

ПСИХОЛОГИЯ

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**МЕТАФОРЫ И ПРЕДСЛУЖАЩИЕ УЧИТЕЛИ:
КАКИМИ МЫ ХОТИМ СТАТЬ В БУДУЩЕМ**

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The purpose of this study was to investigate how metaphors used by pre-service physical education teachers shaped their understanding of teaching. Two research questions guided this investigation: (1) How do pre-service teachers in physical education see themselves as prospective teachers? (2) What metaphors would pre-service teachers use to describe themselves as teachers? Lakoff and Johnson's seminal work on metaphor analysis, constructivist theories, and teacher practical knowledge provided theoretical lenses for understanding how pre-service teachers viewed the roles of teaching and learning. One hundred undergraduate pre-service teachers (81 males, 19 females) in a physical education teacher education program at a mid-size university in the United States participated in this study, recruited from methods of teaching courses. The data were analyzed using constant comparison analysis. The results indicated that the largest common theme was seeing teaching as an emotional practice, where teachers offer support, compassion, and care to students. However, almost 30 % viewed teaching as either the transmission of knowledge or as a clear-cut, defined process. This study has important theoretical and practical implications in teacher education. Our findings are twofold. First, it is important for educators, researcher, and teachers alike to understand what theories of teaching and knowledge construction shape the perspective of new teachers. Second, theories of teaching and learning must be applied for the purpose of supplementing the knowledge, and training of new teachers. Overall, the participants in this study endorsed a humanistic vision of teaching, the caring and compassionate teacher.

Keywords: metaphor analysis, reflection, tacit knowledge, teacher knowledge construction.

**МЕТАФОРЫ И БУДУЩИЕ УЧИТЕЛИ:
КАКИМИ МЫ ХОТИМ СТАТЬ В БУДУЩЕМ**

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Цель настоящего исследования заключалась в изучении того, каким образом метафора, используемая будущими учителями физической культуры, формирует понимание процесса обучения. В работе было поставлено два исследовательских вопроса: (1) Какими видят себя в будущем учителя физической культуры? (2) Какие метафоры они используют для описания себя как учителя? Фундаментальная работа Дж. Лакоффа и М. Джонсона по метафорическому анализу, конструктивистские теории и практический опыт педагогов являлись основой теоретического обоснования того, какие роли будущие учителя отводят преподаванию и обучению. В исследовании приняли участие 100 будущих учителей (81 мужчина, 19 женщин), обучающихся на программах бакалавриата по подготовке учителей физической культуры в среднем по количеству обучающихся университете США, набранных с курсов по методике преподавания. Полученные данные были проанализированы с помощью метода постоянных сравнений. Результаты исследования показали, что наиболее часто у респондентов встречалась тема, в которой процесс обучения описывался в категориях эмоциональной практики, где учитель предоставляет ученикам поддержку, сострадание и помощь. Тем не менее, 30 % участников исследования описывают обучение как передачу знаний, как четкий, определенный процесс.

Результаты данного исследования имеют важное теоретическое и практическое значение в подготовке будущих учителей. Полученные результаты носят двойственный характер. Во-первых, эта информация представляется важной для преподавателей, исследователей и учителей для понимания того, какие теории обучения и формы знаний являются перспективными для педагогов. Во-вторых, теории преподавания и обучения должны применяться с целью повышения качества знаний, а также подготовки новых педагогов. В целом, участники настоящего исследования разделяли гуманистический подход к обучению, описывали учителя как заботливого и отзывчивого.

Ключевые слова: анализ метафор, рефлексия, неявное знание, конструкция знания учителя.

In today's society, calls for educational reform abound. Pre-service teachers, those who are preparing to be teachers, must learn new methods of teaching in order to implement educational reforms. Professors working in teacher education take the preparation of novice teachers with great deal of passion, but in times of change and accountability in teaching, they need be able to clearly explicate the work they do in preparing the next generation of teachers. Therefore, it is important that teacher actions are guided through reflection; teachers at all levels of practice need to be able to analyze the work they do and to reassess their goals and approaches to teaching and teacher education.

Pre-service teachers come to teacher education programs with their own preconceived beliefs about teaching and learning contexts. One key to helping pre-service teachers benefit from research into teaching is to identify these beliefs early on in teacher education programs. Since pre-service teachers come to teachers' education program already with an idea in their minds about teaching, known as teacher beliefs, it becomes imperative to identify those beliefs early [1]. Byra and Coulon (1994) [2] argued that teachers change their methods very little after they enter the profession. Therefore, it is paramount that university educators help pre-service teachers assess their beliefs prior to leaving colleges and universities and enter the teaching profession. These practices of reflection in the form of metaphorical analysis, or other reflective practices, help pre-service teachers assess their understanding of teaching and learning. This, in turn, provides them with opportunities to reflect on their pedagogical practices as teachers and how these practices of reflection may impact their beliefs [3].

Metaphors offer powerful insights into individuals' beliefs about different situations. Lakoff and Johnson (1980) [4] proposed that metaphors were critical parts of thinking that could illuminate the deeper understanding and conceptualization of abstract ideas. Metaphors are seen as a way to express ideas that are often too difficult to put into words [5–10]. They also help individuals view familiar ideas through a new perspective, connecting images and words, and facilitating conceptual change [11–13].

Metaphors can be especially useful in the training of educators since much of teachers' knowledge and beliefs about teaching is implicit [10, 14].

Metaphors help educators identify beliefs about teaching [5, 14–19] and the decision-making process of teachers at all levels of training [12]. Brown, Parson & Worley (2005) [20] argued that metaphors created by pre-service teachers are meaningful because they represent what teachers think, understand and use to create meaning in teaching. Patchen and Crawford (2011) [19] and Stylianou, Kulinna, Cothran, and Kwon (2013) [21] discussed the role of metaphors in explaining the dissonance between teacher beliefs and practice. Carlson (2001) wrote: «The use of metaphors, however, can help physical education pre-service teachers assess their understanding of pedagogy and reflect on the effects that their beliefs will have on their teaching» [22, p. 49]. Stylianou et al. (2013) [21] found that physical education teachers want to have student-centered classrooms; however, their actual practice shows that they are teacher-centered.

Metaphors reveal what teachers think of their work as teachers. Metaphors have the power to engage pre-service teachers actively in their learning, because they push the learners to interpret their ideas and visions of teaching [18, 23]. This interpretation is significant because it is based on personal beliefs and knowledge about teaching. Moser (2000) [24] argued that metaphors give access to tacit knowledge. It is through this tacit knowledge that educators come to know what pre-service teachers think about the nature of teaching and learning. This tacit knowledge when expressed through metaphors can be used to assess what teachers have learned about teaching [10, 18, 19]. Brown et al. (2005) [20] argued that students creation of metaphors function in such a way as to illuminate and solidify their understanding of teaching. Brown, Parsons, and Worley (2005) [20] reported in their study that pre-service teachers used metaphors as a tool to consider the unfamiliar and the uncomfortable.

The purpose of this study was to investigate how metaphors used by pre-service physical education teachers shaped their understandings of teaching.

Two research questions guided this investigation: (1) How do pre-service teachers in physical education see themselves as prospective teachers? (2) What metaphors would pre-service teachers use to describe themselves as teachers?

Because pre-service teachers come to school with preconceived ideas about teaching and learning, it is important to understand this knowledge to facilitate change through learning experiences. Thomas and McRobbie (1999) wrote: «Changing students' views of themselves as learners and the learning strategies they use, requires methods to make their views regarding teaching, learning and their roles as learners explicit to themselves and to teachers» [25, p. 667]. In this study we used metaphors as one method for identifying pre-service teachers' tacit understanding of their future teaching. We saw metaphors as builders of images as creative acts of imagination [26].

Methodology

Participants

One hundred undergraduate pre-service teachers (81 males, 19 females) enrolled in a Physical Education Teacher Education (PETE) program at a large school in the United States participated in this study.

Data Collection

Data Collection consisted of having participants respond to two prompts during one of their methods classes: Being a student was like _____. As a teacher, I want to be like _____.

Data Analysis

As a qualitative study, the data collection yielded language that we compared and contrasted to identify categories which emerged throughout the process of data collection, using the constant comparative method [27, 28]. The process of data analysis for our study, therefore, began with the early detection of recurrent categories formulated through thematic analysis, in light of the qualitative research design we adopted for the data analysis. Qualitative research designs incorporating the constant comparative method search for the emergence of ongoing patterns across the data collection and analysis [27, 28]. We were able to employ the aforementioned technique for our research. Merriam (1998) indicated: «Basically, the constant comparative method involves comparing one segment of data with another to determine similarities and differences» [29, p. 18]. As we compared language, we noted that some participants answered in simple metaphors, others explained their metaphors in greater detail.

Category construction started with the initial analysis of the documents. We reflected on the data and started to create notes [29]. LeCompte, Preissle, and Tesch (1993) wrote: «The notes serve to isolate the initially most striking, if not ultimately most important, aspects of the data» [30, p. 236]. We reflected on our notes, and then we began to construct categories or themes that captured «recurrent patterns» [29] that emerged from across the data [31].

From it, we were able to identify recurrent categories, similar concepts, or ideas from the data, and from which the results or themes from this research cemented. Our data analysis revealed 9 principles themes, or nine major results. These themes emerged consistently throughout our data analysis. Therefore, rendering justice, through trustworthiness, or confidence that the themes, our results were germane because our data reached saturation. The cyclical nature of our data, or the circular patterns around those nine themes, did provide confidence, that no new additional results, or themes appeared, therefore, reaffirming the solidification of nine main core concepts, or themes: *teaching as hard, fun, emotional, adaptive, creative, generating fear, certain, necessary, and the transmission of knowledge*.

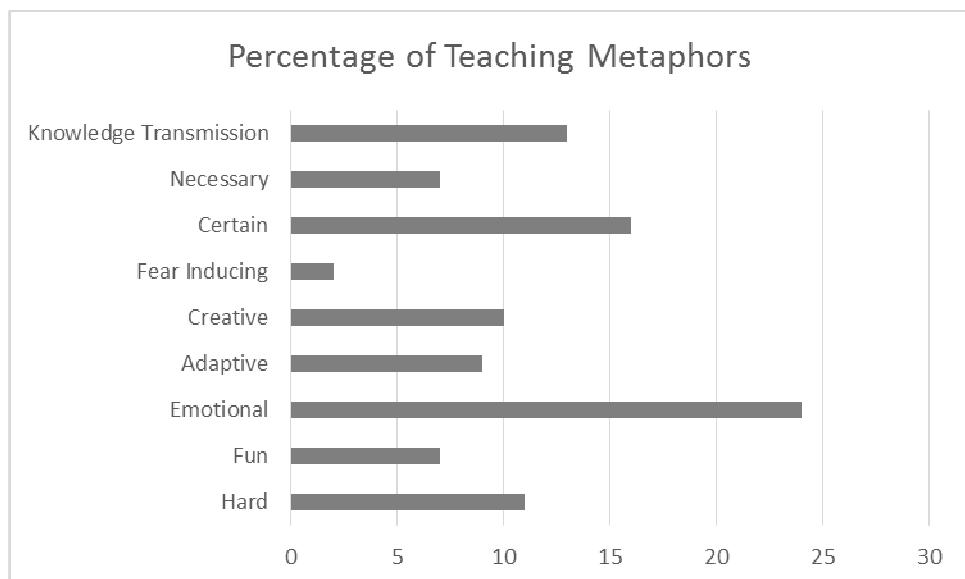
Findings and Discussion

We identified nine categories through data collection and analysis. The categories were clustered into themes using constant comparative analysis [27, 32–38]. Nine themes were identified through data analysis of the words used by the participants which described the visions these pre-service teachers had regarding their views of teaching. The nine themes are teaching as hard, fun, emotional, adaptive, creative, generating fear, certain, necessary, and the transmission of knowledge. The largest common theme (24 %) was viewing teaching as an emotional practice, where pre-service teachers offer support, compassion, and care to their future students. Almost 30 % viewed teaching as either the transmission of knowledge (13 %) or a clear-cut, certain process (16 %). The results are listed in Figure.

The findings show conflicting images in the pre-service teacher where the two largest majorities are torn between a traditional model of knowledge transmission and a humanistic model of teaching. A sizeable number of the pre-service teachers felt that teaching was a simple transmission of knowledge, which supports findings by Richardson (1996) [39]. These results also support Carlson (2001) [22], where a large majority of teachers also saw themselves as knowledge impartors. Those who see teaching as an

impersonal exchange of knowledge may have a more difficult time adjusting to the demands of teaching students. In addition, only 9 % of pre-service teachers expressed that adapting was part of the teaching process, which may also make it more difficult for these pre-service teachers to adapt to the real-world

experience of teaching. However, like those in Weinstein's study (1990) [40], many of the pre-service teachers in the current study envisioned themselves in a humanistic classroom that was warm and caring.



Percentage of images of teaching metaphors expressed by pre-service teachers

Pre-service teachers must reconcile teaching as a concept to be studied in universities with teaching as the real-life interaction of teacher and student. Those who are prepared to meet the emotional needs of students understand more readily the practical side of teaching. Several participants explained their images of the emotional side of teaching. One pre-service teacher in this study wrote: «As a teacher I want to be like a professional that is compassionate and cares about my students as people. I hope to connect with my students and make a difference in their lives». Another pre-service teacher stated: «As a teacher I want to be understanding to students need. I hope to encourage students to always give their very best. Hopefully the students will trust me with their problems so I can help them to be the best they can be». In the voices of these pre-service teachers, we can capture their visions of teaching. Their voices represent a desire to be more than teachers to their students. Their voices echo a desire to care and nurture students.

If PETE programs are to be more successful in educating teachers committed to change, then they need to look at pre-service teachers' visions or metaphors for teaching, recognizing that not all pre-

service teachers possess the same understanding. Schon (1987) wrote: «It holds that learning a new competence requires unlearning deep-seated theories-in-use» [41, p. 290]. PETE programs need to make explicit the expectations pre-service teachers have of their role as classroom teachers. From there, changes can begin. Bruner (1965) wrote: «We have too easily assumed that learning is learning is learning. ... We denied there was a problem of association of development beyond the quantitative one of providing more experience» [42, p. 1010]. In other words, instead of focusing on more experiences, teacher education programs need to focus on the depth and quality of the learning experiences.

Conclusion & Implications

In this study, the researchers sought to provide an interpretative analysis of how a group of pre-service physical education teachers expressed their understanding of teaching through metaphors. The nine main themes which emerged in the study emphasize diverse theoretical constructs of teaching. The participants of the study viewed teaching as hard, fun, emotional, adaptive, creative, fear-inducing, certain, necessary, and knowledge transmission. Metaphors are a critical aspect of thinking, because they aid in

the concretization of abstract ideas or images teachers have inside their minds.

This study to a certain extent confirms similar findings reported in earlier studies. For example, similar to Weinstein's (1990) study, our study revealed that a large part of pre-service teachers endorsed a humanistic view of teaching. They envisioned themselves as caring teachers who were committed to creating warm classroom climates. This vision was encapsulated in the voice of one of pre-service teacher from our study who stated: «I want to be a compassionate teacher who cares about my students as people». Because the pre-service teachers in our study endorsed a caring and nurturing view of teaching, they were able not only to see the human qualities in their students but as well to humanize themselves in the process, a concept Freire calls «critical thinking and the quest for mutual humanization» [40, p. 75].

While one of the emergent findings in our study was that a large number of pre-service teachers committed to pedagogies of care, another sizable number opted for a more traditional view of teaching as the transmission of knowledge similar to the findings in Richardson's (1996) study [39]. It is encouraging that the current results replicate findings by Weber and Mitchell (1996) [43], where the predominant figure of teachers was that of a nurturing female in control of the class. The results of the current study indicated that although there were only 10 % females in the study, the caring teacher in control of the class transmitting knowledge to students was still predominant.

The pre-service teachers in the present study did not lack imagination when it came to expressing their visions of teaching. They were ready to commit themselves to the work of teaching by connecting with their students at a personal level. The power to change resides in the imagination of teachers in changing their methods to create different ways of teaching. The psychologist and the pedagogue must work together in providing a theory of teaching and learning which works best for novice teachers. The task at hand is to help a generation of teachers who will envision themselves as agents of change exceeding their expectations for teaching and caring for their students.

Hume (1993) wrote: «Nothing is freer than the imagination of man; and though it cannot exceed that original stock of ideas, furnished by the internal and external senses, it has unlimited power of mixing, compounding, separating, and dividing these ideas, in all the varieties of fiction and vision» [44, p. 31].

Another way to achieve new visions of teaching is having pre-service teachers develop intuitive flexibil-

ity about views of teaching and learning and use them when working with students. Kant (1959) argued: «But though all our knowledge begins with experience, it does not follow that it all arises out of experiences» [45, p. 25].

This qualitative investigation looked at how a group of pre-service teachers constructed their understanding of teachers through the use of metaphors. One limitation of this study was that only pre-service teachers in physical education participated. In addition, it is unclear if these metaphors of teaching represent actual teaching behavior, or if they are just images that will never materialize. Finally, additional research on pre-service teachers from other cultures or nations through metaphor analysis is needed to identify possible universal themes. Additional research on metaphors and pre-service teachers should also include pre-service teachers from other disciplines beside physical education. It is important to understand if similar or different findings emerge as a result of having different teaching disciplines represented.

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