanation] involves looking for other ways of organizing the data that might lead to different findings” and “logically it means thinking about other logical possibilities and then seeing if those possibilities can be supported by the data” (p. 462). Failure to support rival explanations would confirm the validity of the original findings.

*Reporting.* This involves the question of whether a given report gives a valid account of the main findings of a study and also of the role of the readers of the report in validating the results. (Kvale, 1995, p. 28)

It is possible that other researchers could interpret the data of the present study in different ways. First, the present researcher admits that his biases could permeate throughout the analysis portion or even the entire process of the present study. Second, the particular lens or perspective a researcher uses can produce different interpretations.
Trustworthiness of Metaphor Study. The present study adopted the steps that were suggested by Schmitt (2005) to ensure trustworthiness. The steps are especially developed for metaphor studies. In the same manner that Kvale (1995) makes an effort to achieve validity of interview studies, Schmitt (2005) also emphasized that the steps to ensure trustworthiness of a metaphor study apply not only to the results of the research but also, more importantly, to the entire process of the research.

First, “broad documentation of the research process,” “various stages and decisions along the way,” and “standardized procedure” (p. 380) are used to ensure trustworthiness of metaphor studies. The present study used these stages and procedures developed by Schmitt (2005) to maintain trustworthiness by reporting the research process with as much detail as possible and using the standardized data analysis procedures (see Data Analysis section).

Second, “empirical anchoring of the theory building” (Schmitt, 2005, p. 381) entails to what extent the interpretation is based on raw data. In the present study, the reconstruction and the interpretation of the metaphorical concepts were conducted by examining direct quotes in the raw data.

The third step concerns the number of metaphorical concepts. A sufficient number of metaphorical concepts have a better chance of being significant metaphors. The researcher carefully checked the frequency of each metaphorical concept and reflected it in his interpretation. Criteria for a sufficient number are not provided by Schmitt or other metaphor researchers. Therefore, the judgment of this issue is predominantly subjective.
Fourth, according to Schmitt (2005), “the more thorough the comparison of the metaphorical concepts within the material, the sooner can it be assumed that the most significant implications of metaphorical thinking have been discovered” (p. 381). The present researcher attempted to compare as many metaphorical concepts as possible to conduct a thorough examination.

Finally, Schmitt (2005) emphasized the necessity of investigating non-metaphorical text contents and comparing them with metaphorical text contents. The researcher perused the portion of the interview transcripts that did not contain metaphorical expressions on mentoring. These non-metaphorical portions often support the metaphors that were used elsewhere in the transcripts.

Ethical consideration

Punch (1994) argued that there have been debates on the dilemma between “the protection of the subject” and “the freedom to conduct research” (p. 88). This ethical issue has been raised in terms of consent, deception, privacy, harm, identification, confidentiality, and trust and betrayal (Adler & Adler, 1994; Fontana & Frey, 1994; Punch, 1994). For this reason, qualitative researchers need to be aware of ethical issues when they conduct research. To avoid these problems, the present researcher used pseudonyms in the analysis and interpretation instead of the participants’ real names and names of schools. Only the present researcher accessed the raw data. Audio-tapings were conducted only with the participants’ permission. These ethical considerations were followed to prevent the participants from experiencing any disadvantage or discomfort.
Summary

The present study adopted two features associated with conducting a qualitative study, suggested by Eisner (1998). The self as an instrument feature allows researchers to utilize their subjectivity in qualitative research. Eisner’s (1998) remark, “the features that count in a setting do not wear their labels on their sleeves: they do not announce themselves. Researchers must see what is to be seen, given some frame of reference and some set of intentions” (p. 33), reveals how the present researcher approached the study of metaphors. The present researcher labeled and interpreted the metaphors. Another feature associated with conducting a qualitative study used in the present study is attention to particulars. The metaphors that were found reflected the personal uses by participants rather than a generalization of the use of metaphors.

The research genre of the present study was language and communication. According to Marshall and Rossman (1999), the language and communication genre focuses on speech events and interactions and uses microanalysis as a strategy for analyzing data. In the present study, the focus of interpreting the metaphors was the personal uses of metaphors rather than an extension to a broad cultural level.

Ten elementary teachers participated in two interviews. The selection of teachers was grounded on maximum variation sampling (Glesne, 1999; Patton, 1990). The 10 participating teachers’ teaching experiences ranged from 2 years to approximately 30 years, and the number of the student teachers from the yearlong teacher education program was 0 to 12, whom the participants have mentored (see Table 2). In addition, the grade levels of the teachers ranged from kindergarten to fourth grade, and the teachers,
who did not teach during this study, assisted other classroom teachers as part of their administrator’s role.

Two interviews were conducted for each teacher: one in the 2002-2003 academic year and the other in the 2004-2005 academic year. Each interview lasted about 40 minutes. A combined approach of an interview guide and standardized open-ended interview (Patton, 2002) was used in the present study. A main theme (effective mentor) and sub-themes (mentoring strategies, contents of mentoring, lessons from mentoring, and model teacher as a mentor) of mentoring were delineated, and core questions were established in advance for each theme (see Appendix). Different probing questions were spontaneously asked during the interviews, depending on the participants’ or the present researcher’s interests. Among Patton’s (2002) types of interview questions, the primarily ones used are experience and behavior questions (for example, How do you help your student teachers to become the best teachers they can be?) and opinion and value questions (for example, What do you think are the qualities of a good mentor?).

The procedures for data analysis (see data analysis section) were, according to Schmitt (2005): (1) to determine a target area or a topic (i.e., mentoring), (2) to identify metaphors – what is a metaphor and what is not, (3) to reconstruct metaphorical concepts – to group each metaphor into some concepts, and (4) to interpret the metaphorical concepts.

To ensure validity and trustworthiness, the researcher adopted Kvale’s (1995) seven stages of interview investigation: thematizing, designing, interviewing, transcribing, interpreting, verifying, and reporting and Schmitt’s (2005) trustworthiness
steps for a metaphor study (see Validity/Trustworthiness section). For ethical reasons, all participant names were pseudonyms, and audio-taping was conducted with the participants permission. In the next chapter, results of the present study are discussed
CHAPTER 4

FINDINGS

In this chapter, the metaphors embedded in the data and the manner in which those metaphors have educational meaning in mentoring situations are discussed. The data analysis revealed that the major concepts perceived by the teachers’ use of metaphors regarding mentoring (the second research question) were a non-authoritative mentoring approach and an enhancement of professionalism through mentoring experiences. In other words, the participating teachers believed that good mentoring can be achieved through a less hierarchical and authoritative relationship with student teachers. In addition, they believed that good mentor teachers are willing to learn from student teachers and that such learning can enhance their ability to teach, learn, and learn to teach. This chapter is organized by those metaphors that reflect these major concepts. For the most part, embedded metaphors are the focus of this chapter, but suggestive metaphors are discussed as well when they relate to embedded metaphors.

Preparation of Data

The present study followed a widely used data analysis procedure, one which involves “identifying, coding, categorizing, classifying, and labeling the primary patterns
in the data” (Patton, 2002, p. 463). This general approach has been adopted by metaphor research studies as well (Munby, 1987; Schmitt, 2005). Participant interviews were transcribed as thoroughly as possible. The present researcher perused the interview transcripts and identified metaphorical expressions within them. All metaphorical expressions in which the target domain was mentoring were marked. Then, each metaphorical expression was categorized into a metaphorical concept. For example, “My mentor always has this calm coolness about him” was grouped into a category called mentor as an owner. In this manner, metaphorical concepts or categories were revealed as a patterned discourse. Thus, the research question, What were the teachers’ metaphors concerning mentoring that are used in their everyday language? can be answered.

Because words such as have, give, get, and so on consist of commonly used ontological metaphors among English speakers, metaphors containing them can be found in topics other than mentoring. Therefore, interpretation of the data extended beyond individual words to full sentences. Also, the data was interpreted in the contexts of the interviews – how the words were used in the contexts (the contextualization of words are discussed in separate sections). For example, in the mentoring-as-giving metaphor, give becomes meaningful when what is given to whom by whom is articulated. If it is an opportunity for student teachers to attempt their own ideas that is the object to be given by a mentor teacher, giving opportunity could be interpreted as reflecting a non-authoritative mentoring approach. Thus, the research question, What were the major concepts perceived by the teachers’ use of metaphors regarding mentoring? can be delineated (i.e., a good mentor uses a non-authoritative approach by giving student
teachers opportunities to attempt their own ideas). The answers to these two research questions will be combined in this chapter because the nature of the data analysis renders the questions inseparable.

Through these procedures, many metaphors and their perceived concepts were found. Because it is not only impossible but also undesirable to list all the metaphors and concepts found, the present researcher selected which metaphors to present in this chapter on the basis of two criteria: (1) metaphors that belong to major concepts (a non-authoritative mentoring approach and professionalism) and that were deemed by more than one teacher to be significant, or (2) metaphors that do not belong to major concepts but were extensively and significantly expressed by an individual teacher. Emphasis was placed on the first criterion. These criteria were established because they reflected the most frequently used metaphors that embedded the most significant concepts.

Overview of Research Questions

The present study’s first research question was: *What are the teachers’ metaphors concerning mentoring that are used in their everyday language?* In investigating this research question, the present researcher found 20 metaphors. Those metaphors are:

1. mentoring as a journey
2. student teaching as a discovery
3. mentoring as a symbiotic relationship
4. mentoring as sharing
5. mentoring as giving
6. student teaching as war
7. mentor as a coach
8. mentor as a big sister
9. mentor as a friend
10. student teacher as a family member
11. mentor as an owner
12. mentor as a flexible entity
13. mentor as a container
14. mentor as a builder
15. mentoring as watching
16. student teacher as a caterpillar
17. student teacher as an entertainer
18. student teacher as a flower
19. mentor as a gardener
20. mentor as nurturing nature

The present study’s second research question was: *What are the major concepts perceived by the teachers’ use of metaphors regarding mentoring?* The 20 aforementioned metaphors are directly or indirectly related to the concepts of a non-authoritative mentoring approach and professional development. These metaphors, in the context of the interviews and the participants’ experiences, revealed that a less hierarchical and more interpersonal relationship with student teachers can bring about more successful mentoring. Furthermore, a non-authoritative mentoring approach will benefit mentor teachers by affording them opportunities to share new ideas brought from
the university. Data analysis in the present study showed that a non-authoritative mentoring approach and professional development were interrelated concepts in that mentor teachers learned from student teachers by adopting a non-authoritative mentoring approach (i.e. permitting student teachers to attempt their new ideas in classrooms).

Given that the non-authoritative mentoring approach and professional development concepts are grounded in a proper relationship with student teachers, the above metaphors are *relationship metaphors*. It is important to note that relationship issues have been regarded as a critical aspect of effective mentoring (Dever, Johnson, & Hobbs, 2000; Gore, 1991; Graham, 2006; Lemma, 1993; Stanulis & Russell, 1999; Veal & Rikard, 1998; Zuckerman, 2001). The collaborative relationship between mentor and novice teachers goes through several developmental stages (Dever, Johnson, & Hobbs, 2000; Gray & Gray, 1985). An alternative supervision model was suggested, one in which mentor and student teachers have equal voice and share in the decision-making process, thereby learning from each other (Dever, Johnson, & Hobbs, 2000; Graham, 2006; Lemma, 1993; Veal & Rikard, 1998; Zuckerman, 2001).

Gore (1991) distinguished two kinds of mentor/student-teacher relationships: *interpersonal relationship* and *power relations*. *Interpersonal relationship* pertains to the affective aspects between the two parties such as trust, respect, comfort, and friendship. *Power relations* indicate the degree of the student teachers’ voice. Data analysis of the present study revealed that interpersonal relationship and power relations are interwoven.
That is, as trust and friendship between mentor and student teachers establish, student teachers express their voices and thereby are allowed to attempt the implementation of new ideas into their classrooms.

The results of the mentoring relationship literature are mixed. Certain mentoring relationships were hierarchical (Gore, 1991), others were collaborative (Dever, Johnson, & Hobbs, 2000; Lemma, 1993; Graham, 2006; Veal & Rikard, 1998). Several studies showed mixed results (Stanulis & Russell, 1999; Zuckermann, 2001). Despite these inconsistent findings, the researchers’ suggestions were similar: the relationship between mentor and student teachers needs to be collaborative rather than hierarchical if the benefit of reciprocal learning is to be realized.

If the metaphors that were found in the present study are grouped by the interpersonal relationship and power relations that were suggested by Gore (1991), the results are as follows.

*Interpersonal Relationship Metaphors*

1. student teachers as family members
2. mentor as a friend
3. mentor as an owner
4. mentor as a container*
5. mentor as a builder*
Power Relations Metaphors

1. mentoring as a journey
2. student teaching as a discovery
3. mentoring as a symbiotic relationship
4. mentoring as sharing
5. mentoring as giving
6. student teaching as war
7. mentor as a coach
8. mentor as a big sister
9. mentor as a flexible entity
10. mentoring as watching
11. student teacher as a caterpillar
12. student teacher as an entertainer
13. student teacher as a flower
14. mentor as a gardener
15. mentor as nurturing nature
16. mentor as a container*

* Mentor as a container and mentor as a builder are grouped into both Interpersonal Relationship Metaphors and Power Relations Metaphors.
The metaphors in the *Interpersonal Relationship Metaphors* group emphasize the affective aspects or personality issues of mentoring. For example, one of the participants focused her discourse on her mentor teacher’s *having* a good personality and being able to *build* a good relationship that made student teachers feel at home. The metaphors in the *Power Relations Metaphors* group are related to if or how much student teachers’ opinions and ideas are permitted. For example, to facilitate effective mentoring, several participants in the present study maintained that mentor teachers needed to *give* student teachers opportunities and be *flexible* enough to let them attempt their own ideas. However, these two categories are blurred to a degree. For instance, *open-mindedness* in the *mentor as a container* metaphor extended into both the *Interpersonal Relationship Metaphor* and *Power Relations Metaphor* groups. That is, because a mentor who was so *open* that he could build a good interpersonal relationship with his student teacher also shared his power to make decisions in the classroom. Therefore, the grouping depended on to what degree a metaphor was slanted toward a particular group in the context of the interviews. The following sections explicate the manner in which the present study’s relationship metaphors reflect the concepts of a non-authoritative mentoring approach and professional development. The abbreviations *IR* and *PR* in the section titles stand for *Interpersonal Relationship Metaphors* and *Power Relations Metaphors*, respectively.

**PR: Mentoring as a Journey and Other Related Metaphors**

In conceptual metaphors, it is not unusual to observe the conceptualization of one in terms of journey. According to Lakoff (1993), this repeated occurrence of the same metaphor in different target domains is attributable to “inheritance hierarchies” (Lakoff,
1993, p. 222). In other words, metaphors have a hierarchy, so one metaphor can include many metaphors in its hierarchy. The journey metaphor is one example. A related upper-level metaphor is “A purposeful life is a journey; I’m at a crossroads in my life” (Lakoff, 1993, p. 222; p. 223) whereas lower-level metaphors include “Love is a journey; We’re at a crossroads in our relationship” (Lakoff, 1993, p. 222; p. 224), “A career is a journey; I’m at a crossroads on this project” (Lakoff, 1993, p. 222; p. 224), and so on. Mentoring as a journey falls at a lower level than “a purposeful life is a journey” on the metaphoric scale because love, career, and mentoring are purposeful events in life (i.e., they have goals [destinations], actors [travelers], and so on).

Following are examples of mentoring as a journey metaphors.

Mary: Listen and help them find their way in becoming a teacher.

Mary: You’re trying to lead them down this little path.

Mary: We’re going to walk down this road together.

Elisa: [My mentor showed me] how to go through curriculum guides and find those resources.

As implied in these examples, correspondences between source domain (journey) and target domain (mentoring) are obvious. Mentor teacher and student teacher take this journey together. The mentor teacher leads and helps the student teacher find the way. On this journey, the mentor teacher helps the student teacher overcome an obstacle such as utilizing curriculum guides in an effective way. In this section, Mary’s metaphorical
journey and other related metaphors are exemplified because she was the participant who used the mentoring as a journey metaphor in the most significant way. Moreover, the manner in which the metaphors reflect her desire to manage a non-authoritative mentoring approach is exhibited.

In Mary’s mentoring discourse, a few metaphors including find, field trip, and journey, were intertwined into one metaphor: *Mentoring is going on a field trip or a journey to find something.* Using the *student teaching as a discovery* metaphor, Mary revealed that the mentor teacher’s role is to help student teachers find their teaching identity. For example, Mary said:

Listen and help them find their way in becoming a teacher more than just mimicking yourself. I think you have to let them [find their own way].

I didn’t give enough directness sometimes. I was so into the questioning and wanting them to find themselves.

You find out when you are a teacher, you do it the way she [your mentor teacher] did

I have to help them find their stance as a teacher … I don’t want them to be me.

I really believe in hands-on exploring, finding yourself.

As implied in the above examples, Mary avoided being didactic and did not want her student teachers to imitate her. Instead, she preferred helping student teachers discover their own identity and become a teacher who is different from anyone else. This
virtue was probably one of Mary’s ultimate goals in her mentoring practice. At one time, Mary even implied that she was uncomfortable when she saw one of her student teachers doing the same things she did. Hence, *finding identity* is an essential part of Mary’s metaphors.

Mary’s *field trip / journey metaphor* is an important part of her discourse about mentoring as well. Following is an example of *mentoring as a field trip*.

Mary: It’s [student teaching] like a *field trip*. You’re [student teacher] going to be on this *field* with me all year. … It’s [mentoring] like you’re [mentor] trying to lead them [student teacher] down this little *path*.

This field-trip metaphor does not show Mary’s desire for a non-authoritative mentoring approach. Rather, the mentor teacher is depicted as a leader who guides student teachers down the path. This field-trip metaphor, to some extent, renders the image of a teacher leading children on a field trip. On field trips, teachers play a supervisory role with the children. Teachers give relatively one-way guidance to the children attending the field trip because students usually do not *guide* teachers. Nevertheless, Mary’s approach to mentoring was different from a field trip based on an adult-children relationship. It was based on a more or less equal relationship between two parties. The following example demonstrates how Mary’s field trip or journey was different from student field trips based on traditional adult-children relationships.
Mary: I don’t know all the answers. We’re going to have this little *journey* together. We’re going to *walk down this road* together. … I try to model being reflective and not having the answers because none of us ever have answers, none of us ever get this right, none of us know how to teach all children, none of us know this. … maybe I don’t give enough *direction*. I really believe in hands-on *exploring, finding* yourself, … they don’t get enough *guidance*. I’m not giving enough *guidance*.

As implied above, Mary showed her reluctance to use a didactic approach to mentoring. Basically, she possessed a view that nobody, herself included, knows all the answers. This view contrasts with the customary view that experienced teachers know all the answers and therefore student teachers should follow experienced teachers because they (student teachers) are less knowledgeable. Mary saw her student teachers as equal partners with whom she was on a field trip or journey. In this sense, the journey may be a more appropriate metaphor for Mary than a field trip. This is because the field-trip metaphor may remind one of a traditional one-way adult-children relationship.

Mary: Big thing is I think from the day you bring them [student teachers] into the classroom in front of the children, you treat them as a teacher. They’re not an assistant, they’re not a student. I think you have to treat them as a valuable part of the room, a professional from the very beginning. … I think it has to be a partnership from the time they enter the door.
This non-metaphorical statement (not including *mentoring as a journey*) supported Mary’s non-authoritative, partnership-based mentoring approach; one that was envisioned through her journey metaphors. To Mary, mentoring is a field trip but not one that includes a leader and followers. Rather, it is one that includes equal partners. It is debatable whether or not a perfectly equal relationship is possible between mentor and student teachers (Bullough, 2005). It is evident, however, that Mary pursued an equal relationship to as great of an extent as she could. Mary believed that her relationship with student teachers was built on a partnership. Therefore, it is not surprising that during the interview she spoke of enhancing professionalism through learning from student teachers’ energy, new ideas, new ways of looking at things, and so on. She recognized that learning occurred not only in student teachers but also in her. She was willing to accept this mentoring situation as an opportunity to learn. Perceiving mentoring as a chance to enhance professionalism has been reported in other research studies (e.g., Davis, Resta, Higdo, & Latiolais, 2001; Osgood, 2001). This perceived concept concerning mentoring was well described in one of Mary’s suggestive metaphors.

Mary: it’s like a symbiotic relationship. …… this little bird, …… As he gets the food of what the crocodile ate and at the same time the crocodile doesn’t have a toothbrush or his fingers can’t pick his teeth so the bird is like cleaning his teeth the whole time. They’re both benefiting. I think we both benefit.
Mary’s journey or field trip was based on this symbiotic relationship with her student teachers. This perspective was also related to her mentoring as sharing metaphor. Mary demonstrated how the mentoring as sharing metaphor reflected her mentoring approach:

I think being able to let go, to share your class and not be the only teacher in the room, is a good [mentor’s] quality.

I think if you share that [what makes you a teacher] with them, then they become that way also.

I’m sharing a room with you, so you are my colleague. I’m sharing my most important thing with you, my classroom, my children. So, you know, we have to do this together to do a good job.

Mary’s two metaphors, mentoring as a journey and student teaching as a discovery, can be related to each other in the sense that Mary went on a journey with her student teachers during which she helped them find themselves (identity as a teacher). Mary helped them become themselves, not anybody else. Mary and her colleagues met for this journey as a mentor and student teachers, but Mary wanted to build a partnership, an equal relationship based on a non-authoritative mentoring approach with them. She wanted to learn from her student teachers as they learned from her, and thus renew her professionalism. She also wanted to share important things with her colleagues that they could use on this journey.
PR: Mentoring As Giving

*Mentoring as giving, or mentoring as gift-giving,* is not a new metaphor to depict the relationship between mentors and mentees. Gehrke (1988) suggested that the gift a mentor gives a protégé is “a new and whole way of seeing things” (p. 192). This definition of gift implies a process whereby the socialization of mentees occurs from being novices to experts in their community. However, considering that *give* is a commonly used word in ontological metaphors, the *give*-metaphor as an embedded metaphor must be semantically broader.

The *mentoring as giving* metaphor was used extensively in the participants’ discourse. Following are some examples from the interviews.

Daisy: That teacher *gave* me the opportunity to do some student teaching.
Gretchen: I also *gave* her a chance to take a risk in the classroom.
Linda: I did not *get* that much feedback from my cooperating teacher.
Linda: I try to *give* them feedback.

As implied by Daisy and Gretchen, *mentoring as giving* was used to describe a non-authoritative mentoring approach. The chances for student teachers to attempt what they want must be given as an essential part of effective mentoring. Linda’s metaphors are close to Gehrke’s (1988) definition of gift-giving because student teachers have a better chance of seeing things in a new way through the direct feedback from a mentor. In this
section, these two different *give* metaphors are analyzed in detail through Daisy and Linda’s discourse. These two teachers used *mentoring as giving* in significant, but contrasting ways.

According to American Heritage Dictionary (1994), *give* primarily means “to make a present of” (p. 356) as in *I gave her the book* or “to place in the hands of” (p. 356) as in *Can you give me the pencil on the table?* As Lakoff and Johnson (1980) and Taylor (1984) pointed out, dictionary definitions are limited in terms of the ways in which individuals use metaphors. When Daisy used the *mentoring as giving* metaphor, she consistently used the word *opportunity* with it as well. *Giving opportunities* seemed to be what she wanted to emphasize. This situation is an example of how dictionaries fail to convey metaphorical meanings. Dictionary meanings such as “to make a present of” or “to place in the hands of” do not contain more subtle meanings such as “to allow (student teachers) to do things” or “to let (student teachers) do things.” Daisy, using the behavioral image of give and take, seemed to express how to mentor student teachers.

Daisy: I think you have to be able to say “*Give* the student who is in your room the *opportunity* to try new things” without your continual interference. I think you need to let them try new things.

Daisy also recalled her long ago student-teaching days. In so doing, she implied what qualities make a good mentor.
Daisy: That teacher gave me the opportunity to do some student teaching. … I think that was a big factor because they gave me the chance to spread my wings. They gave me the opportunity to take risks as far as doing things on my own, right off the bat: making decisions about curriculum, making decisions about interventions plans for certain children. I think I was embraced by the whole staff.

As indicated above, the mentoring as giving metaphor contained meaning that many dictionaries do not cover. When a mentor teacher gives a student teacher an opportunity, he or she is letting that student teacher try what he or she wants. Thus, the mentoring as giving metaphor can be interpreted as a willingness to share the power based on a non-authoritative mentoring approach rather than “to make a present of” it. This redefinition of giving can also be understood through a few examples of the mentoring as sharing metaphor Daisy used. Daisy’s statements such as “You also have to share your classroom,” “There was such great benefit in two teachers sharing that experience,” and “I like sharing ideas” demonstrated that giving and sharing are closely connected to her conceptualization of mentoring.

According to Daisy, mentors need to give other things besides an opportunity.

Daisy: You [mentor teacher] might be giving them [student teachers] a guideline, a timetable of trying new things … I think you have to give them some guidelines to begin with and let them work with that guideline but also give them the opportunity to say “I really would like to try it this way.” … We [mentor teachers]
don’t just throw off everybody [student teachers] and say, “do this reading lesson” and not give her any background or any suggestion or any help. … So we try really hard to make sure that she has the support she needs and she is given information that she needs …

Mentor teachers need to give student teachers not only opportunities to do things they (student teachers) want to try but also guidelines, background, suggestions, help, and information about lessons. This image of giving and taking implies a nature of establishing a relationship between mentor and student teachers. Although Daisy emphasized an equal, non-authoritative relationship between mentor and student teachers through her mentoring as giving metaphor, a hierarchy is also embedded in the above statement. For example, giving guidelines is likely to happen in a unilateral direction, from mentor teacher to student teacher. Giving opportunity is even more unilateral in that whatever student teachers give their mentor teachers would not be opportunity. Although student teachers have ideas to give to their mentor teachers – such as contemporary theories from universities, for instance – it seems that there are many more ideas given to student teachers by mentor teachers. This is due to the mentors’ higher position and their plentiful experiences as educators. In this sense, Daisy’s mentoring as giving metaphor represents an example of how a mentor teacher’s metaphor implies a non-authoritative mentoring approach to a relationship that is hierarchical in nature.

Linda also used the mentoring as giving metaphor extensively, but the implication of the metaphor is different from Daisy’s use of it. Linda’s give metaphor implied a
mentor teacher’s more active intervention in student teachers’ activities whereas Daisy’s metaphor emphasized a more laid-back approach to mentoring, one that would allow student teachers to try what they want.

Linda believes that mentors should maintain “a good balance” between actively helping and stepping back. According to her, mentoring is not “holding their hand doing everything” nor is it “totally leaving them off on their own.” Mentors should keep a balance between these two extremes. However, Linda’s interviews implied that she puts more value on “holding their hand” than “leaving them off.” Indeed, Linda did not provide much explanation of the necessity of “leaving them off.” As was the case in Daisy’s statements, Linda’s leaning toward one side of two virtues (holding their hand and leaving them off) was due to her prior experiences as a student teacher. However, her prior experiences as a student teacher were negative whereas Daisy’s experiences were positive. Given that prior experiences are an influential component of teacher development (Wilson & Readence, 1993), the semantic differences in the metaphor were expected to some degree.

Linda’s leave metaphor needs to be considered in relation to her give metaphor. She thought that mentors should give student teachers some ideas rather than leave them on their own. In the following quote, Linda contrasted her experiences as a student teacher with those as a mentor teacher.

Linda: I think it would just go back to not getting the feedback [from the mentor teacher]. When I student taught I was pretty much just left to do everything on my
own and to figure out what I needed to do and how to do it. … My mentor teacher didn’t really help me develop any of my lessons. … and I was kind of left to find the curriculum guide, find the books, talk about what they had done before. So, I worked very independently. And, so as a mentor teacher, I say, “Well, we need to do this in addition and subtraction. We’ve already done these things. This is what we need to do next. Here are some resources. Here are some things the kids might like.” You know, just help them a little bit more. … give them some information on what we’ve already done, and on what they need to be able to do. Then to go over the lessons with them in advance and say, “Okay, this would be a good idea, but you might want to keep this in mind.” Or, “This might take too long, or too short.” And then afterwards meet with them. I don’t leave my student teachers alone very often, especially in the beginning, because I like to observe their lessons and be able to give them feedback about how they are doing. So, I just think it has to be a collaboration. You know, a student teacher just shouldn’t be left by themselves to figure out what to do and that’s kind of how I was and that’s why I don’t do it now. … but I like to make sure that what they are doing is appropriate, is it the curriculum guide, and I’m not going to let them do something I know is going to be really hard, you know too hard for the kids and have it be a failure in that, and then I try to give them feedback when they’re done too. You know, hopefully good [feedback]. But if there are little things we need to do next time, then we talk about that too.
In contrast to other participants, a different perspective was presented in the passage above. For example, “I worked very independently” and “It has to be a collaboration” had different meanings from the ones other participants in the present study presented. In other teachers’ cases, the word collaboration was usually used to mean that a mentor teacher should give student teachers leeway and let them try what they want. In other words, collaboration usually means the reduction of a mentor’s interference. In contrast, Linda used the same word to focus on a mentor actively giving student teachers feedback. That is, to other participants, student teachers do something because mentoring is collaboration. To Linda, however, mentor teachers do something because it is collaboration. To other participants in the present study, student teachers should be allowed to work independently because they have leeway. But when she was a student teacher, Linda worked independently because she was left behind, alone. Linda’s student teaching experiences of being left to her own devices seemed to contribute to her mentoring perspectives. Furthermore, although other participants tried to emphasize that they let student teachers experience new ideas and so on themselves, Linda argued that she might not let student teachers try out those ideas when their (student teachers) lessons were likely to fail. This was a different approach from that of the other teachers.

In Linda’s language, leave and give represented opposite meanings. This was an interesting finding in that leave (meaning to go out or away from, American Heritage Dictionary, 1994, p. 475) and give (meaning to make a present of, American Heritage Dictionary, 1994, p. 356) are not usually regarded as opposites. Furthermore, they are not often related to each other. Yet as demonstrated above, Linda used their meanings as
opposites because her thinking about mentoring can be summarized as *I do not leave but give*. If Linda thought that her mentor teacher gave what she needed to get, then the leave metaphor might not have been significantly used in her interviews. This is because the mentor’s *leaving* might not have happened. Thus, Linda’s leave and give metaphor revealed that the use of metaphors and the meaning of language can be different according to contexts and experiences.

What did Linda want to give her student teachers? Some examples are:

*Give* them [student teachers] a lot of *feedback*, good and constructive.

They [mentor’s feedback] can *give* you [student teacher] some *suggestions* for the next time.

I’m still able to *give* them [student teachers] a lot of *time* that they need.

The contents of giving such as those expressed above are different from Linda’s experiences. Linda’s interviews implied that feedback, suggestions, and time were the commodities that she was not given by her mentor teacher, but these are what she wanted to give to her student teachers. Therefore, the above short list of *giving* reflects her prior experiences as a student teacher.

**Student teaching as receiving.** If mentoring is giving, student teaching as receiving is a naturally following metaphor. The uses of a word such as *get* in the interviews revealed how student teaching was conceptualized as receiving. In Linda’s words, examples are:
Get advice on how to do centers

I did not get that much feedback from my cooperating teacher

I never got any feedback about how I could have done it differently

Again, feedback from the cooperating teacher was the issue. What a mentor teacher gives (or does not give) is what a student teacher gets (or does not get). Compare the above examples from Linda with the following examples from Linda as well.

Give them [student teachers] a lot of feedback, good and constructive.

They [mentor’s feedback] can give you [student teacher] some suggestions for the next time.

The mentor teacher and student teacher give and get the same things. This means that mentoring as giving and student teaching as receiving comprise a single metaphor. Giving and receiving feedback and advice between two people occur simultaneously.

PR: Student Teaching as War

Survival in the classroom has been a primary concern of student or novice teachers (Fessler, 1995; Osgood, 2001). Because the battlefield is a prototypical situation in which survival matters, student teaching as war is an easily understood metaphor. The student teaching as war metaphor reveals one of the major concepts that was found in the present study (a non-authoritative mentoring approach), but not in an explicit manner.
Nevertheless, this war metaphor was extensively and significantly used during the first interview with Ashley, a second-year elementary teacher and a former student teacher in the yearlong program. The *student teaching as war* metaphor has an implication of what should be considered when dealing with student teachers’ primary concerns (survival in a classroom, conflicts with a mentor teacher and so on). Interestingly, Ashley’s war metaphor was rarely found in the follow-up interview that was conducted two years later. This topic is discussed further in a separate section.

Before discussing *student teaching as war*, Ashley’s suggestive metaphor, *mentor as a coach*, needs to be explained. Both *student teaching as war* and *mentor as a coach* imply the significance of *winning* to *survive*.

Ashley: I guess sort of like a *coach*. Somebody who demonstrate a good way to do it and then helps you become the best you can be. Just sitting back and *replaying the tape*: Rene [Ashley’s mentor] saying what she saw after a lesson versus what I saw. Because sometimes we were in the thick of things, *middle of the game* or whatever, you don’t see what actually happened. And having somebody be able to step back and give another perspective to what happened and say, “Well, I might have tried it this way,” and then kind of rehashing it, *practicing* it. That kind of thing.

The *mentor as a coach* metaphor is similar to the situation of an athletic head coach’s post-game analysis. That is, after a game, coach and players watch the game tape
together. As they do so, the coach points out what worked and what did not and provides suggestions for improvement for the next game. Compare mentor as a coach with the following metaphor, student teaching as war, which emerged from Ashley’s comments.

Her opinion won.

If I were the one in charge of the class, I had a little bit more of the freedom.

You can keep the kids under control.

They [kids]’re not under control.

You’re free then to teach.

It wasn’t going to be the end of the world.

A lesson bombed.

I love them to death.

Is this the best course of action?

The thing [decision in class] that’s gonna win out.

Ashley’s suggestive metaphor, mentor as a coach was not explicitly supported by the bulk of her interview comments. Instead, this metaphor was embedded in a different metaphor, student teaching as war. These two metaphors share commonalities in that whether it is a war or a game, those who are involved in it are supposed to work hard to win. Also, in terms of decision-making, these metaphors reflect a hierarchical relationship that is similar to that which exists within either a military or sporting organization.
Ashley: If she [Ashley’s mentor] was the one who was in charge of the class at that point, her opinion won ultimately and if I were the one in charge of the class, I had a little bit more of the freedom because I was the one doing the full-time teaching at that point.

The above statement was Ashley’s response to a question about what her mentor teacher did when Ashley had a different opinion. In this response, it seems that the question of who is in charge was the main issue. The person who was in charge would win whenever there was a difference of opinion. It is interesting that Ashley said, “her opinion won” and “I had a little bit more of the freedom.” This is because the person who “won” was not her enemy but rather her mentor, someone who was supposed to support Ashley. If this is an example of a war metaphor, Ashley was conducting two wars at the same time. One was with her students as a student teacher and the other was with her mentor teacher. This finding implies that mentor teachers need to deal with a potential war that can occur when different opinions emerge between the two parties.

It was unclear in the first interview whether this metaphor meant that Ashley had numerous conflicts with her mentor teacher. What is clear is that Ashley did receive support from her mentor during those frustrating experiences of student teaching.
Ashley: I think knowing that it wasn’t going to be *the end of the world* if one lesson wasn’t the best and knowing that the people are there to support me because she [Ashley’s mentor] was always there to support me even when a lesson *bombed* and I was in tears at the end of the day.

She also indicated the importance of a university teacher education program.

Ashley: [It is really important] to go back and to make sure that what you want to do has grounding in what we know, not to just make a random decision, but to think about “Is this the best *course of action*?” And that’s not always the thing that is going to *win out*.

Ashley frequently used similar warlike metaphors for her classroom experiences. Ashley’s metaphors demonstrated that she fought to be successful as a classroom teacher. The classroom seemed to be a battlefield on which she fought to win every day, her lesson might bomb, she needed somebody to support her to win out, and so on. From Ashley’s perspective, mentors need to play the role of a military officer, one who directs soldiers to win battles. A student teacher cannot win without a mentor.

With respect to the *student teaching as war* metaphor, both Ashley and her mentor teacher should be ranked as officers because a soldier is unlikely to participate in the analysis of battles. Because student teachers discuss the analysis of their teaching with their mentors, it can be assumed that a student teacher is a lower-ranked officer than
the mentor. However, in the future, the student teacher will potentially become an equally high-ranked officer as the mentor teacher. Although the mentor-teacher/student-teacher relationship (higher-ranked officer/lower-ranked officer relationship) is still hierarchical, student teachers not only receive their mentors’ order, but they also participate in decision-making processes.

One of the reasons the relationship between Ashley and her mentor teacher was less hierarchical than the soldier/officer relationship was that her mentor teacher treated Ashley not just as a student teacher but as a regular classroom teacher. In fact, her mentor teacher may have treated Ashley as a future colleague teacher. Thus, Ashley seemed to have worked with as well as under her mentor. The balance between with and under would determine how the mentor and student teachers oscillated between collaborative mentoring and authoritative mentoring.

IR/PR: Mentor and Student Teachers as Family Members

In a few participants’ interviews, mentor and student teachers were described as family members to ensure successful mentoring. Ashley depicted the relationship between mentor and student teachers as a big sister and younger sister. Daisy emphasized an affective aspect of mentoring, using the family metaphor. The mentor and student teachers as family members metaphor is related to the notion of a non-authoritative mentoring approach. For example, the big sister is usually less controlling or authoritative than parents are, so she will allow her younger sister to try something new, experience failure, and learn from it. The manner in which Ashley and Daisy used the family
member metaphor is different on the one hand, but similar with respect to the concept of a non-authoritative approach, on the other hand. In this section, that dichotomy is discussed.

**Mentor as a big sister.** In her second interview, Ashley’s metaphors, *mentor as a coach* and *student teaching as war*, disappeared. When she was first interviewed, Ashley was a second-year teacher, who had had no student teachers. By the time when she was interviewed for the second time, Ashley was a fourth-year teacher, who had had one student teacher. Ashley’s major suggestive metaphor during the second interview was *mentor as a big sister*.

Ashley: I guess as a mentor I would want to be sort of like the *big brother or sister*. You know, somebody that you felt close with that you could talk about and confide with and be able to help you through your mistakes and have a little bit more wisdom so that they can point out things where you might make the mistake. But your *big brother and sister* is going to let you make some of your own mistakes as opposed to a parent who is going to stop you as soon as they see a mistake happening. I think, you know, a *big brother or sister* I think or as being more of a friend. Somebody you can go to for advice, somebody who has been there, done that, but is going to let you do your own thing too.

In the *mentor as a big sister* metaphor, Ashley’s explanation was focused on the noticing of mistakes. She contrasted the actions of parents and the big sister: Big sister
will let her make a mistake whereas parents will stop that mistake from being made. As indicated above, Ashley also implied that mentor as a big sister is similar to mentor as a friend because friends will not stop her attempts either. Sarah used the mentor as a friend metaphor in a similar manner.

Sarah: I think that he [Sarah’s mentor teacher] helped me be the best teacher that I can be by kind of just basically being a friend. Kind of first and foremost he was like a friend. I felt comfortable with him. I was able to talk to him. So when I had challenges, I felt comfortable going to him and saying, “Hey, this is not working” or “I don’t know what I’m doing. What should I do?” So, he helped me in that aspect that we were kind of friends.

Friendship does not always occur between mentors and student teachers because their relationships are basically hierarchical. However, Sarah’s mentor adopted a different approach. To him, being a friend and making his student teachers comfortable would lead to successful mentoring.

As a mentor, Ashley focused more on making mistakes in student teaching situations as demonstrated in both the previous and following comments.

Ashley: I think that a good mentor lets you do some of your own lessons and make some of your own mistakes and then after you have kind of made the mistakes lets you work through how to fix it for the next time. But, still lets you,
lets go of some of the control so you can make some of those mistakes. I think when a mentor is too controlling you don’t ever get the chance to make a mistake, so you don’t really learn from your mistakes. If you are constantly trying to do what your mentor would do, you don’t get your own mistakes in there.

In essence, for Ashley, there is a different viewpoint between her first and second interviews. One of the issues in the first interview was who was in charge of the classroom and how to win out in the classroom. In the second interview, Ashley’s focus shifted to making mistakes and learning from them. The big sister metaphor seemed to support this concept. The second time around, Ashley did not want student teachers to be “constantly trying to do what your mentor would do,” because then, student teachers would not have a chance to learn from their mistakes. This perspective can be compared with a previous quote from the first interview: “If she [Ashley’s mentor] was the one who was in charge of the class at that point, her opinion won ultimately and if I were the one in charge of the class, I had a little bit more of the freedom because I was the one doing the full time teaching at that point.” This excerpt from the first interview revealed Ashley’s view on what determines whether or not a student teacher follows her mentor. That determinant is who is in charge of the classroom rather than the student teacher’s willingness to follow.

In Ashley’s second interview, there were no more war/coach metaphors. Perspectives about making mistakes replaced them. The hierarchical relationship shifted to a more equal (but not perfectly equal), non-authoritative relationship between big sister
and younger sister so that the younger sister is allowed to try something new, experience failure, and learn from it. If this new metaphor is reflective of how Ashley will mentor her future student teachers, then Ashley will be willing to let her student teachers learn from their mistakes.

**Student teacher as a family member.** Whereas Ashley focused specifically on sisters in a family, Daisy expanded the concept of mentoring to the entire family. In this family metaphor, a mentor teacher is a parent and school children are the mentor teacher’s own children. Daisy wanted student teachers to be a part of the classroom family as another parent or relative.

Daisy: I want that person [student teachers] coming into the room to *embrace* the children too. I want them to feel like these are *their children*. The same as these are *my children*. I want them to feel like that. I look at student teachers as someone who is a *family member* coming in for a visit. This is our *family*. We talk about, you know, this is our *family* here during the day and this is a *cousin or an aunt* or someone who is coming in and spending time with us for a short period of time, so we want to make them *a part of our family*. … I think that the strongest teachers establish your classroom as a *family* and that environment.

In this *student teacher as a family member* metaphor, a question emerges that seems to be of concern: *What kind of teacher does Daisy want her student teachers to be?* Daisy, as she expressed above, wanted her student teachers to become *a part of her*
family. In a metaphorical family in a mentoring situation, a mentor teacher’s support and efforts are needed for student teachers to be a part of the family. Daisy consistently pointed this out.

Daisy: I think that it’s important that you allow the students you are mentoring to become not just a part of your classroom, but to become a part of everything else in the building that you participate in, and I was given that opportunity.

An intriguing point here is that Daisy related the family/part metaphor with her mentoring as giving metaphor. That is, mentor teachers should give student teachers an opportunity to become a part of the classroom or even the school family. Then, how does giving them an opportunity make student teachers a part of the family? By being given an opportunity, a student teacher can be accepted as a part of a classroom family not only by the mentor teacher but also by the children in the classroom. As a family member and a teacher – not just as a student teacher – who is acknowledged by the mentor teacher, the student teacher can attempt to implement new ideas.

More examples of Daisy’s part metaphor in relation to the family and give metaphors are as follows:

Daisy: I was allowed to be a part of all of that and I think that’s what I want when students come in my classroom. … my willingness just to have them come in and be a part of the classroom. … when the children embraced her [student teacher]
… I knew that person had made herself a part of our classroom. … When the children miss the person [student teacher] that has been in their classroom, then you know that person was a part of the classroom. … So that person has established herself as part of our classroom and I think the children are your best indicator of that. … When you see the children have embraced them as part of the classroom, then you know they’ve had a successful experience.

In the above example, Daisy used the emotional term embrace to explain what it means to become a part of her classroom family. Perhaps, family is a more emotionally tied community than others. Daisy’s giving her student teachers an opportunity to become a part of her classroom seemed to even include the emotional aspect of a family.

IR: Mentor as an Owner

The mentor as an owner metaphor was one of the most frequently used metaphors. This tendency is likely attributable to the fact that have is one of the most commonly used verbs among English speakers. So, have is used as a metaphor in numerous cases. Following are some examples of the owner metaphor.

Sarah: My mentor always has this calm coolness about him.

Gretchen: You really do have a mentor relationship with that teacher.

Gretchen: I wanted them to have the passion for teaching.
In the interview transcripts, numerous things were found that mentor or student teachers should have, wanted to have, or were having: time, experiences, personality, commitment, and so on. Among them, this section exemplifies one characteristic – personality – mentor teachers should have. Sarah used the owner metaphor to describe the importance of a mentor teacher’s personality in a significant way.

Sarah recalled her student teaching experiences. When she was asked to discuss a suggestive metaphor for mentoring, she could not come up with one. However, Sarah’s metaphors, similar to those of others, are embedded in everyday conversations. That is, they are in the form of embedded metaphors.

One example of Sarah’s have metaphor is: “He [Sarah’s mentor teacher] always has this calm coolness about him.” The primary meaning of have is “to own or possess” (American Heritage Dictionary, 1994, p. 385). Although “to own or possess” is one of the most noticeable aspects of the word, as Lakoff and Johnson (1980) emphasized, dictionaries often fail to convey deeper meanings. For example, as indicated in the example below, have can imply morality, and morality can imply positive (moral) or negative (immoral) aspects.

Sarah: My mentor always has this calm coolness about him.

A moral aspect seems unobvious in this statement, but one can be abstracted from it. Sarah talked about her mentor’s personality/attitude on mentoring. Indeed, personality
and attitude have something to do with morality in that individuals continue to judge what constitutes a good personality (moral) or a bad personality (immoral). Thus, morality is often embedded in what people say about personality or attitude.

Sarah’s aforementioned positive statement reflected her moral support of her mentor’s personality or attitude (calm coolness) by stating that her mentor has (owns) a certain characteristic. Sarah described her mentor’s calm and cool personality.

Sarah: What were the impressive things about him? I would definitely have to say his personality. Very open, his attitude about education. It [teaching] is one of those jobs that can be really stressful, but he always has this calm coolness about him. It’s like refreshing to see somebody just really laid-back about it. That was really impressive; it still is. Whenever I’m like, you know, kind of stressing out, I’ll go to talk to him.

Sarah’s moral support was connected to the issue of: What are the qualities of a good mentor? By comparing the following statement with the above statements, one could find some consistency between the two and infer what Sarah wanted a good mentor to ‘have or own.’

Sarah: I believe that a good mentor is somebody who is understanding. I’ll talk about personality qualities first, um, understanding. Patient, willing to work with the student teacher.
Personality issues were foremost when Sarah answered the question about the quality of a mentor. *Calm, cool, laid-back, understanding,* and *patient* were expressed as characteristics of a good mentor. Although there are many other potential characteristics a good mentor *has* – experiences, skills, subject matter knowledge, and so on – to Sarah, personality was the one that every good mentor *has.* Therefore, Sarah’s metaphor is *mentor as an owner of a good personality.*

**PR: Mentor as a Flexible Entity**

The *mentor as a flexible entity* metaphor reflected two aspects of the mentor-teacher role. One is flexibility in mentoring and the other is flexibility in teaching. Flexibility in mentoring concerns a non-authoritative approach. An effective mentor teacher will be so flexible that student teachers can attempt to implement their own ideas into the classroom. Following are some examples of the flexibility metaphor in mentoring.

Maggie: I am *flexible* and try to let them [student teachers] do new things.

Katrina: Mentoring is like a *rubber band.* … It can’t be stiff and rigid.

Flexibility in teaching requires spontaneous changes during a lessons when the lessons do not work well. An effective mentor should be able to model this kind of flexibility.
Katrina: Things will go wrong and they [student teachers] need to be flexible.

Maggie: Just flexibility as a teacher – being able to start a lesson and being able to stop it because it is not working and change to do something else.

**Flexibility in mentoring aspect.** Maggie and Katrina were two of the participants who used the *mentor as a flexile entity* metaphor in a similar and significant way. The following statements serve as examples of Maggie’s conceptualization of a mentor in terms of a flexible entity.

Maggie: Someone who is *flexible* and willing to give the student teachers their own *flexibility* to try their own things. Someone who is kind of ready to give up that control of the classroom that the teachers like to have to let the interns take over and be themselves.

You also want your student teacher to be able to get into her own, and to me, that is being *flexible*.

I think my strengths are … I am *flexible* and try to let them do new things.

Maggie used the word, *flexible*, to describe the manner in which she wanted to embody her non-authoritative mentoring approach with her student teachers. That is, she wanted to let them try their own things. Maggie’s remark, “give the student teachers their own flexibility to try their own things” exemplified her mentoring approach. In other
words, it seemed that flexibility had something to do with her willingness to share the decision-making process with student teachers. By sharing the decision about what to do in the classroom, the mentor teacher can be flexible.

Katrina: … you really need to be able to see your class taken over by somebody else, and as much as they follow what’s been going on, it’s never quite the same as you would do it … You have to be flexible. You have to be able to kind of let go and realize that not everything is going to be exactly the way that you would do it.

I think that some of my strengths are that I am able to kind of let them take over, even though it’s hard sometimes. I like to think that I give them enough room that they can experiment with things that they want to do. I’m not really demanding that you have to do this and you have to do this. I might suggest things … but you try it how you want. So, I think maybe I’m flexible in that way.

In the mentoring aspect of flexibility, consistency was found between what Katrina wanted to do and what she could do. Giving student teachers leeway to take over the classroom and try out new ideas seemed to be her mentoring virtue. Katrina’s suggestive metaphor supported her mentor as a flexible entity metaphor.

Katrina: … Mentoring is like a rubber band. … Sometimes it stretches, it has to change, and then it might go back, but it can’t be stiff and rigid. It has to change.
Katrina’s suggestive metaphor, *mentoring as a rubber band*, directly supports her *mentor as a flexible entity* metaphor because a rubber band is a typical object that is flexible – “capable of being bent” (American Heritage Dictionary, 1994, p. 322). This rubber-band metaphor represented a strong sense of her concept of mentoring. In most cases, embedded and suggestive metaphors do not have this strong link. But in Katrina’s case, the embedded metaphor (*mentor as a flexible entity*) and the suggestive metaphor (*mentor as a rubber band*) were strongly associated with each other and revealed a strong sense of flexibility about mentoring.

The necessity of a non-authoritative mentoring approach, like that indicated by Maggie and Katrina, has been proposed in mentoring research studies (e.g., Gore, 1991; Graham, 2006; Lemma, 1993; Veal & Rikard, 1998; Zuckermann, 2001). Lemma (1993) emphasized the image of a reflective mentor teacher as being “faded into the background” with “very little teacher intervention” (p. 337). This image of mentoring entails “fairly equal roles” between mentor and student teachers in that the decision-making, control, and responsibilities are shared by both (Lemma, 1993, p. 338). In this sense, the *mentor as a flexible entity* metaphor is a reflection of the non-authoritative mentoring approach.

**Flexibility in teaching aspect.** The flexibility in teaching aspect relates to professional development rather than to the non-authoritative mentoring approach. The following examples exhibit what Maggie and Katrina meant by flexibility in teaching.
Maggie: Flexibility to me is being able to change your schedule and for the kids they are used to a certain routine and you’d like them to have that … to me, that is being flexible. … flexibility as a teacher, – being able to start a lesson and being able to stop it because it is not working and change to do something else.

Katrina: [As a student teacher] You have to have everything ready and kind of think it all through, but even so, things will go wrong and they [student teachers] need to be flexible. That’s a big teacher word, flexibility.

Both Maggie and Katrina conceptualized flexibility in teaching as the ability to change one’s original plans in the midst of teaching when those plans do not work. This flexibility is reasonably required of teachers because children are not likely to learn from a lesson that does not work. But interestingly, this teaching aspect of flexibility was also regarded as a weakness by Katrina herself. The following remarks demonstrate that Katrina’s weakness is her inflexibility in that she proceeds with her classroom lesson even when “things go wrong.”

Katrina: [My] Weaknesses might be just kind of being flexible. I like to do more of being flexible sometimes. If I have a [lesson] plan, I want to get it done. I might just keep going with it [the lesson plan] even though it’s not working [in a classroom]. So, that’s one area to work on.
In the first passage above, Katrina suggested a way for student teachers to be flexible – flexible enough to simultaneously change what “goes wrong” in a classroom. But in the second passage above, she described herself as not so flexible, as unable to change her lesson plan even when it does not work. This finding was unique in that a characteristic of a good model teacher (flexibility in teaching) that Katrina mentioned was what she had not achieved yet. This discord between what a participant should accomplish as a good teacher and what she actually accomplished was extremely rare in the interviews because the participants usually suggested what they already achieved as a characteristic of a good teacher.

IR/PR: Mentor as a Container

The container metaphor is one of the most commonly used metaphors in general. According to Lakoff and Johnson (1980), “Even where there is no natural physical boundary that can be viewed as defining a container, we impose boundaries – marking off territory so that it has an inside and a bounding surface” (p. 29). Many metaphorical expressions that contain the words such as in, within, into, out of, open, shut, and so on are considered container metaphors. Following are some examples of the container metaphor.

Wendy: I’m willing to change anything within reason.

Wendy: It is clear in my head.

Sarah: He was really open to it.
Among many metaphorical expressions of the container metaphor, the mentor as an ‘open’ container metaphor indicates a non-authoritative mentoring approach. The concept is that open-minded mentors permit student teachers to implement new ideas. In this section, the discussion is centered on the open metaphor.

One of the most important words used in the mentor as a container metaphor was open. According to American Heritage Dictionary (1994, p.583), open primarily means “affording unobstructed entrance and exit” or “not shut or closed.” Sarah and Maggie used the word open as an ontological metaphor to express their personal orientation toward the characteristics of a good mentor. Their ideal openness was primarily related to a non-authoritative mentoring approach.

Sarah: I think that our [Sarah’s and her mentor’s] personalities went well together. It was like the type of teacher [he is]. If we [Sarah and another student teacher] did want to try something, he was just open to it because he’s just that type of person. If we had ideas that we wanted to try, he told us from the beginning like … “If you want to try anything, don’t be afraid to try new things. If you wanna do it, go for it!” So, if I had a different approach or a different teaching method that I might wanna implement, he was really open to it.

Maggie: I listen to her [student teacher] obviously. We’re going to have different opinions in different times. And even though it’s my classroom, she needs to try different things. So even though I may not think it works, I might have tried it
before, it very well could work for her because just her manner is different or the way she teaches is; her style is a little bit different. And that’s gonna happen, so I need to be open about that.

These statements reveal the relationship between the mentor as an owner and the mentor as a container metaphors. Sarah and Maggie suggested characteristics that good and effective mentors should have by means of a mentor as a container metaphor. To Sarah and Maggie, personality-related factors were most important and were linked to a mentor’s openness. In other words, a good mentor should have a personality, one which is open-minded.

Maggie’s mentor as a container metaphor was reflected in her mentor as a flexible entity metaphor. To Maggie, these two metaphorical concepts referred to the same topic. As revealed above, Maggie’s meaning of open implied a mentoring approach that is concerned with a shared decision-making process with student teachers. Maggie argued that she would let her student teacher do what they wanted to do even though she thought it would not work. Although Maggie’s definition of flexible suggested that good mentors let their student teachers do what they want by sharing in the decision-making process, her definition of open reflected the same meaning. In this sense, Maggie’s open metaphor was very similar to Sarah’s open metaphor. Sarah connected her open metaphor to her mentor teacher’s willingness to let her try new things.

A few participants, including Maggie, seemed to present another perspective with their mentor as a container metaphor. They viewed the establishment of a comfortable
relationship with student teachers as a critical element in successful mentoring. The importance of an appropriate relationship has been supported by mentoring research studies (e.g., Graham, 2006; Veal & Rikard, 1998; Zuckerman, 2001). Graham (2006) emphasized the affective aspect of a mentor/student-teacher relationship.

The affective component provided emotional and psychological support and emphasized the importance of interpersonal skills in the teaching/learning dynamic. This component became the vehicle that propelled personal relationship into the realm of pedagogical and promoted discussions of the technical and intellectual tasks of teaching. Most cooperating teachers [participants of Graham’s research] mentioned that open and flexible communication among all participants is critical for the success of the internship. (p. 1124, Italics were added).

As indicated above, mentor teachers often regard the establishment of an affective relationship as an essential aspect of successful mentoring and such a relationship is likely to be expressed through the open and flexible metaphors. The participants in the present study also exhibited their concern with the relationship issue.

Maggie: … openness is a strength [Maggie’s strength as a mentor teacher]. She [Maggie’s student teacher] knows that she can come to and ask me anything, or I can go to her and ask her anything.

I just think that openness, you know, being able to have those conversations and I think that got to know her personally when they were here … We did a lot of talking.
Katrina: The most important [in mentoring] is being open. …… if they have any problems or have any questions, I don’t want them to be scared of me but think of me as someone that they have to ask. I want them to be able to come to me with questions or problems that they’re having and ask advice or ask for possible suggestions and just feel comfortable with that. So openness is one of the important things.

I think, again, [establishing a relationship with student teachers is] just being kind of open with them. Giving them feedback that they can use, useful feedback, but not being condescending to them and giving the attitude, you know, “I’ve been teaching for this long and you’re only just a little intern. You can’t do anything.”

In this example, Maggie’s meaning of open was an open two-way street where mentor and student teachers could go to each other and ask anything of each other. In a one-way street, only one of two parties could go to the other. Furthermore, the open metaphor reflected the concept of being comfortable with each other. Maggie attempted to personally get to know her student teacher, and she regarded doing so as important to the establishment of a relationship. To Katrina, open included making student teachers feel comfortable enough to ask her for assistance. Therefore, in this case, Maggie’s open metaphor related more to an interpersonal relationship that is used as a vehicle for successful mentoring.
As in the case of Maggie, this aspect of openness in Katrina may be connected to the *mentor as a flexible entity* metaphor, which was related more to a power relation. That is, if a mentor teacher is *flexible* enough to share the decision-making process and to let the student teacher establish his or her own teaching style, then their relationship may be *open* and equal. Then, the student teacher feels comfortable enough to ask the mentor teacher for suggestions.

In sum, the participating teachers used different metaphors to describe the same concept. The *mentor as a flexible entity* metaphor and the *mentor as a container* metaphor were used to describe their mentoring approach of sharing the decision-making process and of letting student teachers establish their own teaching style. Second, the teachers used the same metaphor to describe different concepts. The *mentor as a container* metaphor represented the concept of *letting the student teacher try* (Power Relations) on the one hand and *being comfortable with each other* (Interpersonal Relationship) on the other hand.

**IR/PR: Mentor as a Builder**

The metaphors used by the participants revealed that a good relationship with student teachers is a critical element to successful mentoring. The *mentor as a builder* metaphor is one of those metaphors:

Sarah: I think that *building* that relationship with student teachers is important.

Katrina: You *build* that relationship of getting to know each other.

Gretchen: You *build* a relationship and can *work* together.
The builder metaphor was an extensively and significantly used metaphor whenever the participants mentioned *relationship*. To some extent, the builder metaphor was also linked to a non-authoritative mentoring approach and to professional development.

Sarah and Gretchen imagined how they would cope with student teachers who were difficult to get along with if they were such student teachers’ mentor.

Sarah: I think that building that relationship with the student teachers is important. So I think that if we did not click, then I would work on that. You know, just kind of try to get to know them. … You know, find out a little bit about their lives.

Gretchen: I would just spend time with them and build a relationship and then build into the classroom. Because sometimes if you know the person and you have a relationship with the person you can work on what you need to do together. So, if you have no relationship, it’s just like a business.

Sarah and Gretchen used the metaphor *mentor as a builder* to express the notion that a good mentor builds a relationship with a student teacher who is difficult to work with. Sarah’s successful mentoring approach was especially structured around personality issues such as friendliness and openness, as demonstrated previously. This concept was
expressed by the use of several metaphors: *mentor as an owner, mentor as a container, mentor as a builder, and mentor as a friend*. Sarah conveyed a single concept through the use of several different metaphors.

In Gretchen’s case, the build metaphor was combined with the notions of a non-authoritative mentoring approach and professional development.

Gretchen: I’ve always been able to *build* relationships with people and I’ve always been able to let go when I needed to let go to give them [student teachers] the legs to do their own teaching. But the more I *worked* with them [student teachers], the more I reflected on my own practice, and the more you reflect on your practice, the better you get. So, I think I became a better teacher.

Gretchen based her non-authoritative mentoring approach – letting student teachers attempt their own way of teaching – on building relationships. In other words, a non-authoritative mentoring approach is critical to building a relationship with a student teacher. In addition, building a good relationship is critical to successful mentoring. In addition, Gretchen utilized her mentoring experiences to reflect her professional aim to become a better teacher. This is an example of professional development through the *building* of a relationship and *working* with student teachers.

PR: Mentoring as Watching

The *mentoring as watching* metaphor implies a laid-back attitude toward mentoring because *watching* is a relatively passive action. Considering that mentor
intervention should be minimized if a relationship with student teachers is to be built (Lemma, 1993), it was expected that a passive metaphor such as *mentoring as watching* could be linked to a non-authoritative mentoring approach. Following are some examples of the *mentoring as watching* metaphor.

Katrina: You really need to be able to see your class taken over by somebody else.

Lee: You may try it and see how it works.

Lee and Katrina were the participants who used the *mentoring as watching* metaphor most significantly. Lee used this metaphor coherently along with her suggestive metaphor, *student teacher as a caterpillar*. In this section, the manner in which the participants conceptualized mentoring by means of the watching metaphor is discussed.

Lee’s suggestive metaphor was *student teacher as a caterpillar*.

Lee: It’s like having a *caterpillar* in a *cocoon* and watching it come out of the *cocoon* and changing into a beautiful *butterfly*. You know, it’s watching them grow and expand and be successful.

With respect to a developmental aspect, it is simple to understand this *student teacher as a caterpillar* metaphor. Student teachers have almost no teaching experiences when they first start out, but after a while, they become more mature teachers. They
grow, as Lee said. But interestingly, Lee did not directly mention, in her metaphor, what her mentoring was like or how she mentored student teachers. Instead, she just said, “watching it come out of the cocoon … it’s watching them grow…” Watching is a part of mentoring, in general, but it does not reflect the totality of mentoring alone. That is because there is no action other than watching. Therefore, it was necessary to examine whether this mentoring as watching metaphor implied that a mentor should permit his or her student teachers to implement their own teaching and observe what they do without frequent interferences. Consider the following example as support for this inference.

Lee: …… they [student teachers] need to watch, but then they need to be able to try it. They need to be able to give it a go and see how it works for them. I always try to tell them that there are other ways to do things.

There again I say, there are other ways to do this. You know, “I understand what you [student teacher] are saying. … You may do that in your own classroom or you may try it here. You may try it and see how it works.”

These statements indicate that Lee’s watching did not mean she was not involved with her student teachers. Rather, for her, watching is a part of the mentoring process. Lee permitted her student teachers to try their own teaching methods and observed whether it (their teaching) worked and/or how it worked. Therefore, the concept of watching or seeing accompanied the concept of allowing, which is a non-authoritative mentoring approach. This viewpoint implies that the watching of a caterpillar as it turns
into a butterfly as her suggestive metaphor did not mean nothing but watching. Watching made a critical component of Lee’s mentoring. Katrina exhibited a non-authoritative mentoring approach with the *mentoring as watching* metaphor as well.

Katrina: You really need to be able to see your class taken over by somebody else [a student teacher] and as much as they follow what’s been going on, it’s never quite the same as you would do it, so you definitely have to be patient. You have to be flexible; you have to be able to kind of let go and realize that not everything is going to be exactly the way that you would do it.

Katrina also emphasized a non-authoritative mentoring approach by *seeing* (allowing) student teachers take over the classroom and attempt different ideas. Thus, the *mentoring as watching* and *student teacher as a caterpillar* metaphors reflect the minimization of teacher intervention rather than watching per se.

In addition to a non-authoritative mentoring approach, the *mentoring as watching* metaphor is related to the *student teacher as an entertainer* metaphor.

Lee: It’s *fun to watch* them [student teachers]. I mean it’s *fun to watch*. First of all, they just love the children, and that’s good to see all the enthusiasm. … even the ones I’ve thought were somewhat struggling, by the end of the year, they had it pretty much figured out how they were going to do it. It’s *fun to watch* them go.
In the above statements, Lee conceptualized mentoring as enjoying a show by making her image a watcher who watched something funny performed by student teachers. Correspondences of this metaphor are student teacher as an entertainer, mentor as an audience, student teaching as a show, and so on. Cortazzi and Jin (1999) found a similar metaphor, Teaching is Entertainment. In their study, teachers viewed teaching as “fun, but only with good preparation and good relationship” (p. 163). Student teacher as an entertainer and teaching is entertainment reflect a partial reason for mentoring or teaching (i.e., it is fun to do). Whether it is student teacher as a caterpillar or student teacher as an entertainer, it seemed that Lee’s concept of mentoring was partially structured around a visual aspect; watching (observing).

PR: Student Teacher as a Life Form – Student Teacher as a Flower

In metaphor research (i.e., Cortazzi & Jin, 1999), teaching has been conceptualized in terms of a plant. Cortazzi and Jin (1999) found that metaphorical expressions such as “It needs firm roots to bear fruit” and “Children’s knowledge branches out into more and more complexity” (p. 163) could be labeled as “Teaching is a plant” (p. 163). Regarding mentoring, several participants in the present study used similar metaphors, not only plant metaphors but also animal metaphors, which could be categorized into the student teacher as a life form metaphor. As discussed previously, Mary’s crocodile and little bird metaphor and Lee’s caterpillar metaphor exemplified this tendency. Gretchen’s student teacher as a flower metaphor belongs to the same category. This metaphor of Gretchen’s reflected a nurturing aspect of mentoring and a non-authoritative mentoring approach, at least to some degree.
Gretchen: … it’s [student teacher] like a *flower* that you find. And it needs to *grow* and you need to keep *nurturing* it and *nourishing* it so that it can come into its own. It’s kind of that with mentoring. You have to start at one place but you end up in a different place. And hopefully, it’s fully developed. … Maybe we’re the *dirt* and the *soil* with the *flower*. Or we’re the *water* and the *soil*. Need both to *nurture* it. … You still have to *nurture* them. And you still start in a place. Everybody starts at some place. Might be different places for each student but you start at the beginning.

When Gretchen was asked the same question two years later during her second interview, her suggestive metaphor was similar.

Gretchen: Mentoring is like, I guess, maybe *tending a garden*. You *nurture* it, you *take care of* it, you *water* it, and then it *flourishes* and it is *beautiful* on its own.

Gretchen was the only participant who offered the same suggestive metaphor in both interviews. This implies that the *student teacher as a flower* metaphor is a strong conceptualization of mentoring for Gretchen.

Although the student teacher held the image of a flower in both of her interviews, the mentor teacher produced different images for Gretchen. In the first interview, the mentor teacher was the dirt, soil, and water. The mentor teacher, as a part of nature,
should nurture, nourish, and take care of his or her student teachers. As indicated by “tending a garden,” mentor as a gardener was Gretchen’s metaphor for mentor teacher in the second interview. In the mentor as a gardener metaphor, the mentor teacher nourishes student teachers but he or she is not the source of nurturing. In this metaphor, the mentor teacher is a medium for transferring the necessary nutrients.

This difference can be explained by the use of various conduit-metaphor frameworks. In the first sub-category of the major conduit-metaphor framework, “Human language functions like a conduit enabling the transfer of repertoire members from one individual to another” (Reddy, 1993, p. 189, see Chapter 2). That is, in the mentor as a gardener metaphor, transfers of the necessary teaching skills and knowledge occur from mentor teacher to student teacher. Compare this notion with one of Reddy’s examples: “I gave you that idea” (Reddy, 1993, p. 189). Just as the idea was given to ‘you’ by ‘me’ in Reddy’s example, water and nutrients (necessary skills and knowledge in teaching) are given to a flower (a student teacher) by a gardener (a mentor teacher).

In contrast, in the mentor as nurturing nature metaphor, the fourth sub-category of the major conduit-metaphor frameworks, “in listening or reading, human find repertoire members within the signals and take them into their heads” (Reddy, 1993, p. 192, see Chapter 2), was used. In this metaphor, a student teacher finds the necessary teaching skills and knowledge in a source, which in this case is a mentor teacher, and absorbs them into his or her (the student teacher) head. Compare this with Reddy’s example: “Can you really extract coherent thoughts from that incredible prose?” (Reddy, 1993, p. 192). Just as coherent thoughts are extracted from the prose by the reader in
Reddy’s example, water and nutrients (necessary skills and knowledge in teaching) are extracted from the dirt and soil (a mentor teacher) by a flower (a student teacher). Therefore, it seems that the *mentor as a gardener* metaphor assumes that the necessary teaching skills and knowledge exist outside the mentor teacher, and that student teachers approach these skills and knowledge via the mentor teacher. In contrast, it seems that the *mentor as nurturing nature* metaphor assumes that the necessary teaching skills and knowledge and the mentor teacher are inseparable. As such, student teachers directly extract these skills and knowledge from their mentor teacher.

This notion seems to be a contradiction by Gretchen because she implied different meanings with two similar metaphors. According to Lakoff and Johnson (1980), contradiction and inconsistency of a metaphor’s use are not unusual. To Lakoff and Johnson, any metaphor is imperfect, so people use various metaphors to explain a phenomenon even though these metaphors are inconsistent. The inconsistency of Gretchen’s metaphors lies in the fact that the gardener metaphor highlights the mentor teacher’s active roles whereas the nurturing nature metaphor emphasizes the student teacher’s active roles. In other words, there is a subtle difference between *mentor as a gardener* and *mentor as nurturing nature*. In the *mentor as a gardener* metaphor, the existence of a caretaker is the focus. It is assumed that the flowers in a garden will not blossom without a gardener. In contrast, in the *mentor as nurturing nature* metaphor, the existence of a gardener is not assumed. Therefore, it is not necessary to conclude that the
flowers will not blossom without a gardener. In this sense, student teachers seem more active in the *mentor as nurturing nature* metaphor than they do in the *mentor as a gardener* metaphor.

Given that the gardener metaphor (mentor teacher gives student teachers skills and knowledge) is more directive than the nurturing nature metaphor (student teachers extract skills and knowledge from their mentor teacher), it was interesting to examine whether Gretchen supported a non-authoritative mentoring approach as the other participants did. If she did, *mentor as nurturing nature* might reflect Gretchen’s approach better than *mentor as a gardener*. The following example supports Gretchen’s non-authoritative mentoring approach and professional development – learning through mentoring.

Gretchen: And you have to be ready to question yourself in front of them [student teachers] so that they know you are always learning to find better ways to work with the children. It’s not like I’m this expert that knows everything … because student teachers tend to look up to you in that way. And you want to have them as part of your community that you’re teaching but you have to let them know that you’re willing to keep working on different aspects of teaching yourself to find out the better ways. And sometimes you may look at a problem together which is the collaboration I was talking about.
This mentoring approach reflects the *mentor as nurturing nature* metaphor rather than the *mentor as a gardener* metaphor because the above statement indicates more active involvement by the student teachers than merely their receipt of knowledge from the mentor teacher.

The growth metaphor was also used to support Gretchen’s *student teacher as a flower* metaphor.

I would say listening and giving them [student teachers] the room to *grow*.

A good mentor needs to give a student teacher room to *grow*.

I … give her [student teacher] room to *grow*.

Gretchen was very consistent with the use of the growth metaphor. When she was asked about the qualities of a good mentor in 2002, Gretchen’s first answer was, “I would say listening and giving them [student teachers] the room to *grow*.” When she was asked the same question in 2005, her first answer was, “A good mentor needs to give a student teacher room to *grow*.” Considering the consistency of her suggestive metaphor (*student teacher as a flower*), the consistency of her embedded metaphor (the *grow metaphor*), and the coherence between her suggestive and embedded metaphors, Gretchen’s approach to mentoring seemed to be clearly established.

In the third quote above, “I … *give* her room to *grow*,” the give metaphor and the *grow metaphor* work together. Any living thing cannot grow without being provided appropriate conditions in which to survive. Flowers need to be given dirt, soil, and water.
Likewise, for student teachers to grow, they need to be given appropriate support. The flower-metaphor, including the grow-metaphor and the give-metaphor, are interrelated. Consider the following statements from Gretchen as additional support for these metaphors.

You [mentor teacher] need to … build that relationship that gives them that reflection time.

You give them [student teachers] parts of that day that they can do.

I try to give them confidence.

I also gave her a chance to take a risk in the classroom.

When I needed to let go to give them the legs to do their own teaching ...

It’s just the importance of giving them the experiences of teaching.

These statements are virtually a laundry list of giving from Gretchen. The conditions for student teachers to survive can be set up by providing confidence, experiences, chances to take risks, and so on. This give metaphor reflects the mentor as a gardener metaphor rather than the mentor as nurturing nature metaphor in that student teachers will grow by means of what the mentor teacher directly gives to them. Thus, Gretchen’s student teacher as a flower metaphor tends to oscillate between mentor as a gardener and mentor as nurturing nature.
Different Metaphors, Same Concept

In the previous sections, it was found that a variety of metaphors about mentoring, mentor, and student teacher were used to express the concepts of a non-authoritative mentoring approach and professional development. Why were such diverse metaphors used to express only a few concepts? Why are the metaphors often inconsistent with each other even though they represent the same target domain? For example, student teaching as war and student teaching as a discovery include two different source domains that are not connected to each other. Why did the participants need these inconsistent metaphors to conceptualize the same target domain?

Individuals use many metaphors in their conceptualization of an event, object, concept, phenomenon, and so on (Danforth & Kim, in press; Lakoff & Johnson, 1980). According to Lakoff and Johnson (1980),

There is a good reason why our conceptual systems have inconsistent metaphors for a single concept. The reason is that there is no one metaphor that will do. Each one gives a certain comprehension of one aspect of the concept and hides others. To operate only in terms of a consistent set of metaphors is to hide many aspects of reality. Successful functioning in our daily lives seems to require a constant shifting of metaphors. The use of many metaphors that are inconsistent with one another seems necessary for us if we are to comprehend the details of our daily existence (p. 221).

This argument was reflected in this chapter by 20 different metaphors, each one conceptualizing the target domains of mentoring, mentor, student teaching, and student
teacher. *Student teaching as war* highlights the aspect of the survival of a student teacher in a classroom, but hides the other aspects such as the delights of becoming a teacher. *Student teacher as a discovery* emphasizes the importance of teacher identity, but discounts other aspects such as possible conflicts and struggles with children in a classroom that a student teacher may experience. Because there is no single metaphor that contains every aspect of the target domain of student teaching, teachers use different metaphors having inconsistent source domains, depending on what aspects they want to highlight at the moment of speaking.

Despite the different highlights of various metaphors, the present study found a few patterned concepts in the metaphors – the most highlighted aspects of the metaphors. Those concepts regarding mentoring, as perceived by the participants, were a non-authoritative mentoring approach and professional development. These concepts are related to each other because non-authoritative mentors will permit their student teachers to develop their own teaching styles, and this tendency promotes mentor teachers’ professional development. In the following sections, the manner in which the participants revealed similar concepts using different metaphors is discussed.

**Non-authoritative mentoring approach.** One of the dominating concepts perceived by the participants was a non-authoritative mentoring approach. Most participants regarded this concept, to some extent at least, as one of the most important issues in mentoring. The significance of the non-authoritative mentoring approach among the participants was expressed through a variety of metaphors. Examples of the words used in these metaphors to indicate a non-authoritative mentoring approach include *have,*
open, friend, build, flexible, big sister, journey, share, give, and so on. These metaphors reflect, either covertly or overtly, the notion that mentor teachers need to let student teachers take risks. Table 3 displays examples of the metaphors that indicate the concept of a non-authoritative mentoring approach.

<table>
<thead>
<tr>
<th>Participants</th>
<th>Characteristics of good mentors</th>
</tr>
</thead>
</table>
| Sarah        | have good personality for mentoring  
open to letting student teachers try new things  
buid an equal relationship |
| Ashley       | big brother or sister who lets little brother or sister make mistakes |
| Mary         | help student teachers find their own ways  
go on a journey together  
have a symbiotic relationship with student teachers as crocodiles and little birds have  
share the classroom with student teachers |
| Daisy        | give student teachers opportunities to try new things  
allow student teachers to be a part of the family so that they are given opportunities |
| Lee          | see what student teachers try rather than stop them from doing so |
| Maggie       | flexible to let student teachers try their own things  
open to letting student teachers try their own things |
| Katrina      | flexible like a rubber band to let student teachers try their own things  
open to making student teachers feel comfortable and to establishing an equal relationship |
| Wendy        | make student teachers have good days by being willing to let them try their own things |

Table 3: Various metaphors to express a non-authoritative mentoring approach
According to the participants, good mentors are *open* to letting student teachers try new things (Sarah and Maggie). Also, good mentors are *open* to establishing an equal relationship (Katrina). Good mentors are *flexible* in letting student teachers try on their own (Maggie and Katrina), *giving* student teachers opportunities to try new things (Daisy), *seeing* what student teachers try (Lee), and helping student teachers *have* good days by being willing to let them try their own things (Wendy). Mary used the discovery metaphor to argue that good mentors help student teachers *find their own ways*. Likewise, Sarah believed that good mentors *build an equal relationship* with their student teachers. In an equal relationship, student teachers can take risks and develop their own teaching style. In sum, two important findings from the present study are: (1) Participants were most concerned about a non-authoritative mentoring approach that requires a less hierarchical relationship; and (2) Participants used various metaphors to express a non-authoritative mentoring approach.

**Professional development.** Most participants in the present study showed their intention to learn from the university. This result confirmed the findings of the existing literature (e.g., Davis, Resta, Higdon, & Latiolais, 2001; Hamlin, 1997; Osgood, 2001; Veal & Rikard, 1998). The participants in the present study acknowledged that student teachers refreshed their (participants) professionalism. This is because their student teachers brought new ideas with them from the university. When the participants permitted their student teachers to develop their own styles, the student teachers tended to use strategies and methods they had learned from the university. By mentoring student teachers, the mentor teachers could continue to stay in touch with contemporary
educational ideas and interact with the university. On the other hand, the partnership was maintained by the mentors’ providing practical, experienced knowledge to the student teachers. The symbiotic relationship that was expressed by Mary’s metaphor of crocodile and little bird exemplified this partnership.

A non-authoritative mentoring approach and professional development are related to each other. Non-authoritative mentor teachers are more likely to permit their student teachers to try new ideas they have learned from the university. Non-authoritative mentor teachers are also more likely to utilize their mentoring experiences as opportunities for professional development. Book (1996) placed a high value on “the professional teacher who continually is a learner and who seeks to collaborate with others to respond to the learning demands of the students and colleagues” (p. 195). This viewpoint reflects the concepts of a non-authoritative mentoring approach and professional development that were found among the participants in the present study.

One of the instructive lessons of professional development is that “the best way to engage teachers … is to collaborate with them rather than trying to direct their thinking” (Book, 1996, p. 199). The participants in the present study seemed to apply this concept to their student teachers. Rather than direct their student teachers’ thinking, the mentor teachers actively engaged their student teachers in classroom teaching and activities. They usually treated their student teachers as colleagues right from the beginning, and they permitted their student teachers to try out new ideas they had learned from the university they attended.
Same Metaphor, Different Concepts

The present study revealed that participants used the same metaphor to express different concepts. Daisy’s give metaphor and Linda’s give metaphor serve as examples.

Daisy’s *mentoring as giving* metaphor tended to go together with the word *opportunity*. As a mentor teacher, Daisy wanted to give student teachers opportunities to try ideas. Daisy’s give metaphor focused on leaving student teachers alone to allow them to experiment and learn by themselves.

Linda’s *mentoring as giving* metaphor reflected an opposite view. Linda repeatedly related that she had had unfortunate student-teaching experiences because she was left alone without her mentor teacher’s help. She had not received adequate feedback before or after her teaching lessons. These negative experiences seemed to influence Linda’s mentoring approach. As a result, in contrast with Daisy, Linda’s give metaphor reflected her desire to provide feedback, advice, suggestions, and so on. Although Daisy was willing to provide feedback and suggestions, there was a different emphasis between the two teachers’ (Daisy and Linda) give metaphors. Linda emphasized her willingness to intervene and prevent her student teachers from failing, although she did let her student teachers attempt new strategies and methods. In this sense, Linda’s giving feedback had a different meaning from Daisy’s giving opportunity. That is because Linda’s give metaphor did not contain the concept of *let the student teachers do what they want* as much as Daisy’s give metaphor did. These different foci of the same metaphor seemed to be related to the different prior experiences of the metaphor users.
Summary

In this chapter, the participating teachers’ metaphors were analyzed and interpreted. The participants’ metaphors for mentoring were embedded in their language, and for a few teachers, the suggestive metaphors were related to their embedded metaphors. These metaphors reflected the metaphor users’ thinking about the mentoring process. Table 4 displays the teachers’ metaphors concerning mentoring that are used in their everyday language (research question 1). These metaphors reflect the concepts of a non-authoritative mentoring approach and professional development, ones that are grounded in a successful mentoring relationship between mentor and student teachers (research question 2).

<table>
<thead>
<tr>
<th>Types of Relationship</th>
<th>Embedded metaphors</th>
<th>Suggestive metaphors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interpersonal</td>
<td>Student teacher as a family member</td>
<td>Mentoring as a journey</td>
</tr>
<tr>
<td></td>
<td>Mentor as a friend</td>
<td>Student teaching as a discovery</td>
</tr>
<tr>
<td></td>
<td>Mentor as an owner</td>
<td>Mentoring as sharing</td>
</tr>
<tr>
<td></td>
<td>Mentor as a container*</td>
<td>Mentoring as giving</td>
</tr>
<tr>
<td></td>
<td>Mentor as a builder*</td>
<td>Mentor as a container*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mentor as a builder*</td>
</tr>
</tbody>
</table>

| Power Relations       | Mentoring as a journey | Mentoring as a symbiotic relationship |
|                       | Student teaching as a discovery | Mentor as a coach |
|                       | Mentoring as sharing | Mentor as a big sister |
|                       | Mentoring as giving | Student teacher as a caterpillar |
|                       | Mentor as a container* | Student teacher as a flower |
|                       | Mentor as a builder* | Mentor as a gardener |
|                       | Student teaching as war | Mentor as nurturing nature |
|                       | Mentor as a flexible entity | |
|                       | Mentoring as watching | |
|                       | Student teacher as an entertainer | |

*Mentor as a container* and *mentor as a builder* are grouped into both Interpersonal Relationship and Power Relations types.

Table 4: Metaphors of the participants
Often, mentor teachers used the same metaphors to reflect similar meanings, but others used the same metaphors to reflect different meanings. Several teachers used different metaphors to describe the same concepts. These results indicate that the same metaphors can be used in different ways, and that different metaphors can be used in similar ways. It was noted that different metaphors tended to converge on two salient concepts such as a non-authoritative mentoring approach and professional development.
CHAPTER 5

CONCLUSIONS

This chapter discusses three issues presented in previous chapters. First, the findings uncovered by this research as they relate to the theories of chapter 2 are demonstrated. Various metaphors, such as explicit, implicit, generative, conduit, structural, orientational, and ontological, are revisited in relation to these findings. Second, connections between mentoring studies and metaphorical studies in the field of education and the findings uncovered in the present study are made. For example, the relationship between the findings from empirical research on metaphors in chapter 2 and the present study is discussed. Finally, the implications of the present research for mentoring and recommendations for future research are presented.

Metaphor Types in the Findings

This section discusses the existence and implications of the types of metaphors described in chapter 2, including implicit, explicit, generative, conduit, structural, orientational, and ontological metaphors, as they relate to the findings uncovered by the
present study. It is important to note, however, that these metaphor types are arbitrary (Lakoff & Johnson, 1980); therefore, a specific metaphor may in fact be categorized into several different types.

**Explicit and implicit metaphors.** In the case of implicit metaphors, Steen (1999, p. 84) stated, “the referent is not expressed in the same clause,” whereas with explicit metaphors, “the literal referent of a metaphor is expressed in the same clause.” Explicit metaphors were mainly found in participants’ answers to the question, “What is your metaphor for mentoring?” because the majority of the answers were “I think mentoring (referent) is …” For example, responses to the question, “What is your metaphor for mentoring (or mentor)?” included:

Ashley: I guess sort of like a coach.

Ashley: I guess, as a mentor, I would want to be sort of like the big brother or sister.

Lee: It’s like having a caterpillar in a cocoon.

Katrina: How about, mentoring is like a rubber band?

Gretchen: Mentoring is like, I guess, maybe tending a garden.

The responses from Katrina and Gretchen were in typical explicit metaphor form: A is B. Lee replaced the referent (mentoring or mentor) with it. Although Lee did not directly state the referent, she provided an explicit metaphor, as it undoubtedly indicated mentoring. Ashley’s statement, “I guess, as a mentor, I would want to be sort of like the big brother or sister,” is not a typical explicit metaphorical response in the form A is B or A as B, as she failed to directly mention that ‘a mentor is’ a ‘big brother or sister’.
However, her statement “as a mentor, I would want to be,” strongly implies that ‘big brother or sister’ is the same as ‘a mentor’. Therefore, “I guess, as a mentor, I would want to be sort of like the big brother or sister,” is another form of a typical explicit metaphor: *I guess mentor is a big brother or sister.* Ashley’s other answer, “I guess sort of like a coach,” similar to her ‘big brother or sister’ metaphor, is also an explicit metaphor, although it lacks a referent. Both answered the same question, “What is your metaphor for mentoring (mentor)?” and *mentor is* was simply excluded in her answer, “I guess sort of like a coach.”

As a typical example of an implicit metaphor, consider Mary’s statement regarding a journey metaphor:

Mary: We’re going to have this little journey together. We’re going to walk down this road together.

As in the example, “I walked to the place where the bird of prey hung ready over the crowd,” from Steen (1999, p. 82) as cited in chapter 2, Mary’s sentences contain no referent (helicopter and mentoring, respectively). Yet, the implicitness of Mary’s metaphor is comparable to that of Steen. Mary’s sentences include no referents; however, “journey” and “road” infer mentoring within the context of the conversation.

Implicit metaphors embed the form of *A is B*, which is a typical form of explicit metaphors. That is because most metaphors contain a characterized part and a characterizing part in either an explicit or an implicit way, such as mentor (characterized
part) is a coach (characterizing part) and mentoring (characterized part) is a journey (characterizing part). Therefore, Mary’s metaphor, although it was an implicit metaphor, implies a similar form of explicit metaphors, \(A \text{ is } B\).

**Generative metaphors.** An important implication of the present study is its finding that generative metaphors have the potential to change the relationship between mentor and student teachers into a less authoritative one. Consider the metaphors *mentor as a family member* and *mentor as a friend*. By viewing a student teacher as a friend, the mentor teacher, also viewed as a friend, may defy the traditional hierarchical relationship between mentor and student teacher. Instead of the hierarchy, the emphasis in the friend metaphor could be on to make student teachers feel comfortable to ask mentors for help when challenged, and to provide friendly advice. Thus, the idea that *student teacher (or mentor) is a friend* may generate new perceptions of, and change the image of, mentoring.

**Conduit metaphors.** *Mentoring as giving* exemplified the participants’ use of conduit metaphors to communicate what they gave, should give, or wanted to give to their student teachers, as seen in the following examples.

- Daisy: They gave me the opportunity to take risks.
- Linda: I try to give them feedback when they’re done.
- Gretchen: It’s just the importance of giving them the experiences of teaching.

Reddy stated, “Human language functions like a conduit enabling the transfer of repertoire members from one individual to another.” (1993, p. 189) The examples above reveal that the participating mentor teachers transferred various concepts to student
teachers and that they used the conduit metaphor give to describe the transfer (giving) to student teachers of opportunity, feedback, suggestions, experiences, and criticism as if a conduit between mentor teacher and student teacher existed.

**Structural metaphors.** Structural metaphors contributed significantly to the present study, as they allow for the examination of how participants structured their concepts of mentoring. For example, Mary partially structured her concept of mentoring in terms of a journey. Ashley presented a typical structural metaphor (war) by describing her experiences using words such as ‘win,’ ‘charge,’ ‘freedom,’ ‘under control,’ ‘bomb,’ and so on. This clearly demonstrated her view of her student teaching experiences as a war. As she became a more experienced teacher, she restructured her concept of mentoring in terms of ‘big brother or sister,’ and her description of the characteristics of a big sister illustrate her modified view of mentoring: one who would “let you make mistakes.”

Given that one concept is metaphorically structured in terms of another (Lakoff & Johnson, 1980), structural metaphors helped illustrate in terms of what the participants conceptualized mentoring.

**Orientational metaphors.** Orientational metaphors have “spatial orientation: up–down, in–out, front–back, on–off, deep–shallow, central–peripheral” (Lakoff & Johnson, 1980, p. 14). Numerous orientational metaphors in the interview transcripts exhibited the existence and extensive use of such metaphors. However, in the present study, relative to other metaphors used, orientational metaphors were irrelevant to the target domain (mentoring). A few examples of orientational metaphors include: We were going to go
into this year; [A school district] is taking all of that freedom for teachers to do that out of the classroom; It would have made the scores go up; When something comes down from the district office, you have to do it.

**Ontological metaphors.** Ontological metaphors contributed significantly to the present study and, as noted by Lakeoff and Johnson (1980), fulfill some human purpose, such as referring, quantifying, identifying aspects, identifying causes, and setting goals and motivating actions. Many of the embedded metaphors used by the participants are ontological metaphors. This dominance of ontological metaphors was expected because a characteristic of a conceptual metaphor is that individuals tend to make abstract concepts more concrete based on physical experiences. This mapping from a concrete source domain to an abstract target domain facilitates the understanding of the target domain (Lakoff, 1993). Ontological metaphors are a typical example of a conceptual metaphor providing concreteness. For example:

Mary: Listen and help them find their way in becoming a teacher.

Wendy: Everybody has bad days.

Sarah: Building that relationship with the student teachers is important.

Gretchen: We’ve lost contact.

These examples demonstrate the use of ontological metaphors in everyday conversations and their use in creating discrete boundaries for abstract concepts (Lakoff & Johnson, 1980). ‘Way in becoming a teacher’, ‘bad days’, ‘relationship’, and ‘contact’, do not have visible, discrete boundaries because they are abstract concepts and not
concrete objects that individuals can see and touch. Ontological metaphors allow individuals to find, have, build, and lose and thus allow these abstract concepts to become concrete and be found, owned, built, or lost.

A comparison with Lakoff and Johnson’s (1980) examples in chapter 2 may help make sense of these characteristics of ontological metaphors. Sarah’s and Gretchen’s metaphors exemplified the purpose of referring by simply referring to abstract concepts as if they had discrete boundaries. Mary’s “Listen and help them find their way in becoming a teacher” illustrates the purpose of setting goals and motivating actions. Wendy’s metaphorical expression, “Everybody has bad days,” reflected the purpose of identifying aspects because the days were bad (bad aspect of the days).

The extensive use of ontological metaphors in the present study, which reflects their relevance to participants’ conceptualization of mentoring, merits further research into their use in everyday speech.

**Metaphor Studies in Education**

This section discusses the relevance of the findings of the present study to the research reviewed in chapter 2. Embedded metaphor studies are revisited and their implications on the present study are discussed. Additionally, this section examines the suggestive metaphor studies discussed in chapter 2 and their implications.

**Studies of embedded metaphors in education.** Several studies (e.g., Munby, 1986, 1987; Munby & Russell, 1990; Wickman & Campbell, 2003) examined metaphors embedded in everyday language in education. These studies share the views of Lakoff and his colleagues by revealing the existence of conduit, orientational, and ontological
metaphors. The findings of the present study revealed these types of metaphors as well. Because conduit, orientational, and ontological metaphors are so widely used in everyday language, researchers studying embedded metaphors are likely to have results that correspond with this line of research. For example, the metaphors including *have, build, find, share, give* and so on in the present study demonstrate the extensive use of the ontological metaphor, as suggested by Lakoff and Johnson (1980), and are empirically supported by the research studies in chapter 2.

**Studies of suggestive metaphors in education.** The embedded metaphors as well as the suggestive metaphors from the present study were in accord with the findings of the research studies on suggestive metaphors noted in chapter 2.

Bullough and Stokes (1994) found that metaphors can change. The present study confirmed their finding. Ashley’s (a participant of the present study) first suggestive metaphor was *mentor as a coach* and her embedded metaphor was *student teaching as war*. Two years later, she used the suggestive metaphor ‘big brother or sister’ and indicated no war-related metaphor, reflecting a change in her use of metaphors as she gained experiences in school.

Several researchers touched on authority issues related to suggestive metaphors. Cohen and Lotan (1990) suggested the metaphor, ‘teacher as supervisor of complex technology,’ and argued that teachers need to delegate more authority to students than they have traditionally done. Less supervisory roles are needed in situations of uncertainty, such as the uncertainty of being experienced in the classroom. Marshall (1990a) suggested the metaphor, ‘classroom as learning setting,’ which implies an issue
related to authority. In contrast with a work environment where authority relationship is more intense, a learning setting encourages acquisition and construction of knowledge and skills for self-development and the relationship between teacher and students can be less hierarchical. As discussed in chapter 4, metaphors found in the present study were related to a non-authoritative mentoring approach. Many metaphors uncovered in the present study, such as have, open, friend, build, find, family, see, flexible, and so on, supported the suggestions by Cohen and Lotan (1990) and Marshall (1990a). Participants of the present study expressed effective mentoring as including a relationship (or partnership) with student teachers and giving student teachers the authority to do what they wanted.

Bullough (1991) found that the metaphors suggested and developed by the participants were related to their prior experiences. The present study supported this finding. Linda (a participant of the present study) used the metaphor mentoring as giving that focused more on giving feedback as a mentor teacher than on sharing an equal relationship with student teachers, which was what most other participants emphasized. This difference can be explained by Linda’s prior experiences as a student teacher in which a serious lack of feedback from her mentor teacher existed. Other research studies determining the roles of prior experiences in teacher education (e.g., Bullough & Stokes, 1994) and showing that mentoring heavily hinges on prior student teaching experiences (e.g., Veal & Rikard, 1998) also support this finding.
Implications for Mentoring

Metaphors reflect how individuals view the world even though they may not be aware of their use of metaphors (Hill & Johnston, 2003; Lakoff & Johnson, 1980). This perspective can be practically applied to inservice teacher education for mentor teachers in that metaphors enable mentor teachers to express their perceptions of mentoring. For example, being aware of metaphors can help mentors reflect on their mentoring practices and see how and if the mentoring practices are geared to their ideal mentorship. This implication for teacher education is based on an assumption that metaphors reflect daily action and thought (Lakoff, 1992; Lakoff, 1993; Lakoff & Johnson, 1980; Paine, 1995). Therefore, being aware of metaphors can contribute to a change in teachers’ views and actions because metaphors guide daily action in the classroom to attain educational goals (Berliner, 1990; Cole & Knowles, 1993; Dooley, 1998). According to Dooley (1998, p. 100), metaphors “interact with and influence the practical knowledge from which modes of practice and beliefs about teaching and learning emerge.” Also, Cortazzi and Jin (1999) argued, “raising teachers’ awareness of their own metaphors may help them to reflect on their own experience and to develop professionally” (p. 150). Application of suggestive metaphors to preservice teacher education has already been developed in several programs (e.g., Bulloch, 1991; Bullough & Stokes, 1994). The present study revealed the possibility of the application of embedded metaphors as well as suggestive metaphors to inservice education for mentor teachers. Analysis of embedded metaphors is important because suggestive metaphors do not always reflect embedded metaphors. By
discovering embedded metaphors, mentor teachers can be aware of the degree their mentoring goals at the conscious level is supported by the concepts that are embedded in metaphors.

In what ways do the metaphors that were found in the present study provide insights into mentoring? It is necessary to note that all of the metaphors of the present study are relationship metaphors to some degree. The metaphors were grouped into interpersonal relationship metaphors and power relations metaphors. This finding indicates that building a good relationship needs to be considered foremost to promote effective mentoring. Especially, the fact that the majority of the metaphors were grouped into power relations metaphors indicates that mentor teachers’ willingness to share the decision-making process with student teachers can facilitate student teacher learning and successful mentoring. When the traditional hierarchical mentor-protégé relationship is maintained, student teachers’ voices are constrained and unheard (Gore, 1991) and the lack of communication does not improve the relationship – a vicious circle. Awareness of metaphors can contribute to finding this vicious circle, breaking it, and replacing it with a new, constructive one.

The participants of the present study used metaphors that strongly implied that effective mentoring relies heavily on establishing a more equal and non-authoritative relationship with the student teacher. Moreover, a genuine benefit to mentor teachers is that mentors not only give their knowledge and experiences to student teachers but also receive new ideas from their mentees. That is, mentoring represents a reciprocal process.
Other studies on mentoring support these important findings. In fact, many studies have pointed out the desirability of a non-authoritative approach to mentoring student teachers (e.g., Gore, 1991; Graham, 2006; Lemma, 1993; Veal & Rikard, 1998; Zuckerman 2001). Moreover, Veal and Rikard (1998) argued that mentor teachers learn from student teachers, and that many existing conflicts are resolved if the relationship is non-authoritative and equal decision-making responsibilities are established. Although the degree of equality of the relationship and responsibilities is controversial, the benefit of a non-hierarchical relationship was evident in that such a relationship facilitates both mentor teachers’ and student teachers’ learning.

A non-authoritative mentoring approach based on an intimate interpersonal relationship and equal power relations between mentor and student teachers was an essential part of the data. This non-authoritative mentoring approach is especially important in that many novice teachers eventually become a mentor teacher and their mentoring tends to reflect their prior experiences as a student teacher in a significant way (Rikard & Veal, 1996). The data of the present study did not show that negative student teaching experiences necessarily cause ineffective mentoring practices. However, Daisy and Linda exemplified how their contrasting experiences as a student teacher affected mentoring. Implications for mentor teachers and teacher educators to promote productive student teaching experiences are that (1) mentor teachers need to allow student teachers to attempt their ideas and learn from failure and (2) building an intimate relationship between mentor and student teachers corroborates student teachers’ ability to learn to teach.
Another implication of the data is that mentor teachers’ open-mindedness to learn from student teachers or mentoring experiences benefits the mentor teachers themselves. This reciprocal aspect of mentoring has been reported in numerous mentoring research studies (e.g., Beck & Kosnik, 2000; Duquette, 1994; Goodfellow & Sumsion, 2000; Hamlin, 1997; Siebert, Clark, Kilbridge, & Peterson, 2006; Sinclair, Dowson, & Thistleton-Martin, 2006; Veal & Rikard, 1998). The data of the present study demonstrated that the aspect of professional development in mentoring is closely linked to the concept of a non-authoritative relationship. The most salient benefit received by mentor teachers, who have a less hierarchical relationship with student teachers, is an improvement in their professional skills related to teaching and learning by learning new ideas from their student teachers.

Implications of Metaphor Studies. Why do mentors use metaphors to describe mentoring? Humans are unable to comprehend an abstract concept without using an image that is either not abstract or less abstract than the abstract concept itself (Lakoff & Johnson, 1980; Lakoff & Turner, 1989). According to Lakoff and his colleagues, this explains why a source domain is always more concrete than a target domain. Source domains are more concrete because they are more rooted in everyday physical experiences. When people think about an abstract concept, they may have difficulty grasping a clear image of the concept because it is more abstract than concrete, in their experience. For example, when asked about a concrete object, such as ‘What is apple?’, people will have a clear image of an apple because they have seen, touched, and tasted it. In contrast, teachers may have difficulty explaining mentoring beyond “Mentoring is to
help novice teachers teach children well” because mentoring is an invisible, abstract concept. Therefore, teachers attempt to explain mentoring, the abstract target domain, in terms of a concrete source domain, through metaphors. The present study revealed that teachers actually used many metaphors to explain the abstract target domain of mentoring. Petrie and Oshlag (1993) suggested that the educational meaning of the metaphor lies in the fact that it helps individuals move from the more familiar to the less familiar. In this sense, the metaphors of the present study may help teachers form clearer and more familiar images of mentoring because they turn abstract concepts into concrete and familiar entities grounded in everyday experiences. The *mentor as container*, *mentoring as watching*, and *mentoring as giving* metaphors the examples. Through these metaphors, mentoring is clearly conceptualized in terms of everyday experiences such as watching and giving. These clear images enable mentor teachers to answer the fundamental question, *What is mentoring? What am I doing to my student teacher? Am I doing what I should do?* and so on. In this way, metaphors lead teachers to a better understanding of their own perceptions of mentoring by making the concept of mentoring more concrete and familiar.

**Recommendations for Future Research**

First, further analysis focusing on a few specific metaphors is required to provide a deeper understanding of their use. For example, metaphorical expressions including *have* (the mentor-as-owner metaphor) were extremely frequent in the interview transcripts for the present study. Further analysis on the *have* metaphor may exhibit more detailed conceptualization of mentoring in terms of owning.
Second, further analysis on the reasons behind teachers' use of certain specific structural metaphors in the present study will improve the understanding of the nature of their mentoring and metaphors. For example, a question such as, *Why was the journey-metaphor used to explain mentoring?* may uncover a structural relationship between the source domain (journey) and the target domain (mentoring). Lakoff and Turner (1989) and Gibbs and O’Brien (1990) revealed reasons for using particular metaphors or idioms.

Third, in the triad of student teaching, the present study provided only the views and metaphors of classroom teachers. Investigating the metaphors of university supervisors and student teachers would help to develop a more complete picture of mentoring views among the three parties. Such research may reveal why some triads work effectively whereas others do not. Uncovering the metaphorical differences among the three parties may be useful in understanding the conflicts within a triad.

Fourth, tracing mentor teachers’ metaphors over an extended period may reveal changes in their use of metaphors. Bullough and Stokes (1994) reported that almost every preservice teacher who participated in their research changed his or her metaphor use over the course of the teacher education. Examining changes in the use of metaphors may help to explain the effect of interactions between mentor teachers and their changing experiences and environments on their use of metaphors and their views of mentoring.

Fifth, the relationship between embedded metaphors and suggestive metaphors as used by a mentor teacher requires exploration. This area of research should be conducted through a predetermined procedure: (1) recording mentor teachers’ discourses regarding mentoring, (2) asking mentor teachers to create suggestive metaphors for mentoring, (3)
finding embedded metaphors, and (4) comparing embedded metaphors with suggestive metaphors. Given that studies on suggestive metaphors dominate the research on teacher education, this is a much needed research area related to mentoring and metaphors.

Sixth, examining extant mentoring research studies from the perspective of metaphorical models also requires further investigation. In other words, even research studies on mentoring that are seemingly irrelevant to an analysis of metaphors may embed metaphors for mentoring. For example, if a researcher determines that affection is the most significant factor in successful mentoring, that researcher may offer a metaphor for mentoring related to affection. Uncovering such hidden metaphors can link mentoring research to metaphorical studies and models.

Seventh, metaphor research can be relevant to the teaching of content in subject courses (e.g., science, social studies, and so on). Because many scientific theories and models are composed of metaphors and analogies (Leary, 1994; Pribram, 1994), potential practical uses of metaphors in science education courses can be found by examining the metaphors of scientific theories and models and informing preservice teacher education students about these metaphors. Highlighting metaphors in this way can facilitate the students’ understanding of the scientific theories and models because metaphors make the theories and models more concrete and easier to understand. Also, these metaphors can be used in supporting or criticizing particular scientific models.

Final Remarks

The significance and value of the present study lies in its finding that the relationship between mentors and student teachers is apparently a key factor for effective
mentoring. If effective mentoring means student teachers will successfully learn how to teach, thereby benefiting children in P-12 schools, then a strong, healthy relationship between mentor and student teachers is needed to achieve effective mentoring. Findings indicate that student teachers will resist learning from their mentor teachers if the relationship between the two parties is antagonistic or paternalistic. Therefore, the present study suggests that mentoring programs in teacher education need to focus on the issues and nature of the mentoring relationship. Specifically, university teacher educators should inform mentor teachers about the importance of sharing the decision-making process with student teachers. Establishing good interpersonal relationships between mentor teachers and student teachers can facilitate collaboration between the two parties. Typically, the relationship between mentors and student teachers is hierarchical in nature. However, the present study showed that mentor teachers who make an effort to establish a more equal relationship within this hierarchy are more successful mentors. Therefore, attention to the formation and operation of the mentoring relationship should be an important part of mentoring programs in teacher education.
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APPENDIX

CORE INTERVIEW QUESTIONS AND SAMPLE INTERVIEW QUESTIONS
Core Questions: Interview 1

Background Questions
Can you introduce yourself to me?
How long have you been a teacher?
How many student teachers have you had?

Main Theme: Good Mentor
What do you think are the qualities of a good mentor?
What is most important to you when you mentor student teachers?
What are your strengths and weaknesses as a mentor?
What is your metaphor for mentoring?

Sub-theme: Mentoring Strategy
How do you help your student teachers to become the best teachers they can be?
What do you do when your student teachers raise opinions that are different from yours?
Do you have specific mentoring strategies?

Sub-theme: Contents of Mentoring
How and what do your student teachers learn from you?
What are the most important things for student teachers to know?

Sub-theme: Lessons from Mentoring
What have you learned from mentoring and from your student teachers?
In what ways has your mentoring changed over the year?

Sub-theme: Model Teacher As a Mentor
What are your strengths and weaknesses as a teacher?
What is your advice for someone who wants to be a teacher?

Sub-theme: Partnership with University in Mentoring
In what ways is the university teacher education program helpful or not helpful to the development of your student teachers?
Core Questions: Interview 2

Background Questions
Can you tell me about yourself, your teaching experiences, and the grade level you teach?
How many student teachers have you had?

Main Theme: Good Mentor
What do you think are the qualities of a good mentor?
What is most important to you when you mentor your student teachers?
Can you give me an episode when you were happy with your student teachers?
Can you give me an episode when you were not happy with your student teachers?
What are your strengths and weaknesses as a mentor?
What is your metaphor for mentoring?

Sub-theme: Mentoring Strategy
How do you help your student teachers to become the best teachers they can be?
Did your student teaching experiences affect your mentoring?
What are the characteristics of student teachers who get along with you?
How do you cope with student teachers who do not always agree with you?
Do you have specific mentoring strategies?
What do you do when your student teachers have opinions that are different from yours?
What do you do if a student teacher does something that is inappropriate in your classroom?

Sub-theme: Contents of Mentoring
How and what do your student teachers learn from you?
What is most important for student teachers to know?

Sub-theme: Lessons from Mentoring
What have you learned from your mentoring experiences?
How have you grown as a mentor?

Sub-theme: Model Teacher As a Mentor
What is your advice for someone who wants to be a teacher?
Sample Interview Questions: Interview 1

*Can you introduce yourself to me?
*How long have you been a teacher?
*How many student teachers have you had?
*What do you think are the qualities of a good mentor?
What is the crucial factor to make good relationship with student teachers?
*How do you help your student teachers to become the best teachers they can be?
How do you know what is the time for them to expand their roles in classroom?
*What do you do when your student teachers raise opinions that are different from yours?
   Do you remember a specific example?
*How do your student teachers learn from you?
What changes did you see from your student teachers between the beginning day and the last day?
*What is most important to you when you mentor student teachers?
Do you enjoy mentoring?
   In what aspects?
*Do you have specific mentoring strategies?
What kind of teachers do you want to help them become?
It is important, why?
*What are the most important things for student teachers to know?
*What have you learned from mentoring and from your student teachers?
Do you consider your student teachers as fellow teachers?
*In what ways has your mentoring changed over the year?
It just depends?
Was there something that you think that, this didn’t work, or this works, or you modify some strategies to mentor student teachers?
*What are your strengths and weaknesses as a teacher?
*What are your strengths and weaknesses as a mentor?
*What is your advice for someone who wants to be a teacher?
*In what ways is the university teacher education program helpful or not helpful to the development of your student teachers?
*What is your metaphor for mentoring?

* indicates core questions.
Sample Interview Question: Interview 2

*Can you tell me about yourself, your teaching experiences, and the grade level you teach?
*How many student teachers have you had?
*What do you think are the qualities of a good mentor?
Can you tell me the relationship between a sense of humor and a good mentor?
Can you remember what you learned from your student teaching experiences?
*Did your student teaching experiences affect your mentoring?
*What is most important to you when you mentor your student teachers?
*What are the characteristics of student teachers who get along with you?
*How do you cope with student teachers who do not always agree with you?
*How and what do your student teachers learn from you?
Do you have a kind of strategy to make your student teachers learn?
*What is most important for student teachers to know?
*Can you give me an episode when you were happy with your student teachers?
*Can you give me an episode when you were not happy with your student teachers?
How do you establish a relationship with your student teachers?
So, did you contact them after school?
*How do you help your student teachers to become the best teachers they can be?
*Do you have specific mentoring strategies?
*What do you do when your student teachers have opinions that are different from yours?
*What do you do if a student teacher does something that is inappropriate in your classroom?
  Was the student teacher deeply frustrated by that?
*What have you learned from your mentoring experiences?
*How have you grown as a mentor?
*What are your strengths and weaknesses as a mentor?
*What is your advice for someone who wants to be a teacher?
*What is your metaphor for mentoring?

* indicates core questions.