Iranian and U.S. Pre-service Teachers' Philosophical Approaches to Teaching: Enhancing Intercultural Understandings

Caroline R. Pryor
Texas A&M University at College Station

Zohreh Eslami-Rasekh
Texas A&M University at College Station

Abstract

This study investigated philosophical approaches to teaching held by pre-service teachers in Iran and the US. The study's participants were 30 pre-service teachers from Iran, a predominantly Muslim country, and 30 American pre-service teachers. Data were collected using the 105-item Philosophy of Education Scale (POES, Author A, 2003) composed of five philosophical approaches and seven teaching dimensions. Scores indicated Iranian-US pre-service teachers differed in their beliefs about the Executive (behaviorist) teaching approach; similarities were found in the Citizen Teacher (social-responsibility) approach. As researchers, we purport the results to have implications for enhancing conversations about cultural values and applications in educational settings.

Introduction

The post-September 11 atmosphere has generated a renewed interest in the Islamic world and issues related to education in Muslim countries have become prominent topics of discussion in media and among scholars. Because education encompasses several dimensions (e.g., content, pedagogy, context, policy), each highly related to cultural expectations (Dewey, 1933; Kincheloe, 1999; Wactler, 1990), understanding the foundational assumptions teachers embrace regarding the goal of education and the role of teachers is one way to promote intercultural understanding. Evaluating ideologies that underlie teachers' approaches to teaching and learning (Cochran-Smith & Fries, 2002) about other educational systems through examination of approaches and beliefs may demythologize (Haggerson, 2002) the intercultural expectations educators possess about one another as well as unveil and expand pedagogical knowledge that may enrich our community. The benefits of such exchanges are numerous; they provide for the opportunity to: evaluate ideologies that underlie approaches to teaching (Cochran-Smith & Fries, 2002), learn about the world and the human experience, (Watkins, 2002), encompass diversity, (Compton-Hall, 2003), and connect with research of a non-local nature (Florio-Ruane, 2002).

For Iran, a predominantly Muslim country, and the United States possessing a widely diverse population and history steeped in western European culture, calls for such

Author note

Caroline R. Pryor, Department of Teaching, Learning, and Culture, Texas A&M University, College Station; Zohreh Eslami-Rasekh, Department of Teaching, Learning, and Culture, Texas A&M University, College Station.

Correspondence regarding this article should be addressed to Caroline R. Pryor, Department of Teaching, Learning, and Culture, Texas A&M University, 4232 Harrington Towers, College Station, Texas 77843. E-mail: cpryor@coe.tamu.edu; carolinepryor@yahoo.com

exchanges regarding the importance of intercultural philosophical exchange are beginning to emerge in literature (UNESCO, 2003; Alexander, 2001). Several international events however, have limited opportunities for such exchanges. For example, (a) the American hostage crisis in Tehran has negatively impacted Iranian-American relations (Trimel, 1998), (b) Iran continues to refuse to hold talks with the U.S. government and most cultural and educational exchange groups have either abandoned or severely curtailed their activities in Iran following the severing of U.S.-Iranian relations in 1979 (Trimel, 1998; Rubin, 2000), and (c) perceived differences in philosophy and theology continue to foster a so-called "Clash of Civilizations" expounded by pundits and scholars. (Center for Common Ground in Iran). Yet, Crossley's (2002) research suggests a renewal of international inquiry and exchange by examining the context in which [cultural] exchanges occur.

In educational settings, cultural exchanges are partially created by teachers' decisions regarding the application of philosophical approaches (Brousseau, Book, & Byers, 1987) and beliefs about outcomes for student learning (Wactler, 1990). For example, teachers communicate cultural perspectives to their students through decisions about what knowledge students should learn and how best to teach this knowledge (UNESCO, 2003; Feinberg & Soltis, 2004). As researchers, we posit that the provision of discourse regarding teachers' beliefs about approaches to teaching contributes to a larger portrait of intercultural perspectives (Bogdan & Biklen, 2004). This article, attempts to describe how pre-service teachers in Iran and the US explain beliefs about the goal of education and the role of the teacher. Two questions guide this inquiry:

1. How are Iranian and US pre-service teachers' philosophical approaches to teaching similar or different?
2. What can we learn about each culture that will promote intercultural understanding?

Although the present study investigates a small sample of US and Iranian pre-service teachers (n=60), the sample offers a preliminary portrait of the teachers' goals for their students and the teaching methods utilized to reach these goals. To further enhance this comparison, as researchers, we studied pre-service teachers most likely to encounter students with multiple linguistic and cultural perspectives as these teachers use strategies which enhance learning to live together and adapting rapidly to change (i.e., interpret behavior, relation building, and decision making) (International Conference on Education, 2001). In the US, the K-4 level is the largest of these student populations (Montone & Loeb, 2000; Shaul, 1999), and in Iran, this population of learners is prevalent in the middle-secondary level (4-12) students who study English as a second language (Atai, 2000).

The discussion section is centered upon the importance of educational philosophy to teachers' decisions about practice—the values and beliefs they hold about teaching. After this initial discussion, two aspects of understanding a culture's vision for its society are presented: (a) philosophy or approach to education, and (b) organization of schooling in each culture (Feinberg & Solits, 2004). Lastly, the beliefs and values of US-Iranian pre-service teachers are compared using a Philosophy of Education Scale in order to gain information derived from the world in which teachers live and work—their classrooms. The purpose of this article is to provide information that might

translate into broader global understandings and provide legitimacy for future large scale investigations. It is valuable then, to begin with an introduction to how understanding educational philosophy informs our knowledge of culture and cultural values, followed by sections on US and Iranian specific philosophies, schooling systems, and results of the Scale findings, concluding with an analysis of our findings and suggestions for further studies.

The Importance of Understanding Educational Philosophies
Ross (1992) defines the philosophy of education as an individual's vision about the purpose and process of education. Understanding one's philosophical orientation to teaching provides one with a foundation from which decisions may be made regarding appropriate and important content and its subsequent instructional methods. (Oliva, 2005; Tanner & Tanner, 2000). Wactler (1990) suggests that an educator's most basic analytic skill is a foundational understanding of approaches to teaching. Carbone (1991) posits the term "teacher as philosopher" due to the strong link between teachers' values, curriculum design, and implementation. Understanding one's philosophical approach may provide teachers with a useful framework for differentiating instructional decisions supportive of the cultural and diverse needs of students (Hall, 2002). Thus, similar to Beach and Lindahl's (2004) reasoning that an educational leader must understand philosophies of planning in order to guide an organization, leaders must also understand international educational philosophies in order to enhance educational decisions that frame future social goals and international interactions. These philosophic understandings act as events or markers (benchmark "bits" of information) (Denzin & Lincoln 2003).

Research completed in the 1980s suggests that an intercultural exchange of events (in this case educational philosophies) can (a) foster a more comprehensive global perspective on approaches to teaching (Feinberg, 1989), (b) promote understanding of these approaches' derivation in principles. (Brousseau, Book & Byers, 1987), and (c) eliminate unexplored, inter-global assumptions (UNESCO, 2003). Feinberg (1989) suggests the desegregation of intercultural data as renormative –evaluation of data for perspectives known or unknown. For example, many Americans are confused about the differences between national affiliation (i.e., Arabs, Persians, Turks) and religious affiliation (Muslim and Islam) even though statistical surveys indicate that the five countries with the largest Muslim population are not Arab (Shabbas, 1998). Further, most Americans equate Islamists with Arabs, a misunderstanding that leads to fear/hate of "those people" (Shabbas, 1998). Therefore, the following sections, Islamic Philosophy of Education and Schooling in Iran, provide a brief historical, political, and religious background for both countries.

Islamic Philosophy of Education
The examination of philosophic approaches to education in Iran begins, as does all Muslim life, with understanding the tenets and centrality of religion's role—the Islamic belief – in Iranian society. At the core of Islamic beliefs is a fusion of balanced growth in personality through the training of the spirit, intellect, the rational self, feelings, and bodily senses (Riaz, 2000). To develop this core, Islamic education aims to prepare students in such a manner that their attitudes toward life, and their actions, decisions, and approaches to everyday matters of life are governed by the spiritual and ethical

values of Islam. For example, Muslim educators believe that the most important purpose of education is to prepare for a life of purity and sincerity. This total commitment to character building is based on the ideals of Islamic ethics and is considered the highest goal of education (Riaz, 2000). To foster this aim, students are taught to seek the glorification of God in achieving a state of morality and to act according to principles of Islamic righteousness. It is incumbent upon all Muslims to perform the best and most dignified acts within reach of one's capacity. Islam's utmost emphasis is on deed—acting upon what is learned (Rizvi, 1986). Education in Islam emphasizes that for the comprehension of principles and the implicit meaning of articles of faith, it is imperative that scientific and technological knowledge be acquired and applied (Quddus, 1990). As a philosophical approach, utilizing the scientific perspective of knowledge may appear to come in conflict with the role of religion in Eastern teaching approaches; however, Islamic educators provide for a balanced view of philosophic integration (the use of several philosophic approaches).

Philosophic integration serves as a foundation for clarifying education's social purpose, a continuous process necessary for the complete and balanced development of individuals. In Iran however, educational interpretation by secularists and religious thinkers vary in perspective, balancing between religious and secular values. Many Islamic educational supporters believe that modern western education over emphasizes reason and rationality and encourages scientific inquiry at the expense of spirituality and faith. It has been highly challenging for Muslims to resist Western "liberalism" because all branches of knowledge have been affected by Western thought and Islamic substitutes for liberal concepts have not yet been created (Shahbazi, 1998). Islamic critics of "liberal education" believe that liberalism has created a perplexing variety of views and thoughts, without providing for the survival of Islamic values (Rizvi, 1986). Proponents of Islamic education believe that secular education and thinking generated by a modern scientific approach promotes attitudes of empiricism and creates doubt about the need to think in terms of religion (Riaz, 2000).

Schooling in Iran
The Iranian educational system has long been influenced by various politics, ideologies, and philosophies. Javam (2003) noted four major educational phases: pre-Islamic, Islamic, westernized education, and education after the Islamic Revolution. Religions in contemporary Iran include Shiah Muslim (89%), Sunni Muslim (9%), and Zoroastrian, Jewish, Christian, and Baha'i (2%). Islam arrived in Iran by Arab invasion more than 1400 years ago in the year 637 A.D. Previously, Iranians were mostly Zoroastrians, one of the oldest of the revealed world-religions. Persia eventually adopted the Shiah strain of Islam, which reveres Ali, the son-in-law of Mohammed, and his descendants, while Sunni Islam (which does not hold Ali up as the only continuation of the tradition from Muhammad) prevailed in most of the Arab world. Arab rulers were followed by a succession of dynasties, most of who were of Turkish origin, until 1925, when Reza Shah founded the last Pahlavi dynasty (monarchy) and tried to restore Persian national pride and power. Westernized education reached its peak during the Pahlavi Monarchy in which Iran became a superficially westernized country (Javam, 2003); in part due to exposure to western ideology through cultural and educational exchanges during this period. Iran (formerly Persia) today is a predominantly Muslim country.

Iran changed from a monarchy to an Islamic Republic after the revolution of 1979. The following year, Ayatollah Khonmeini assigned a committee the task of reviewing the educational system and recommending a new program that captured the philosophy, culture, and religious ideals of Islamic Iran (Shahbazi, 1998). Currently, the Iranian pre-university educational system stresses the importance of Islamic ideas in five main areas: student population, goals, staff, school environment, and curriculum— with the aim of creating a new generation of students with an "Islamic personality" in keeping with the principles of the Islamic Revolution (Kulayi, 2000). Commitment to Islam and loyalty to the Islamic revolution are key components for hiring and promoting staff members in schools and increased emphasis in the curriculum is placed upon ethical education. To reflect these changes, the textbooks have been "purified" to emphasize the ideology and politics of the Islamic Revolution (Shabhazi 1998).

These changes are exemplified in the Islamic philosophic approach to education as educators infuse Islamic ideology (such as seeking knowledge) into Iranian schools. For example, one of the first Arabic sentences taught to children is "Muslim men and women are morally obliged to seek knowledge" (talab al-ilm farizda ala kul muslim wa muslima). Another phrase that children are expected to recite mentions Muhammad and "knowledge from the cradle to the grave" (min al-mahd allahd). Teachers stress the relationship between religion and schooling as demonstrated by the first word of the Quran: "Read". Muslims posit that this placement emphasizes the importance of literacy education (Kulayi, 2000). Values such as knowledge, literacy, and loyalty to the Islamic revolution are essential, by definition, of an Iranian educator. Some educator conflict in this loyalty may be evident however, as advancements in technology, ease of communication, and an increase in the amount of international trade and travel impact the degree of modernity in Muslim countries such as Iran. With differing degrees of impact, transformation into a modern, liberal, and technological society is one possible future shift in educational approach.

Philosophy of Education in the United States
Modernization—broadly based philosophical approaches to teaching—is not historically uncommon in the US. However, philosophic approaches to teaching under girding the United States educational system have been anchored by two opposing perspectives: relativism (student centered-self actualization) and positivism (achievement-evaluation) (Feinberg, 1989). In part, because the attributes of attainment-evaluation are observable, positivism has dominated the United States system. During the American colonial period of 1650-1776, the influence of European Protestantism such as standardized curriculum and measurement, unifusive behaviors, and privatization of religion, were cornerstone beliefs, standard in the development of public-private schooling (Smith, 1984). Although relativistic philosophy impacted some, but not all, European educators (e.g., Pestalozzi, Froebel, Rousseau, Montessori) during the period of 1750-1900, its influence was lessened in the United States. Thus, early US educational models drew primarily on positivistic beliefs; more humanistic models of relativism-progressivism periodically emerged, especially during conditions of social strife such as during the economic and political uncertainties of the 1890's, 1930's and 1960's (Smith, 1984).

Educational philosophic shifts in the US system have been more visible than in Iranian systems. Unlike Iranian culture which traditionally has had a dominant set of normative

values commonly understood and smoothly translated into school practice (see discussion section about emerging changes appearing in Iran) US educators periodically reflect on, discuss, and reconsider the efficacy of positivism and relativism in school practice. However, although the conflicts attributable to the oppositional attributes of positivism and relativism are well described in literature (see Feinberg& Soltis, 2004; Fenstermacher & Soltis, 2004; Oliva, 2005; Tanner & Tanner, 2000), the social values upon which teachers make decisions are based on a long-standing belief in the principles of a democratic society (Gutmann, 1987). The three main principles composing a democracy are liberty-freedom, justice-fairness, and equality-equal opportunity (Beane & Apple, 1999; Gutmann, 1987; Gutmann & Thompson, 1996; Ravitch & Therstrom, 1992 and others), values commonly translated into expectations of school practice (author A, 2000; 2003; Parker, 2005 and others).

Schooling in the US
American belief in these three democratic principles, and expected in-school practice rests on positive attitudes towards three cultural norms: (a) opportunity for full social participation for all citizens (Goodlad, 1996), (b) equal opportunity in a diverse society (Spring, 1999), and (c) a moral norm of justice and fairness (Gutmann, 1987). To communicate the importance of these beliefs to its citizenry, US pre-service teacher education programs have encouraged the preparation of pre-service teachers to lead students in understanding these values in order to become effective citizens in a democratic society (Darling-Hammond, 1994; Davis, 2003; Parker, 1996b; Soder, 1996). The current challenge for the American educational system in its outreach for global intercultural understanding appears to be how to respond to positivistic values of US governmental mandates such the Federal No Child Left Behind Act of 2001 and/or re-frame educational approaches to incorporate philosophies of a more progressive-humanistic and self-sustaining nature of inquiry.

Method
Participants
The Iranian participants were nine male and 21 female pre-service teachers, ages 21-26, majoring in middle-high school level TESL (teaching English as a second language) in a post-baccalaureate education program in an Iranian university; English is not taught at the elementary school level in Iran. The US participants were 30 female pre-service teachers, (a typical demographic), predominantly white, ages 21-22, majoring in elementary grades (K-6), who finished coursework in English as a second language and multi-cultural education. These participants were first semester seniors at a research university in the southwestern US, and enrolled in a social studies methods course. In US schools, English as a second language is more commonly taught at the elementary level. The most important controlling criteria for participation were pre-service teaching status and exposure in the university program to methods of teaching English as a second language.

Procedure
Instruments. The Philosophy of Education Scale (POES, see Figure 1) is composed of seven dimensions of teaching, derived from the core standards of the Interstate New Teacher Assessment and Support Council (INTASC) (1992), and the National Council of Accreditation of Teacher Education (NCATE) Standard One (2000 revision) of effective

teaching: classroom environment, lesson plans, classroom management, activities, grading/evaluation, knowledge, and teacher's role. The seven dimensions of the POES are triangulated across five philosophical teaching approaches described in the literature.

Within each dimension (e.g., grading/evaluation), five cells represent each approach; each cell is composed of three indicators representing a particular approach. Each indicator is independently rated using a five point evaluative scale, after which the cell is compared across the five approaches of a dimension and each approach is ranked using the five-point scale. The summated ranked scores derive an overall philosophical orientation score. These ranked scores also portray the contribution of each dimension to overall philosophical approaches. Figure 1 provides one example of dimension-indicator scoring on the POES. In all, the POES is comprised of 105 indicators, each independently rated, and 35 philosophical approach items, each ranked.

Figure 1. Philosophy of Education Scale and Sample Scoring

This form has seven rows (e.g., "Classroom Environment") of large boxes. Each large box has a small box and three descriptors of teaching beliefs and practice. First, start with the descriptors. Rate each of the three descriptors in each large box in the first row, going from left to right, using the scale below as a guide. **Rating numbers may be repeated.**

<div align="center">Most like me **5   4   3   2   1** Least like me</div>

Second, **rank** each of the five large boxes in across each row from the one most like you (5), to the one least like you (1) using the scale above. Use each ranking number only once; **place this number in the small box**. Repeat this process for the remaining rows. Third, add the small boxes (down), for each column. (copyright author, 2003).

Sample Scoring Across One Dimension of Teaching (Lesson Plans).

Rate Indicators	*Rate* Indicators	*Rate* Indicators	*Rate* Indicators	*Rate* Indicators
Rank Approach	*Rank* Approach	*Rank* Approach	*Rank* Approach	*Rank* Approach
LESSON PLANS				
5	**1**	**3**	**2**	**4**
4 Specific objectives and standards clearly defined	1 Long-term, broadly structured outcome	3 Emphasis on depth of knowledge	1 Open-ended objectives	2 Flexible goals based on community and citizenship needs.
4 Essential elements of instruction are addressed	1 Thematic and integrated curriculum	3 Instruction extends beyond standardized testing	2 Inquiry	3 Practical knowledge and life skills
5 Meets district guidelines, scope and sequence	1 Student centered learning	2 Extensive resources (field trips, guest speakers)	3 Emphasize technological skills and information interpreting techniques	5 Higher-order, critical thinking and problem-solving

Note. To determine *overall* philosophical approach, sum total **only the small boxes down the column**.

Figure 2. Philosophy of Education Scale

CLASSROOM ENVIRONMENT				
❑	❑	❑	❑	❑
_ Task-oriented	_ Student-oriented	_ Content-oriented	_ Technology-oriented	_ Culturally enriched environment with global perspectives
_ Organized/Efficient	_ Flexible activities	_ Goal-directed/semi-structured	_ Production-dominated activity	_ Safe learning community
_ Commercially prepared material	_ Student-generated material	_ Teacher-prepared materials	_ High use of multi-media	_ Interactive learning environment
LESSON PLANS				
❑	❑	❑	❑	❑
_ Specific objectives and standards clearly defined	_ Long-term, broadly structured outcomes	_ Emphasis on depth of knowledge	_ Open-ended objectives	_ Flexible goals based on community and citizenship needs
_ Essential elements of instruction are addressed	_ Thematic and integrated curriculum	_ Instruction extends beyond standardized testing	_ Inquiry	_ Practical knowledge and life skills
_ Meets district guidelines, scope and sequence	_ Student-centered learning	_ Extensive resources (fieldtrips, guest speakers)	_ Emphasis on technological skills and information interpreting techniques	_ Higher-order, critical thinking and problem-solving
CLASSROOM MANAGEMENT				
❑	❑	❑	❑	❑
_ Teacher/School-developed rules	_ Classroom meetings and peer review	_ Teacher models desired behaviors	_ Individual responsibility is stressed	_ Parental involvement in solving problems
_ Positive reinforcement for desired behaviors	_ Rules established cooperatively by teacher and students	_ Self-evaluation on ethics and moral development	_ Teachers and students discuss expectations	_ Student input in consequences and guidelines
_ Defined consistent consequences for undesired behaviors	_ Serious problems dealt with individually	_ Students responsible for his or her own conduct	_ Procedures govern student interaction with technology	_ Individual rights, community focus, self-responsibility, respect for others

ACTIVITIES				
☐	☐	☐	☐	☐
_ Regular/consistent individual assignments	_ Journal writing	_ In-depth research projects on content areas lecture/ discussion/ inquiry	_ Student-teacher share	_ Community service
_ Lecture-direct instruction	_ Cooperative learning	_	_ Peer teaching	_ Leadership development/ teamwork skills
_ Daily or weekly homework assignments/ projects	_ Student-selected activities and projects	_ Extensive reading	_ Students create presentations and projects	_ Emphasis on diversity in debate/discussion/role play
GRADING / EVALUATION				
☐	☐	☐	☐	☐
_ Standards-based testing	_ Portfolio assessment	_ Essay and objective tests	_ Graded on level of decision-making, resources used and application	_ Evaluation based on contribution to civic responsibilities
_ Objective measurement	_ Effort considered as achievement	_ Ability to apply knowledge as achievement	_ Evidence of technological competence	_ Student/teacher jointly developed rubrics
_ Scored evaluation measures	_ Self and peers evaluate process as well as products	_ Thorough and rigorous standards	_ Feedback and evaluation often given in electronic formats	_ Immediate feedback, justification/ interpretation of grades
KNOWLEDGE / INSTRUCTION				
☐	☐	☐	☐	☐
_ Step-by-Step instruction	_ Discovery and personal experiences	_ Intense study of content area	_ Students search for information	_ Student discovery, inquiry/critique, research projects
_ Individual practice	_ Manipulation experimentation/ inquiry	_ Perspectives of knowledge important	_ Exploration of knowledge	_ Understanding of democratic process
_ Focus on mastering basic skills and standards	_ Students construct personal understanding of content	_ Breadth of knowledge important	_ Interpretation of meaning	_ Practical knowledge equals content knowledge
TEACHER ROLE				
☐	☐	☐	☐	☐
_ Manager	_ Facilitator	_ Expert	_ Interpreter	_ Leader
_ Organizer	_ Inquirer	_ Mentor	_ Consultant	_ Citizen
_ Planner	_ Co-Learner	_ Guide	_ Connector	_ Patriot
Column Total	**Column Total**	**Column Total**	**Column Total**	**Column Total**

Measures. The POES measures five teaching approaches found in the literature (e.g., Feinberg & Soltis, 2004). The approaches used in the POES are the: (a) executive (behaviorism, a production model), (b) humanist (progressivism, student centered), (c) subject specialist (perennialism, content focused) (Tanner & Tanner, 2000), (d) explorer (deconstructivism, revealing social myths, Pinar, Slattery, Reynolds, & Taubman, 2000), and (e) citizen teacher (essentialism, core civic values, Ravitch & Thenstrom, 1992).

Reliability. Studies of the 105-item POES investigating US pre-service and in-service teachers (average sample size n=+100) (Pryor, 2003, Pryor & Kang, 2003;Pryor, 2004;), reported reliability ranging from.61 to.68, considered well above the benchmark range of 0.50 to 0.60 set by Nunnally (1967) for an instrument intended as an analytic tool. These studies were developed by: (a) determining indicator-cell coefficients (Cronbach's alpha), (b) coefficients for each of the seven dimensions and five corresponding philosophical approaches, and (c) averaging the mean coefficients of either the five approaches or the seven dimensions, leading to the same result. Small sample size in this present study prevented replication of this reliability. The POES was administered by the professor of each participant group as part of their course work and class discussions.

Data analyses. To compare Iranian and US philosophical differences ANOVA analysis and t-tests were performed to determine within-group and between-group differences on overall philosophical orientation. A matrix was developed using mean score and t-test differences for each group, on (a) each philosophical orientation and (b) four teaching variables salient to instructional design: knowledge (content information), lesson plans, classroom activities, grading/evaluation (Tanner & Tanner, 2000). The remaining three variables were considered tangential to this study because they represented policy rather than instructional decisions (classroom environment, management, role of teacher) not considered in this analysis.

Table 1: Comparison between Iranian and U. S. Pre-service Teachers on Philosophical Orientations.

	Iranian (n=30)		U. S. (n=30)			
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>t</u>	<u>p</u>
Executive	3.15	0.41	4.03	0.48	-7.66	<0.001**
Humanist	3.79	0.46	4.31	0.34	-4.97	<0.001**
Subject Specialist	3.60	0.43	4.01	0.44	-3.62	0.001**
Explorer	3.79	0.56	4.04	0.46	-1.89	0.063
Citizen Teacher	3.83	0.44	4.27	0.43	-3.91	<0.001**

Note: ** statistically significant at 0.01 level. Scales range from 1(least like me) to 5 (most like me).

Results

Iranian and US Pre-service Teachers' Philosophical Orientations to Teaching

Table 1 portrays the differences in Iranian and US pre-service teachers' overall philosophical approaches to teaching. These two groups differ significantly on mean scores for each orientation, except for the Explorer approach, in which there was no between group difference. The ANOVA analysis indicated (F=11.293, p<0.001) a significant difference in the ratings Iranians gave to these five philosophical approaches; these pre-service teachers did not highly rate either the Executive or Subject Specialist approaches. US pre-service teachers' scores were more equally spread out among the philosophical beliefs, as indicated in the ANOVA analysis (F=3.418, p=0.011); US pre-service teachers tend not to highly rate the Explorer approach. These F values also indicate that the Iranian pre-service teachers' philosophical tendencies are more strongly held than are those beliefs of the US pre-service teachers. The most highly rated philosophical approach (for both groups) was Citizen Teacher.

Table 2: Comparison between Iranian and U. S. Pre-service Teachers on Four Variables.

		Iran (n=30)		**U. S.** (n=30)			
		M	SD	M	SD	t	p
Executive	LP[a]	3.24	0.83	4.48	0.46	-7.09	<0.001**
	CA[b]	2.58	0.55	3.69	0.74	-6.57	<0.001**
	GR[c]	3.13	0.84	3.78	0.67	-3.27	.002**
	KN[d]	3.64	0.67	4.19	0.53	-3.48	.001**
Humanist	LP	3.86	0.55	4.22	0.59	-2.41	0.019**
	CA	3.68	0.74	4.22	0.47	-3.41	0.001**
	GR	3.53	0.85	4.27	0.47	-4.28	<0.001**
	KN	4.08	0.71	4.53	0.44	-2.97	0.005**
Subject Specialist	LP	3.79	0.70	4.36	0.52	-3.57	0.001**
	CA	3.10	1.05	4.01	0.60	-4.12	<0.001**
	GR	3.90	0.60	3.60	0.62	1.91	0.061
	KN	3.61	0.58	4.07	0.59	-3.01	0.004**
Explorer	LP	3.71	0.64	3.94	0.66	-1.39	0.171
	CA	4.14	0.77	4.21	0.63	-0.37	0.716
	GR	3.58	0.66	3.63	0.66	-0.33	0.745
	KN	3.71	0.82	4.36	0.51	-3.64	0.001**
Citizen Teacher	LP	4.30	0.60	4.43	0.55	-0.89	0.376
	CA	4.41	0.64	4.39	0.49	0.15	0.88
	GR	3.36	0.61	4.03	0.60	-4.37	<0.001**
	KN	3.27	0.76	4.23	0.50	-5.86	<0.001**

Note. a: Lesson Plan; b: Classroom Activity, c: Grading, d: Knowledge. ** Statistically significant at 0.01 level. Scales range, 1=least like me to 5=most like me. N=30 for each group

Iranian and US Philosophical Beliefs about Four Teaching Variables
Table 2 portrays Iranian and US pre-service teachers' differences within each philosophical approach, across four instructional variables. Iranian and US pre-service teacher differences on these four variables are significant for both the executive and humanist approaches. Of these two approaches, the t score on the variable "lesson

Iranian and US pre-service teachers' philosophical approaches—by variable—differ less in the subject specialist and citizen teacher approach, and except for the knowledge variable, there is no difference between Iranian and US pre-service teachers' ratings within the explorer approach. These between group similarities are also evident in the subject specialist-explorer approaches for the grading variable, and in the citizen teacher- explorer approaches on lesson planning and classroom activities.

Discussion
As researchers for this study, we sought to investigate the ways in which Iranian and US pre-service teachers were similar or different in selecting their overall philosophical approach to teaching and what we might learn about philosophical approaches that would promote intercultural understanding. To derive knowledge about an overall approach, it was vital to learn about these two groups through a lens of what they do believe, focusing secondarily on how the groups might hold similar-dissimilar beliefs. For example, one finding of this study indicated that philosophical differences are visible in participants' beliefs toward the Executive approach (i.e., US more so than the Iranians who are less favorable toward the Executive approach, indicating a less favorable Iranian belief in the positivistic, achievement only model). In explaining the sources of the beliefs of each group, between group differences toward the approach were examined. For information that was further illuminated using within approach data; we found the use of disaggregated data (e.g., with approach on the variable of lesson planning) could contextualize the philosophical differences that we sought to explain. In the following section, Iranian Pre-service Teachers' Approach to Lesson Planning, one example variable --"lesson planning" – is used as this variable is typically central to the selection and organization of other teaching strategies (Johnson, 2000; van der Valk, Ton, Broekman, & Harrie, 1999), and the primary tool used by pre-service teachers to develop lessons (Lechner & Barry, 1977; Oldham, van der Valk, Ton, Broekman, & Berenson, 1999; Strang, 1996). Other instructional differences related to "lesson planning" are portrayed in Table 2, by philosophical approach (e.g., the two groups differ in the subject specialist approach on their rating of approach to classroom activities).

Iranian Pre-service Teachers' Approach to Lesson Planning
Several representative slogans of the Islamic revolution may help explain the Iranian pre-service teachers' low rating of the executive approach and high rating of the citizen teacher approach to developing lessons. It is plausible that the low rating may have been caused by a shift from the pre-revolutionary Pahlavi dynasty, under the rule of the Shah which did not provide for free discussion among educators (Rashedi, 1984). The slogans of independence (Esteghlal), freedom (Azadi), and democracy, of the revolutionary era have currently been influential in promoting inquiry, debate, and discussion, each of which are indicators on the POES citizen teacher approach. Slogans of independence are

seen in aspects of Iran 's educational programs. Javam (2003) for example, noted that the Islamic revolutionary phase emphasizes the importance of self-sufficiency in science, industry, and agriculture. Further, the acceptability of slogans of independence favored by this revolutionary young generation may justify their high rating of indicators within the Citizen Teacher approach: critical thinking and problem solving. However, as predominant as the Citizen Teacher approach might be among Islamic Iranian pre-service teachers, social/religious values in which the good of the society prevails over the individual rights, desires, or personal achievement remains a salient social value. Religion continues to play the dominant role in education, with concern for community eminent in achieving a state of morality and spirituality more important than the attributes of efficiency found in the executive, factory production model (Author B, 2004; Riaz, 2000).

High rating of the Citizen Teacher approach (i.e., lesson planning) however, is a rather incomplete portrait of current Islamic educational philosophy. To fully understand the present predicament of education in Iran, it is necessary to comprehend two distinct historical phenomena: the interaction between Islam and educational institutions and the development of modernizing (Westernizing) trends in education (Rashedi, 1984). The Muslim clergy in post-Islamic revolution culture continually calls for a new Islamic education free of Western influence and domination; teaching materials change yearly in an attempt to follow Islamic religious principles. Complicating this influence is the Iranian Ministry of Education which centralizes curriculum including newly emerging changes--technology and computer skills have been recently added to the curriculum. Data in this present study indicated an Iranian disposition towards a Citizen Teacher philosophy and, by inference, the suggestion of western cultural influence on Iranian philosophical approaches. Other reports counter this finding, suggesting the Executive approach is the primary Islamic educational directive—instructional lesson plans are teacher directed (toward Islamic values)—inquiry is little used (Javam, 2003). How free this new Islamic educational system in Iran might be from Western influences or in fact, to embrace Western influence is, therefore, unresolved as emerging educational practices reflect and debate underlying values of philosophical approach.

US Approach to Lesson Planning
US pre-service teachers, more significantly than Iranians, highly rate the executive approach to lesson planning. In their rating of the Citizen Teacher approach, these two groups are similar; no significant difference was found (on the variable of lesson planning), and both groups rated lesson planning as a Citizen Teacher as its highest approach. For the Iranian pre-service teachers, this finding may be explained by sectarian values that foster inclusiveness and a sense of community including learning attributes such as sharing personal learning and knowledge, or use of investigation and inquiry which is supported with activities such as peer tutoring (Raxvi, 1986). In contrast, the US expectation of education has long been the efficiency, factory production model (see Feinberg & Soltis, 2004; Kincheloe, 2004 and others) and pre-service teachers' education lesson planning models used in US universities tend to respond to this expectation (Berliner, 1987). This approach continues today, driven in part by US federal mandates such as the No Child Left Behind act of 2001 (Marshak, 2003) in which the efficacy of the executive approach is linked to excellence in lesson delivery and high use of measures of student assessment. Therefore, it is not unexpected

that US pre-service teachers in the early stages of a school-based field-experience report that they use direct instruction lesson plans to help them list and teach the state and district academic standards, keep students on task, and respond to federal mandates to teach in a manner that is measurable and well-regulated (Odell & Huling, 2000).

Other reports indicate that US pre-service teachers would prefer an inquiry-teaching model, but are often reluctant to implement this approach (Gunzenhauser, 2003). The US pre-service teachers in this present study who most highly rated the citizen teacher approach (inquiry, debate, discussion, and civic involvement) also highly rated the indicators of citizen teacher lesson planning. For these pre-service teachers, lesson planning is a different process than it is for those who highly rate the executive approach—that is, planning becomes a process of inquiry (Parker, 1996). For this group of pre-service teachers, religious or spiritual values such as behavior as goodness, or dedication are not central educational goals (Nord & Haynes, 1998); rather, the value of lesson planning is that it fosters student inquiry (Tanner & Tanner, 2004). Thus, a dichotomy of approach exists in pre-service teacher education programs, as it is not uncommon for these programs to foster strategies of inquiry despite the executive-assessment model found in the public schools (Cochran-Smith, 2004). Given the significant US propensity toward the direct instruction model of the executive approach to teaching, it is important to understand several other aspects of US culture that give rise to a secondary, but strongly believed, citizen teacher approach.

The first of these aspects is the multidimensional nature of US democratic society. Democratic theory underlying its cultural structure has long held that the principles of individual liberty and freedom (e.g., voting rights) are primary to the social contract between government and man (see John Locke, 1690 in Lamprecht, 1928). Teachers who govern classrooms as executives support this principle of individual achievement; exemplars of this principle are spelling bees, mathematics tests, or recitations of historical facts. A second aspect however, stands in contrast to this individuality –the social norm in which a person's responsibility should be less focused on individual rights than on one's communal responsibility to the good of the whole (Gutmann & Thompson, 1996). Despite historical use of the executive model, (Fenstermacher & Soltis, 2004; Tanner & Tanner, 2000) many believe that the current US philosophical approach to teaching is aligned with the citizen teacher philosophy; exemplars of this policy are the encouragement of parent's involvement in public school choice, teacher participation in text book selections, and flexibility in designing educational practice (Tanner & Tanner, 2000). Critics of US policies find the citizen teacher approach unsupported citing examples of hegemony, hidden curriculum, and economic resource concentration as exemplars of disbelief in a democratic US educational philosophy (Beane & Apple, 1999; Giroux, 2004; Kincheloe, 2004). US pre-service teachers; therefore, find they must evaluate their beliefs about "best teaching practices" based on competing philosophies and complex cultural expectations. No clear set of regulations is offered to US teachers; rather, values of citizenship and social responsibility (justice-fairness) serve as a fulcrum for judging teaching practice.

Conclusion
This article agrees with the postulate that cultural isolationism will not enhance intercultural understandings (Smith, 2002). Broader intercultural understandings require

learning about exemplars of culture, places, and artifacts in which culture is evidenced. For teachers to share these understandings, they need to understand how various cultural values are viewed in international educational practice. Feinberg (1989) suggests that permission to inquire about culture means one should neither ignore nor solve the questions of cultural relativism or normative principles; rather, investigations should share and explain the basis for decisions. Clarity in this matter may be seen in the following definition of why one investigates philosophical orientation:

Philosophy of education involves reflection on the purposes and procedures of a practical activity and it has an interest in improving practice. The question changes [after inquiry] from how to understand, to how to act. …Practice belongs neither to the philosopher nor to the anthropologist (Feinberg, 1989 p. 171).

Moreover, the rationale Feinberg offers avoids notions of perfecting relativism in understanding cultures: "In practical activity, we are not choosing among whole cultures, but rather are making selective decisions about certain aspects of a culture" (p. 170). In the case of investigating the philosophical orientations of Iranian and US pre-service teachers, tools such as the Philosophy of Education Scale (Author A, 2004) may generate conversations about values and beliefs that underlie educational decisions and enhance cultural understandings.

As researchers, the similarities and differences we found in the overall philosophical approaches and practical activities of Iranian and US pre-service teachers provide praxis for further investigations of cross-cultural comparisons. First, it is suggested that care be taken not to create a cultural dichotomy between East and West (Kubota, 1999) or Muslim and non-Muslim countries. Constructing fixed, apolitical, and essentialized cultural categorizations such as Muslim/non-Muslim may promote divisiveness and cultural 'otherness.' Second, as data indicated, the complexities of defining cultural and religious values and the social weight of these should be considered by researchers as these definitions may circumvent definitions indigenous to a population (e.g., the goal of education does or does not include religion) (Bogdan & Biklen, 2003). However preliminary the information in this present study, the intention to notice multiple influences on the formation of philosophies of education in Islamic countries suggest additional conversations of intercultural understanding.

Although this study illuminates similarities and difference in overall approaches to teaching and practical activities of Iranian and US pre-service teachers, we, as researchers, do not offer these as broad generalizations. For example, both Iranian and US pre-service teachers highly value the Citizen Teacher approach, and the US, more than Iranians, value the Executive approach; it is important to note that difference exists in the location (e.g., lesson planning) of the practical application of a philosophical approach. This study offers initial insight into the cultural rationale of why these pre-service teachers may hold certain philosophical beliefs and suggests that these explanations center on cultural perceptions of an individual's role in society, the role and influence of religion, and social expectations of the implementation of values. There are several limitations of this preliminary study: sample size, lack of qualitative explanations from the pre-service teachers, and lack of understanding of the field experiences that may influence these teachers as they try out their newly developed

skills. Research is needed to replicate this study with larger samples in which socially diverse sub-samples might offer additional explanations of the foundations of philosophical approaches to teaching.

References

(2003). United Nations Education, Scientific, and Cultural organization UNESCO. Accommodation curriculum in second language. In (Authors) *Education in a Multilingustic* World, Paris.

(2001, September 5-8). International Conference on Education. *Education for all: Learning to live together, content, learning strategies,--problems and solutions*. IBE, Geneva. ED/BIE/confinted/46/3. Retrieved 11/21/04.

Alexander, R. (2001). Border crossings: Towards a comparative pedagogy. *Comparative Education*, 37(4), 507-523.

Atai, R. M (2000). ESP Revisited: A reappraisal study of discipline-based EAP programs in Iran. Unpublished doctoral dissertation. Esfahan University, Iran.

Pryor, C.R. (2003, February). *A comparison of pre-service and in-service teachers' philosophy of education: Tests of a newly revised Philosophy of Education Scale*. Paper presented at the meeting of the Association of Teacher Educators, Jacksonville, Florida.

Beane, J. A. & Apple, M. A. (1999). The case for democratic schools. In *Democratic Schools*, M. W. Appple & J.W. Beane (Eds.), Alexandria, VS: Association for Supervisions and Curriculum Development.

Beach, R. H., & Lindahl, R. (2004). Identifying the knowledge base for school improvement. *Planning and Changing, 35* (1&2), 2-32.

Bogdan, R. C., & Biklen, S. K. (2003). *Qualitative research for education: An introduction to theories and methods*, (4th ed.). Boston: Allyn & Bacon.

Carbone, P. (1991). The teacher as philosopher. *Educational Forum, 55*(4*)*, 319-331.

Cochran-Smith, M. The problem of teacher education. *Journal of Teacher Education*, 55(4), 295-299.

Cochran-Smith, M., & Fries, M. K. (2002). The discourse of reform in teacher education: extending the dialogue. *Educational Researcher*, *32*(6), 26-28.

Compton-Hall, M. (2003). "Not all people are like me": Addressing diversity from a newfound awareness. *Teacher Education and Practice*, *16*(2) 143-155.

Crossley, M. (2002). Comparative and international education: Contemporary challenges, reconceptualization, and new directions for the field. *Current Issues in*

Comparative Education [Online], 4(2). Available at: ttp://www.tc.columbia.edu/cice/articles/ah161.htm [11/21/04]

Darling-Hammond, L. (1994). Reframing the school reform agenda: Developing capacity for school transformation. In L. Hammond, A. Lieberman, D. Wood, & B. Falk, (Eds.), *Transforming school reform: Policies and practices for democratic schools* (pp. 3-18). National Center for Restructuring Education, Schools, and Teaching.

Davis, O. L. (2003). Does democracy in education still live? *Journal of Curriculum and Supervision, 19*(1), 1-4.

Dewey, J. (1933). *A restatement of the relation of reflective thinking to the educative process.* Lexington, MA: D.C. Heath.

Eslami-Reseskh, Z., (2004). Face keeping strategies in reaction to complaints: English and Persian. Journal of Asian Pacific Communication, 14(1), pp. 181-198.Feingberg, W. (1989). A role for philosophy of education in intercultural research: reexamination of the relativism-absolutism debate. *Teachers College Record*, *91*(2), 161-176.

Feinberg, W., & Soltis, J. (2004). *School and society*. New York: Teachers College Press.

Fenstermacher, G., & Soltis, J. (2004). *Approaches to teaching*. New York: Teachers College Press.

Florio-Ruane, S. (2002). More Light: An argument for complexity in studies of teaching and Teacher education. *Journal of Teacher Education, 53*(3), 205-215.

Giroux, H. A. (2004). Critical pedagogy and the postmodern/modern divide: Towards a pedagogy of democratization. *Teacher Education Quarterly, 31*(1), 31-47.

Goodlad, J. I. (1996). Democracy, education and community. In R. Soder (Ed.), *Democracy, education, and the schools* (pp. 87-124). San Francisco: Jossey-Bass.

Gunzenhauser, M.G. (2003). High-stakes testing and the default philosophy of education. *Theory Into Practice*, *42*(1), 51-28.

Gutmann, A. (1987). *Democratic education*. Princeton, NJ: Princeton.

Gutmann, A., & Thompson, D. (1996). Democracy and disagreement. Cambridge, MA: Harvard University Press.

Haggerson, N. (2002). The mission of the mytho-poetic scholar. In M. Wolfe & Author (Eds.), *The mission of the scholar*: *Research and practice* (pp.75-90). New York: Peter Lang.

Hall, T. (2002). Differentiated instruction: Effective classroom practices report. *National Center on Accessing the General Curriculum, 6*(2), 1-9. Retrieved 7-29-04: http://www.cast.org/ncac/classroompractice/cpractice02.pdfon.

Javam, M. H. (2003). *Improving pre-service elementary teacher education in the Islamic Republic of Iran.* Unpublished doctoral dissertation, University of Toronto.

Johnson, A.P. (2000). It's time for Madeline Hunter to go: A new look at lesson plan design. *Action in Teacher Education*, 22(1), 72-78.

Kincheloe, J. (1999). Critical democracy and education. In J. Henderson & K. Kesson (Eds.), *Understanding curriculum leadership* (pp.70-83). New York: Teachers College Press.

Kubota, R. (1999). Japanese Culture Constructed by Discourses: Implication for Applied Linguistics Research and ELT. *TESOL Quarterly, 33*(1), 9-35.

Kulayi, J. K. (2000). *The women's press, modern education, and the state in early twentieth-century Iran, 1900-1930's.* Unpublished doctoral dissertation, University of California.

Lamprecht, S. (1928*). Locke selections*. New York: Scribners.

Lechner, J.V. & Barry, N.H. (1997). Multicultural education through art, literature, and music: A study of pre-service teachers' perceptions of appropriate materials and methods. *Journal of Research and Development in Education, 30*(2), 87-102.

Marshak, D. (2003). No child left behind: A foolish race into the past. *Phi Delta Kappan*, November, 229-231

Montone, C.L. & Loeb, M.L. (2000). *Implementing To-Way Immersion Project in Secondary Schools*. Education Practice Report No.5. Center for Research on Education, Diversity, and Excellence, Santa Cruz: CA: Office of Educational Research and Improvement. ED 439616.

Nord, W.A. & Haynes, C.C. (1998). Taking religion seriously across the curriculum. Association for Supervisions and Curriculum Development: Alexandria, VA.

Nunnally, J. C. (1967). *Psychometric theory*. New York: McGraw-Hill.

Odell, S., & Huling, L. (2000). Introduction: Leading the teaching profession toward quality mentoring. In S. Odell & L. Huling (Eds.), (pp. 2-9). *Quality Mentoring for Novice Teachers*. Indianapolis: Kappa Delta Pi.

Oldham, E., van der Valk, H. E. B., Ton, R., Broekman, H.E.B., & Berenson, S. (1999). Beginning pre-service teachers' approaches to teaching the area concept: Identifying tendencies towards realistic, structuralist, mechanist, or empiricist mathematics education. *European Journal of Teacher Education*, 22(1) 23-43.

Oliva, P. F. (2005). *Developing the curriculum*. New York: Longman.

Parker, W. (1996). Curriculum for democracy. In R. Soder (Ed.), *Democracy, education and the schools* (pp. 182-210). San Francisco: Jossey-Bass.

Pinar, W. F., Reynolds, W. M., Slattery, P., & Taubman, P. M. (2000). *Understanding curriculum*. New York: Peter Lang.

Pryor, C.R., (2003, February). *A comparison of pre-service and in-service teachers' philosophy of education: Tests of a newly revised Philosophy of Education Scale*. Paper presented at the meeting of the Association of Teacher Educators, Jacksonville, Florida.

Pryor, C. R., & Kang, R. (2003). Two *new* evaluation instruments for collaboration. *Academic Exchange Quarterly*, *7*(3), 147-151.

Pryor, C.R. (2004). Writing a philosophy statement: An educator's workbook. Boston: McGraw-Hill.Quddus, N. J. (1990). *Problems of education in Pakistan.* Karachi: Royal Book Company.

Rashedi, N. (1984). *History of Iranian Education: Influence of Islam and the West*. Unpublished doctoral dissertation, University of Michigan, Ann Arbor.

Ravitch, D., & Thernstrom, A. (Eds.). (1992). *The democracy reader*. New York: Harper Perennial.

Riaz, M. N. (2000). Education Systems in an Ideological State: Major Issues and Concerns in Pakistan. In Mazurek, K., Winzer, M. A., & Majorek, C. (eds.), E*ducational in a Global Society: A Comparative Perspective* (pp. 329-341). New York: Allyn and Bacon.

Rizvi, S. S. (1986). *Islamic Philosophy of education.* Lahore: Institute of Islamic Culture.

Ross, R. M. (1992). A study of the relationship of educational philosophy to leadership style of educators in selected school districts. Unpublished doctoral dissertation, University of Arkansas, Fayetteville.

Rubin, M. (2000). Dialogue of Civilizations - A First-Hand Account, *Middle East Quarterly, 7(1)*, http://www.meforum.org/article/39, Retrieved 11/23/04.

Shabbas A. (1998). *The Arab World Studies Notebook*. Fairbanks: Ellen–Bodman.

Shahbazi, M. (1998). *Formal education, school teachers, and ethnic identity among the Quahqa'i of Iran*. Unpublished doctoral dissertation, Washington University.

Shaul, M.S. (1999). *Public Education: Title I Services Provided to Students with Limited English Proficiency*. Report to Congressional Requesters. General Accounting Office, Washington, D.C. ED 441 335.

Smith, D. G. (2002). The hermeneutic scholar. In Wolfe, M & Author A. (Eds.), (pp. 52-73).*The Mission of the Scholar: Research and Practice*. New York: Peter Lang.

Smith, G. (1984). *Lives in education*. Ames, IA: Educational Studies Press.

Soder, R. (1996). Teaching the teachers of the people. In R. Soder, (Ed.), *Democracy education and the schools*. (pp.244-275). San Francisco, CA: Jossey-Bass.

Spring, J. (1999). *Wheels in the head*. New York: McGraw-Hill.

Strang, H. R. (1996). The teaching decisions simulation: An interactive vehicle for mapping teaching decisions. *Journal of Technology and teacher Education*, 4(2), 133-143.

Tanner, D., & Tanner, L. (2000). *Curriculum development*. NJ: Prentice-Hall.

Trimel, S. (1998). Contacts between Scholars Bringing Hope for U.S.-Iran Reconciliation. *Record*, 23 (20).

The Interstate New Teacher Assessment and Support Consortium. (1992). *Model standards for teacher licensing, assessment, and development: A resource for state dialogue*. Washington, D.C.: Author.

The National Council for Accreditation of Teacher Education. (2000). *NCATE unit standards*. Washington, D.C.: Author.

van der Walk, A. E., Ton, A.E., Broekman, H.G. B., & Harrie, R. (1999). The lesson preparation method: A way of investigation pre-service teachers' pedagogical content knowledge. *European Journal of Teacher Education*, 22(1), 11-22.

Wactler, C. (1990). How student teachers make sense of teaching: The derivations of an individual's educational philosophy. (Doctoral dissertation, Arizona State University, 1990). *Dissertation Abstracts International*, 51, 26-27.

Watkins, W. (2002). The hermeneutic scholar. In M. Wolfe & Author (Eds.), *The mission of the scholar*: *Research and practice* (pp.112-128). New York: Peter Lang.