

What Kind of Teachers Will Teach our Children? The Worldmindedness of Undergraduate Elementary and Secondary Social Studies Teacher Candidates at Five Florida Public Universities

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Abstract

Our research examined degrees of worldmindedness of 644 undergraduate elementary and secondary social studies teacher candidates entering the requisite social studies methods courses in their junior or senior year at five of Florida's largest public universities. Worldmindedness in this study is defined as a worldview in which one sees oneself connected to the larger world community grounded in Personal Responsibility, Cultural Pluralism, Efficacy, Globalcentrism, and Interconnectedness. We hypothesised selected demographic predictor variables as potential correlates of higher scores in worldmindedness. Findings demonstrated that variables significantly related to higher scores were: proficiency in two or more languages, progressive political orientation, taking more content courses with a global orientation, high grade point average, birth-place outside the United States, and female gender. Secondary candidates scored higher than elementary candidates. We conclude with recommendations for educational experiences in teacher education programs that may develop a deeper worldmindedness in teacher candidates with the potential of producing a sophisticated teaching force comparable to the best in the world.

Keywords

worldmindedness; globalcentrism; cultural pluralism; personal responsibility; efficacy; interconnectedness; global teacher education

Introduction

In 2003 former US Secretary of State Collin Powell warned: 'To solve most of the major problems facing our country in the 21st century will require every young person to learn more about the world' (Powell, 2003). The United States needs a population capable of understanding the nature of global developments and of making and expressing informed judgments about the consequences of global change. Therefore we need to educate for a participatory citizenry which is politically astute and able to respond to the conditions of the world with understanding of the diversity of its cultures. It is our belief that this requires teachers whose own perceptions of the wider world can nurture this global perspective in future generations. Can the United States rise to the challenge of preparing such teachers?

Mainstream attitudes in the United States notably lack a global perspective. A large proportion of young Americans has been found to exhibit a limited knowledge of the world, its history, geography, and global issues and do not believe it is essential to know more about the world (Manzo, 2006; Green, 2008). Research by the Pew Research Center in 2009 found that the American public 'clearly believes that domestic concerns should take precedence over foreign matters. More than three-quarters of Americans (78%) agree that we should pay less attention to the problems overseas and concentrate on problems here at home.' Moreover, in matters which are clearly international in scope a majority of citizens in the United States favors national sovereignty over international authority. This is typically the case, for example, with matters concerning the environment and those of international courts in contrast with Europeans who generally support international authority (Myers, 2006).

Teachers educated in the United States are highly likely to share the dominant worldview of their fellow citizens. As the educators of teacher candidates, we see it as our task to prepare globally-educated teachers, equipped to teach for the emergence of well-informed, reflective citizens who perceive themselves as citizens of the world as well as of their own country. We believe that if we understand the attitudes our teacher candidates bring to their training experience, we are better equipped to help them develop 'worldmindedness' a sense of connection to and responsibility toward the rest of the world, and to teach them how to develop it in their students.

In this study we sought to determine the degree of worldmindedness of undergraduate teacher candidates in five of Florida's largest public universities, the perspectives of most of whom had been shaped in the United States. We surveyed students who intended to be elementary and secondary social studies teachers at that point during their junior or senior year at which they enrolled in one of the very similar social studies methods courses required by each of their universities.

Worldmindedness

'Worldmindedness' is construed here as a worldview in which one sees oneself as a member of the world community with a responsibility toward the other members of that community. Because the teachers we train can have an indelible effect on the attitudes of future generations in this time of rapid globalization, educators in global education feel deep concern about this quality in their students. The belief systems of future teachers can be broadened by integrating into their education definitive global concepts which develop worldmindedness. These are globalcentrism, a sense of personal responsibility, awareness of cultural pluralism, a sense of efficacy and a sense of interconnectedness (Merryfield, 2009). *Globalcentrism* is defined first by a view of humankind as a single species comprised of individuals linked across space and time and, second, by perceiving the people of the entire world as members of the human family situated in the unity, wholeness, and interdependence of systems of the modern world (Becker, 2002; Hicks and Holden, 2007; Bergstrom, 2010). *Personal responsibility* is defined as a personal concern for people in all parts of the world, evidenced as a sense of moral responsibility for trying to improve world conditions in some way. *Cultural pluralism* is reflected in an appreciation of the diversity of cultures in the world, a belief that all cultures have something of value to offer, and that one should take pleasure in exploring and trying to understand other cultural frameworks. *Efficacy* is the belief that an individual's actions can make a difference and that involvement in national and international issues is important. *Interconnectedness* implies an awareness and appreciation of the inter-relatedness of all peoples and nations.

Theoretical Framework

Our study is grounded in theory and research in two areas: the global belief systems of teachers and the impact of global pedagogy on teaching and learning.

The Global Belief Systems of Teachers

A growing body of conceptual literature in education identifies the belief systems of teacher candidates as how they conceptualize teaching and how they use their pedagogical knowledge to shape curricular and instructional decisions (Kirkwood-Tucker, 2002; Gaudelli, 2003; Gomez, Black, and Allen, 2007; Merryfield, 2009). A teacher's orientation to the world, including concepts, values, and sensibilities, is grounded in his or her beliefs about the world. As teachers are the ultimate curricular and instructional gatekeepers of what takes place in the classroom (Thornton, 2005), the structure of their belief systems inevitably influences their instruction. A teacher's belief system is of clear importance, for example, in teaching United States history, required in all public high schools in the country, as the 'isolationist attitude that has prevailed throughout most of US history teaching is counterproductive in the context of global realities' (Tucker and Cistone, 1991:7; also see Zong, Wilson, and Quashiga, 2008).

Research has found that the outcome of social studies teacher education is shaped by the interaction of an individual's pre-existing beliefs with two variables: that person's interpretation of the content of methods courses; and experiences in schools during internship (Doppen, 2007; Zong, 2006). We suggest that research into the beliefs of prospective teachers can help their educators both find ways to help their students explore and widen their pre-existing beliefs about the world, and identify experiences in a teacher education program that effectively catalyze the development of professional knowledge and disposition in teacher candidates (Zong, 2006).

The Impact of Global Pedagogy

Since the emergence in the early 1960s of a global perspective in teacher-education programs and schools in the United States, global educators have made significant contributions in theoretical inquiry and conceptualization regarding the development of attitude formation in students. In the early history of the global education movement, such seminal contributions as the work of Becker, Anderson, Hanvey, Tye and Tucker set the direction for the field. Students were encouraged to examine their traditional belief systems as embedded in the centrality of their own ethnic and national identities and to cultivate a position of globalcentrism which readied them for a worldmindedness education related to supranationalism, the promotion of peace, and sympathy – even empathy – for people of other nations and cultures (Anderson, 1968; Becker, 1979).

Among the first practical approaches to classroom teaching from a global perspective was the development of a conceptual framework by Hanvey, (1976) in 'An Attainable Global Perspective.' Part of Tucker's seminal work (1982) was the demonstration that it is 'people, particularly teachers, not textbooks [that] appear to be the primary carriers of the global education culture' (*ibid*:213). Empirical research in highly multi-ethnic Miami, Florida, on the impact of a pedagogy of global perspectives on teacher education and later in large K-12 student populations has shown that deepening students' knowledge and understanding of the world promotes openmindedness and acceptance of diversity and reduces stereotyping and prejudicial assumptions about the Other (Kirkwood-Tucker, 2001; 2009a; 2009b). In a large empirical study in a public school district of middle-American Ohio, Merryfield (1998) found an absence of ethnocentrism and nation-centeredness in students in the classrooms of certain exemplary teachers who were teaching for an understanding of multiple perspectives and awareness of global injustices. She argued that global educators can make a difference by fostering students' interests in the larger world and an increased compassion for other people (Merryfield, 2002a).

Sometimes a teacher working from a global perspective can contrive to use what would at first appear to be an impersonal learning experience to develop an interest

in and compassion for the Other. Stover (2008) examined the highly polarizing contemporary tragedies in Palestine, Israel, Jordan, and Egypt in a college-level class using a computer-based interactive simulation designed to transcend ethnocentric thinking; the result was that his students expressed empathy toward all these countries. In several high schools in metropolitan east-coast New Jersey Gaudelli and Fernekes (2004) found that students were inspired by an expanded view of national human rights violations and international human rights abuses to engage in social action in their own communities.

Ethnographic research on culture and cultural differences has demonstrated that teacher candidates shift their thinking about diversity when they are exposed to different cultural content and to personal engagement with the Other (Lensky *et al*, 2005). But significantly, cross-cultural experience alone does not necessarily result in deepening compassion for or understanding of the Other in prospective teachers. On the one hand, there is an interesting study of pre-service teachers of English language learners (ELL) who, after immersion in cross-cultural experiences with Latino students, demonstrated that they had developed a positive view of Latino students and expanded their knowledge base about immigration (FERENCE and Bell, 2004). Yet there is also an extensive empirical study by Weisman and Garza (2002) of a program intended to help American prospective teachers work more effectively in multicultural settings by exposing them to an emphasis on cross-cultural language and academic development. Most of these respondents believed that American democratic principles are inconsistent with promoting biculturalism and perceived no consequential relationship between racism and their own privileged positions as Whites. The study found that the nature of the subjects' experience in this program had limited influence on their attitudes toward diversity issues. Rather than looking at factors within the structure of schooling for lack of educational success, they laid the blame on minority students and their families. Taken together such findings indicate that the goals of global education-the development of worldmindedness-are achievable, but require something beyond simply effecting mutual exposure of members of different cultures.

Rationale for this Study

Our interest in examining the worldmindedness of our undergraduate prospective teacher population in Florida was reinforced by numerous studies in the global education literature that demonstrated parochialism and lack of content knowledge about the larger world among American teachers. We have argued that if we want future generations to be involved in moving the human family toward a more just and peaceful world the worldmindedness of their teachers can positively influence that and therefore the human condition. As worldview and content knowledge are inextricably linked, we will point to selected studies that address both.

Lack of Global Awareness in Teacher Candidates

Our concerns are intensified by research studies that disclose a severely limited understanding of the world among American teacher candidates. For example, in a large teacher education program the empirical research of Holm and Farber (2002) found a high degree of insularity, inattention toward and lack of awareness of the world among upper level undergraduate university students. They showed little evidence of widely shared geopolitical referents that would serve as the basis of informed discussion or teaching about the meaning and ramifications of globalization. Clarke (2004) found that another group of American university students exhibited mixed attitudes toward internationalism and the involvement of the United States with other countries, rooted in limited global awareness and the concept that the primary role of their country is to shape its own future.

An old but especially alarming study by Osunde, Tlou, and Brown (1996) remains one of few empirical studies of the perspectives of teacher candidates on developing nations. Of particular concern are the embarrassing stereotypic misperceptions of Africa of 100 pre-service social studies teachers randomly selected at two public universities in the United States. They held the same stereotypic misconceptions about aspects of Africa as had their parents and grandparents several decades earlier. Though the study is old, it is hard to believe that the results in this area would be very different today. It should be mentioned parenthetically that such problems do not occur only in the United States. To cite only one example, Portuguese scholars Gil-Perez, Vilches and Edwards (2003) found the perceptions of the state of the world seriously lacking among the science teachers of their country, describing their understanding of global responsibility as 'fragmented and superficial.'

Our concerns were compounded by Levine's (2005) reports from surveys conducted by the Asia Society and National Geographic Society. These reports abound in evidence that American young people are alarmingly ill-informed about the geographical and geopolitical relationships that give context to world events. Eighty per cent of college-bound high school students did not know that India is the world's largest democracy, an overwhelming majority could not find either Afghanistan or Israel on a world map, and 25 per cent could not name the ocean between the American West Coast and Asia.

A year later, a National Geographic-Roper Public Affairs Literacy Study (2006) of 530 randomly polled young adults in the United States between ages 18 to 24 produced even more dire illustrations of limited understanding of the world both within and beyond their country's borders. Trailing young adults in eight other industrial nations (Canada, France, Germany, Great Britain, Italy, Japan, and Sweden) these young Americans were next to last in their knowledge of geography and current affairs. Despite the barrage of American news coverage of the Iraq war since its inception in 2003, 6 of 10 young adults between ages 18 to 24 in the US sample could not find Iraq on a map of the Middle East; two-thirds did not know that there had

been a recent catastrophic earthquake in Pakistan that killed over 70,000 people; more than 4 in 10 could not place Pakistan in Asia. Seventy per cent of this same group believed English to be the primary language spoken by most people in the world, and 71 per cent did not know that the United States was the world's largest exporter of goods and services (48 per cent believed it was China). Regarding hot-spots in the world, 75 per cent could not locate Israel on the map of the Middle East despite the fact that the conflict between Israelis and Palestinians has been a controversial issue throughout their lives. Seven in 10 could not find North Korea on a map of Asia, and 6 of 10 did not know that its border with South Korea is the most heavily fortified in the world (30 per cent thought it was the US-Mexican border). Moreover, only 14 per cent of the youths surveyed considered speaking another language fluently to be a necessary skill in the 21st century and, most alarming, fewer than 3 in 10 even believed that it is necessary to know where other countries are located on the earth!

A study by Gaudelli (2003) argued that teaching cultural relativism triggers one of the most controversial arguments in global pedagogy. His chapter 'Opening Pandora's Box: Cultural Relativism in Global Education' points to the ambiguity of practicing teachers who seek a middle ground between cultural relativism and ethical universalism as they grapple 'with the tension between a public expectation of culturally relativist teaching and the private tendency toward ethical universalistic thought' (*Ibid*: 98).

From such disconcerting findings we theorize that a large number of active teachers in classrooms in the United States today lack knowledge of the larger world, are at best ambiguous about the diversity of its cultures, and lack effective training in integrating global perspectives and global content in classroom instruction.

Purpose of this Study

We believe that it is profoundly helpful to us as educators of teacher candidates to understand the attitudes toward the world that our students bring to their teacher training experience and that with such understanding we are better equipped to help them develop worldmindedness and teach them how to develop it in their future students.

Methodology

In light of the research regarding the narrow worldview and limited knowledge of the world in the population from which most prospective teachers in the United States are drawn, we sought to determine the degree of worldmindedness in 644 undergraduate teacher candidates at five of Florida's largest public universities as they entered the social studies methods courses required in their junior or senior year. We defined the constructs of worldmindedness as globalcentrism, personal responsibility, cultural pluralism, efficacy, and interconnectedness, as discussed

earlier, and hypothesized 14 demographic predictor variables as potential correlates of worldmindedness scores. These were: age, ethnicity, gender, teaching experience, political attitude, grade point average, foreign language proficiency, birthplace, number of global education courses taken, membership in educational/professional organizations, number of times/week reading a newspaper, reading a weekly news magazine, international experiences, and major.

Setting

The five large public universities in Florida participating in this study are all Carnegie I research universities accredited by the National Council for Accreditation of Teacher Education (NCATE) and compete with each other for academic excellence, acquisition of grants, student recruitment, and in their increasing efforts toward competence in global literacy. They are located across the State of Florida in urban and suburban settings and pride themselves with a large number of foreign students from different parts of the world. Student populations range from 27,000 to 50,000.

The curriculum requirements were comparable in all five universities with only minor idiosyncratic variations, as they must all meet the Florida Department of Education mandate for teacher education. This includes courses in social and psychological foundations, reading in the content area, classroom assessment, classroom management, teaching English language learners (ELL), social studies methods, field studies (exposing students to the realities of the classroom in designated schools), and student teaching internship. The social studies methods course required in all five universities could be taken either in the junior or senior year and covered effective teaching strategies such as guided classroom discussion, interactive teaching, cooperative learning, differentiated teaching, and proficiency in the application of technology.

The only variation among the social studies education program requirements at these five universities was a course called *Developing a Global Perspective* (or a similar title) offered in three of the five universities. This course focused on developing a positive disposition toward the world and the diversity of peoples in the United States as well as beyond its borders. The course required students to develop lesson plans about topics such as violation of human rights, the income gap between developing and industrialized nations, gender inequality in education, and the economic, political, and cultural interconnectivity among nations, as global scholars believe that these topics will move the learner from a nation-centered to a globalcentric orientation (Heilman, 2006; Kirkwood-Tucker, 2004; Merryfield, 2009). Only one university required this course for secondary social studies students; in a second university the course was optional for secondary social studies students; the third university required the course only for Master's degree students. The re-

maintaining two universities offered no global perspectives course at the time of the study.¹

Participants

Teacher candidates were juniors or seniors pursuing an undergraduate degree in elementary education or secondary social science education. Of these, 63.5 per cent had declared elementary education as their major; 36.5 per cent had declared a major in secondary social studies. Almost three-quarters of these future teachers were between the ages of 18 and 25; one quarter were between 26 to 40.² Their ethnic identities were 49.3 per cent European American, 28.4 per cent Hispanic American,³ 11.7 per cent African American, 4.2 per cent Caribbean American, 0.9 per cent Asian American, and 0.9 per cent 'Other.'

Data Collection

Each of these 644 teacher candidates filled out the Worldmindedness Survey in their first or second week as enrollees in the required social studies methods course. The survey was administered to classes during each of three consecutive semesters, the spring, summer and fall of 2005. Each teacher candidate was given a copy of the form titled 'Willingness to Participate in *Worldmindedness* Study' signed by the principal researcher. This outlined risks, benefits, survey safe-keeping, and confidentiality of the study. At each university the survey was distributed to participants by collaborating professors who reiterated the voluntary nature of participation and the option for withdrawal at any point during the survey administration. Participants were not required to sign any forms.

The participating colleagues at each university filled out a 'Projected Student Enrollment' form estimating enrollment in their social studies methods classes for the duration of the study. Before each semester we sent the projected number of survey forms with a self-addressed prepaid return envelope. Most completed surveys were returned during the spring and fall semesters, fewer during the summer semester known for its lower student enrollment.

Instrument

The *Worldmindedness Survey*⁴ used in this research was an instrument developed and validated by Hett (1993) in her dissertation, *The Development of an Instrument to Measure Global-Mindedness*, derived from items of previous studies by Lentz (1950), Sampson and Smith (1957), Glick (1974), Redding (1975), Silvernail (1979), and Barrows, Clark and Klein (1981). The survey instrument was further tested for validity and reliability by Zong (1999). This *Worldmindedness Survey* is a two-part instrument composed of 24 demographic questions and a 30-item 5-point Likert-type scale. The Likert scale consisted of five points: 1-strongly disagree; 2-disagree; 3-unsure; 4-agree, and 5-strongly agree. Nine items were reverse coded.

From these 24 demographic predictor variables, we selected 14 demographic variables as potential correlates of *Worldmindedness* scores. Each demographic variable was hypothesized to demonstrate either a positive or negative relationship to the criterion variable. These were: age, ethnicity, gender, teaching experience, political attitude, grade point average, foreign language proficiency, birthplace, number of courses taken with a global content orientation, membership in educational/professional organizations, number of times/week reading a newspaper, reading a weekly news magazine, international experiences, and major.

The total *Worldmindedness* score was established by averaging all items of the survey instrument (30 items, $\alpha = .90$). Five sub-scores were created, reflecting those elements of worldmindedness detailed here. *Personal responsibility* (7 items, $\alpha = .76$) consisted of statements such as 'I feel compelled to speak out when I see our government doing something globally I consider wrong,' 'When I hear that thousands of people are starving in the world, I feel very frustrated,' and 'Americans have a moral obligation to share their wealth with the less fortunate peoples of the world.' *Cultural pluralism* (8 items, $\alpha = .78$) was grounded in statements such as 'I generally find it stimulating to spend an evening talking with people from another culture,' 'The US is enriched by people from different cultures and countries,' and 'I have very little in common with people in less developed countries.' *Efficacy* (5 items, $\alpha = .69$) included statements such as 'There is nothing I can do about the world and its problems,' 'I want a career which will have a positive impact on future generations,' and 'I can affect what happens on a global level by what I do in my community.' *Globalcentrism* (5 items, $\alpha = .62$) consisted of statements such as 'The US must continue to put our needs as its highest priority in negotiating with other countries,' 'American values are the best,' and 'I sometimes feel irritated with people in other countries because they don't understand how we do things here in America.' *Interconnectedness* (5 items, $\alpha = .67$) was composed of items such as 'I think of myself not only as an American but also as a citizen of the world,' 'I feel a strong kinship with human beings worldwide,' and 'It is not really important for me to consider myself as a member of the global community.'

Results

To adjust for multiple hypothesis testing, a cumulative .05 Type I error-rate over the tests of all 14 demographic correlates was modified (via Bonferonni's inequality) to a per-hypothesis alpha of $.05/14$, or approximately .0036. In all cases the Levene's test of homogeneity of variance yielded non-significant results (all with $p > .10$); thus this assumption of analysis of variance (ANOVA) was met. There was also no significant departure from normality for any of the *Worldmindedness* scores.

Table 1 indicates the descriptive statistics containing the criterion (dependent) variables and predictor (independent) variables and the means (or percentages for dichotomous variables), standard deviations, and number of candidates (N) responding to the survey.

Table 1: Means or Percentages and Standard Deviations

Variable	Mean	Standard Deviation	N available ^a
Total Worldmindedness	3.87	.45	586
Personal Responsibility	3.81	.61	625
Cultural Pluralism	4.21	.50	618
Efficacy	3.91	.60	625
Globalcentrism	3.38	.66	622
Interconnectedness	3.88	.61	622
# Global Courses	.78	.83	644
Political Orientation	2.98	1.10	624
GPA	1.70	.68	637
# Languages Proficient	1.44	.58	636
# Times/Week Newspaper	3.62	1.24	639
Age	2.18	1.17	642
Gender (% Female)	(78.0%)	.41	637
Birthplace (% US Born)	(85.6%)	.35	644
Elementary Major	(63.5%)	.48	641
Teaching Experience	(26.4%)	.44	644
Read Magazines Weekly	(22.4%)	.42	634
International Experiences	(49.6%)	.50	643
Member Organization	(16.7%)	.37	639

Sample size = 644.

The 'N available' column represents the number of students who responded.

A lower number indicates that students did not answer relevant item(s).

Table 2 gives the correlation of all predictor variables with the total *Worldmindedness* score and all subscores as well as the multiple correlations derived by predicting the *Worldmindedness* scores from the demographic variables of all 14 predictors. As *ethnicity* had three levels, it was dummy coded into two predictors for the purpose of the multiple correlation calculation.

From Table 2 it can be observed that many predictors were significantly related to the total *Worldmindedness* score or subscores. The bivariate correlations were of small to moderate size, representing variance portions from about 1% to 10%. The reader is cautioned to be aware of their small to moderate size in interpreting the findings. The multiple correlations arising from predicting the *Worldmindedness* scores were all significant with portions of variance ranging from 9% to 22%.

Table 3: Means by Ethnicity and ANOVA results

Scales	Ethnicity Means			Error df	MS	F _(Hyp df=2)	Partial Eta ²
	African American (N = 67)	European American (N=290)	Hispanic American (N=170)				
Total							
Worldmindedness	3.81	3.81	3.94	524	1.02	5.10*	.019
Personal Responsibility	3.71	3.74	3.93	556	2.38	6.52*	.023
Cultural Pluralism	4.19	4.16	4.24	551	.33	1.37	.005
Efficacy	3.79	3.84	4.01	557	2.06	5.97*	.021
Globalcentrism	2.59	2.67	2.63	554	.22	.50	.002
Interconnectedness	3.81	3.81	4.00	555	2.24	6.22*	.022

*p < .0036

Analysis of variance (ANOVA) offering consideration of the relationship between *Worldmindedness* and ethnicity are reported in Table 3. Ethnicity was recoded into three categories: European-American (49.3%); Hispanic-American (28.4%); and African-American (11.7%), as no other ethnic group constituted as much as 5% of the sample.

As can be seen from Table 3, there was a significant analysis of variance (ANOVA) for the total *Worldmindedness* score, *personal responsibility*, *efficacy*, and *interconnectedness* but not for *cultural pluralism* or *global centrism*. Although significant, the effect sizes were small, clustering around two per cent. Among the scales for which there was a significant effect, one can see a consistent pattern: little or no difference between African-American and European-American teacher candidates, but a slightly higher score for Hispanic-Americans.

Post hoc Tukey HSD pair-wise tests, however, showed a significant difference between Hispanic-Americans and European-Americans only for *personal responsibility* and *interconnectedness*. The relatively conservative .0036 alpha is of relevance herein. Although the ordering of means is consistent, the effect sizes were not large enough to declare pair-wise differences between other groups with significant analysis of variance (ANOVA).

We found that high *Worldmindeness* scores of teacher candidates were positively related to 10 of the predictor variables: foreign language proficiency, political attitude, grade point average, teachers born outside the United States, gender, enrollment in classes with a global content orientation, primary or secondary school major, age, international experiences, membership in professional organizations and worldmindedness. However, the study found no significant correlation

between 3 of 10 hypothesized predictor variables and any *Worldmindedness* scores: teaching experience, number of times a week that candidates read a newspaper and reading a weekly news magazine.

Global educators may be heartened by the positive relationships evidenced in the itemized findings below:

1. *Proficiency in two or more languages* was the only predictor that significantly related to all *Worldmindedness* scores with a positive relationship to all subscores.
2. Teacher candidates professing a more *liberal political attitude* had significantly higher scores on the *Worldmindedness* scales, and political attitude was significantly related to all *Worldmindedness* scores except *efficacy*. The association between more progressive political orientation and global-centrism was the strongest correlation obtained.
3. *GPA*s were significantly positively related to all *Worldmindedness* scores except *globalcentrism*.
4. Those *born outside the United States* scored significantly higher in total *Worldmindedness* and in the sub-scores of *personal responsibility* and *globalcentrism* than their US born peers.
5. *Gender difference* was significantly related to all of the *Worldmindedness* scores except *cultural pluralism* and *globalcentrism*. Females exhibited higher scores than males.
6. Those who had taken more content courses with a *global orientation* scored significantly higher in total *Worldmindedness*, and in the sub-scores of *personal responsibility* and *cultural pluralism* than their counterparts.
7. *Major* was significantly correlated to two *Worldmindedness* scores; secondary school majors scored higher in *cultural pluralism* and *globalcentrism* than elementary school majors.
8. *Age*, *international experiences*, and *membership in professional organizations* were each significantly correlated with only one other variable. Older teacher candidates tended to have a higher *interconnectedness* score; *international experiences* were related to a higher *cultural pluralism* score; *membership in professional organizations* was related to a higher score on *efficacy*.

Discussion

Proficiency in Two or More Languages

Proficiency in two or more languages was the only predictor that significantly related to all *Worldmindedness* scores with a positive relationship to *all* subscores. Some of the teacher candidates in this group were bi- or multi-lingual by upbringing-

ing, and presumably some English speakers who had studied a second language in high school had continued their study in college. The literature of immigrant studies shows that foreign-born or first-generation immigrant students in the host country tend to continue to speak their native languages in the home and thus are able to communicate with non-English-speaking members of their families as well as English language learners (ELL) if they choose teaching as their profession (Gollnick and Chinn, 2009; Rumbaut and Portes, 2001).

These teacher candidates indicated a clear identification with the global constructs of *globalcentrism*, *cultural pluralism*, *personal responsibility*, *efficacy*, and *global interconnectedness*. According to F. Lee Anderson (1968), a pioneer global educator, a deeply-held belief in globalcentrism leads to readiness for a worldmindedness education. Such prospective teachers also resonate strongly with *cultural pluralism*, an orientation requiring individuals to resist stereotyping, chauvinism, and feelings of superiority over the Other (Merryfield, 2009).

Teacher candidates with multiple language competencies appear to see themselves connected to the world community, able to transcend differentiations between those who share their cultural beliefs and others of the larger world (Zong et al., 2008). The ability to communicate lends power to cross-cultural dialogue and exchange, supporting persistent and continuous attempts to reach common ground (Barber, 2000; Eck, 2001). Moreover, teacher educators have observed effective geography skills and a sense of time and place among students of bicultural or multilingual backgrounds (Gollnick and Chinn, 2009), and such teacher candidates are inclined to examine their own perspectives in relation to the perspectives of the Other, having been widened in their understanding of cultural practices and beliefs through language acquisition, (Merryfield, 2009).

Political Orientation

The largest correlation was between a 'liberal' political identity and *globalcentrism*. *Political orientation* in teacher candidates was significantly related to all *Worldmindedness* scores except *efficacy*. This supports the idea of the global citizen-thinker whose beliefs transcend local, city, state, and national borders. The development of *globalcentrism* is an essential element of the international democratic citizen in understanding the world (Merryfield, 2009) requiring examination of what is good for the global community, not only what benefits one's own country. To place the world at the center of one's thinking requires one to make judgments based on international, not ethnocentric or nationcentric standards, leading to readiness for a worldmindedness of supranationalism and promotion of peace and sympathy for people of other nations and cultures (Hicks and Holden, 2007; Liverof et al., 2005). McIntosh (2005) defines the global citizen as an individual who possesses the combined capacities of mind, heart, physical body, and spirit-soul. She argues that the 'sweetness' of this spirit-soul seeks 'the nondestructive ... engaging rather than

withdrawing in order that individuals may be able to be of service of something larger than oneself' (*Ibid*:24). Considering their authoritative training, the eventuality of a large number of retired military personnel reducing United States teacher shortage causes one to wonder whether their political attitude will promote or impede thinking and acting from a globalcentrist position.

Teachers with a politically liberal orientation are inclined to acknowledge the interdependence of the world's people, resulting in cross-cultural bonding and cooperative pursuits. Using the world-systems approach, identifying commonalities and collaboration among nations, promoting understanding among diverse peoples grounded in relativistic knowledge in the study of shared problems of humanity, are essential elements in teaching globalcentrism (Hicks, 2003; Merryfield and Wilson, 2005). This clearly informs Martin Luther King, Jr.'s principles of nonviolence, open communication, and individual civic empowerment leading to collaborative action across races to achieve the common good (Levinson and Brantmeier, 2006).

Grade Point Average

The positive correlations between high grade point average (GPA) and overall *Worldmindedness* in this study imply a level of sophistication in students whose grade point averages reflect high academic achievement. Many of these had had the privilege of participating in foreign exchange programs or had traveled overseas, sometimes more than once. Therefore it is not surprising that high grade point average is correlated with a high degree of *Worldmindedness* as indicated by levels of *personal responsibility*, *cultural pluralism*, *efficacy*, and *interconnectedness*. Although there is no traceable literature pointing to an association between high academic scores and degrees of worldmindedness, the civics education literature demonstrates that high grade point averages are associated with political participation (Gutierrez, 2005) which is highly correlated with worldmindedness.

But there is also a general lack of *globalcentrism* in teacher candidates with high GPAs. This may be attributable to their youth, innocence, or naiveté in perceiving their own country more favorably than others, as Zevin (2003) demonstrated in his comparative attitudinal study of Norwegian and United States' youth, both of whose attitudes toward their own countries was markedly more favorable than toward others.

Birth Outside the United States

Teacher candidates born outside the United States scored higher on the total *Worldmindedness*, *personal responsibility* and *cultural pluralism* scores than respondents born in the United States. This may be reflective of their personal and professional international experiences, being steeped in a definitive cultural identity and sense of place, and a capacity for making connections between culture and worldviews

(Ndura, 2004). The need to form an individual identity while positioned between cultures may have supported them in achieving that critical insight that exposes the prejudices and stereotypes of both and makes the connection between culture and worldview. Individuals with cross-cultural experiences seem to be able to improve their cultural learning of the Other, thereby enabling them as teachers to reduce the culture shock experienced by their students who enter a different culture (Cushner and Mahon, 2002).

Teacher candidates born outside the United States scored significantly higher than the native-born in *globalcentrism* and also demonstrated high scores on *personal responsibility*. Both may reflect those aspects of worldmindedness which perceive the world's people as members of the human family situated in the unity, wholeness, interdependence, and systemness of the modern world (Becker, 2002; Hicks and Holden, 2007; Merryfield, 2002b). Their significantly higher score on *cultural pluralism* would appear to result from their lived experiences and cross-cultural learning, resulting in gains in 'substantive knowledge, perceptual understanding, personal growth, interpersonal connections, and the ability to become a cultural mediator' (Zong *et al*, 2008, : 207).

It is striking that in a nation forged out of so many ethnic and cultural groups most citizens of the United States should lack the comfort with several languages so common in other parts of the world. Native-born teacher candidates might ask themselves whether they should acquire a foreign language and seek ways to spend time either abroad or in one of the numerous US immigrant communities such as Haitian Creole and among people immersing themselves in firsthand understanding of another culture. Global scholars may be able to persuade colleagues to consider requiring cross-cultural experiences and foreign language proficiency as admission prerequisites to their American teacher education programs.

Gender

Gender was significantly related to all *Worldmindedness* scores except for *cultural pluralism* and *globalcentrism*. Female teacher candidates generally had higher scores than their male counterparts, notably in higher *efficacy* and *interconnectedness*. Some of this may be attributable to socialization. Lower efficacy scores in male subjects may reflect something of the social standing of teachers at the elementary and secondary levels in United States society, indicating that teaching is a more acceptable and higher status role for women than for men.

Attending Courses with a Global Orientation

Those teacher candidates who had taken more content courses with a global orientation scored significantly higher in total *Worldmindedness*, and in *personal responsibility* and *cultural pluralism* than their peers. During their freshman and sophomore years they had self-selected courses in non-western world area studies

offered in either the College of Humanities or College of Social Sciences. These students appeared to have developed a concern for marginalized and oppressed peoples and a sense of moral responsibility toward improving the human condition. These teacher candidates also professed an appreciation for diversity of cultures, the belief that all cultures have something of value to offer, and the opinion that one should take pleasure in exploring and trying to understand other cultural frameworks (Wilson, 2001; Zong, 2009).

The high level of *Worldmindedness* in this subset may result from the strong recommendations of Florida's public universities that incoming freshmen contemplating a teaching career take classes in world history, world geography, international relations, cultural anthropology, and area studies or from enrolment in one of the education courses (or an equivalent under another title) available at each of the five universities: Teaching Diverse Populations, Multicultural Education, and Class, Gender and Race. Although the extent of global content in these self-selected courses cannot be credibly ascertained, despite their multicultural grounding they are increasingly taught with a global dimension (Banks, 2004). Moreover, a small group of the secondary social studies teacher candidates in this study population had attended the Developing a Global Perspective course required by one university at the undergraduate level, by another at the graduate level, and offered by a third as an elective course offering a broad view of the world's conditions in industrialized and developing nations, leading students to think from a global perspective.

Major Field of Study

A subject's self-selected major (either elementary education or secondary social studies education) correlated significantly with *cultural pluralism* and *global-centrism*. Secondary social studies candidates had higher scores in both constructs than their elementary school counterparts. As they are preparing to teach United States and world history, to teach in depth about the world's civilizations and their salient contributions, and to integrate geography into their history courses, it is hardly surprising to find in them a greater consciousness of what is good for the international community, not only what benefits their own country, and a willingness to make judgments based on universal rather than ethnocentric or nation-centered standards (Kirkwood-Tucker, 2004). More research on the global belief systems and content knowledge of elementary teacher candidates would yield deeper insight into their worldview and knowledge about the world.

Age, International Experiences, and Membership in Professional Organizations

The three demographic variables *age*, *international experiences*, and *membership in professional organizations* were each significantly correlated only to one *Worldmindedness* score. Older teacher candidates tended to have higher *interconnected-*

ness scores; international experiences were related to higher *cultural pluralism* scores; membership in professional organizations was related to higher scores in *efficacy*. It appears that age and increasing maturity support the feeling of interconnection with the larger world, contributing to increased knowledge and understanding of the world's people. Presumably the experiences of longer lives tend to develop awareness and appreciation of interrelatedness among people and nations. Membership in professional organizations was related to a higher score on efficacy, a testimony to an interest in personal growth, and professional development. It indicates belief in the power of an individual to make a difference in local, national, and international communities and in civic participation as important in finding a solution to local, national and international issues (Merryfield, 2009).

Conclusion and Recommendations

Our research supports findings of the study by Duckworth, Levy, and Levy (2005) that positive correlations existed between teacher candidates and *Worldmindedness* as measured by Hett's (1993) globalmindedness scale (GMS) but, unlike their studies, ours found significant correlations between scores on the GMS and such factors as age, gender, ethnicity, and experiences outside of the United States. Clearly, more research is required in order to better inform policies and practices in preparing American teacher candidates for worldmindedness.

In this research we sought to ascertain the worldmindedness of 644 American undergraduate elementary and secondary social studies teacher candidates enrolled in the requisite social studies methods course in teacher education programs at five of the largest public universities in the state of Florida. The inquiry revealed positive relationships between worldmindedness and those teacher candidates who had taken the greatest number of content courses with a global orientation, identified themselves as being of a 'liberal' political disposition, were female, proficient in two or more languages, had high grade point averages, were born outside the United States, had international experiences and belonged to professional organizations. However national replications of worldmindedness studies are necessary before viable recommendations for admissions standards and curricular adaptations in teacher education programs can be made.

Nevertheless we are proposing some tentative recommendations to globally-minded teacher scholars based on predictor variables that are significantly related to the worldmindedness scores of this empirical research. We consider these predictors to be actionable in restructuring teacher education admission and program requirements in the process of shaping the worldview of future teachers worldwide.

We raise the question of whether admission standards of established teacher education programs could be expanded to include mandatory content courses with a global orientation as well as foreign language studies to be taken in the first two years of university education to promote worldmindedness in teacher candidates.

It is not surprising that student teaching outside the United States results in higher levels of cross-cultural understanding, sensitivity and empathy between foreign teachers and students (Cushner and Mahon, 2002; Quezida, 2004; Suarez, 2003). Teacher educators may also consider requiring international experiences of a specified duration or willingness to engage in international experiences prior to graduation, such as a summer working or studying abroad. Such international experience could be deepened by working, studying or volunteering in a developing nation. Foreign exchange programs might be considered as an integral part of teacher education communities. Teacher educators might propose putting into place a foreign-based internship program.

If candidates are unable to go abroad, alternate experiences in an international context might be established at the local level. Group living experiences in international houses on campus, participation in internationally-oriented education and social programs, acquisition of a foreign friend, or shadowing and working in non-profit international organizations can inform insight and understanding of the Other. A study of over 700 preservice teachers whose social studies classes included learning about the world and who also experienced personal involvement with persons from another culture found that participants acquired important global cognitive, affective, and participatory skills and were positively inclined to internationalism (Clarke, 2004). In this context the research question arises: to what degree do globally-minded future teachers self-select when engaging in internationally-oriented activities and how does the experience enhance their world-mindedness? Answers to these questions could begin to address the issue of circularity and causality that emerge repeatedly in the research on global attitudes.

Finally, a high grade point average as part of the admission requirements to teacher education programs may act as an incentive to attract students of high academic achievement to the teaching profession. Higher admission standards will result in greater selectivity of potential teacher candidates, building a strong and enviable teaching force at involved universities.

Teacher educators might propose some subscales such as cultural pluralism and globalcentrism for their social foundation courses to promote the development of worldmindedness in teacher candidates across disciplines. Psychology foundations courses might consider addressing *efficacy* and personal responsibility in relation to learning, development, and the ethics of teaching. As gender matters to all outcomes of learning, attention might be given to feminist perspectives in matters of relationships such as equity, human rights, well-being of children and youth, and the self-determination of formerly marginalized voices. Social studies educators can play a key role in influencing the worldmindedness of teacher candidates by considering a mixed-methods study of content, methods, and learning experiences, requiring curriculum development, resources, incentives, and faculty development projects as well as hiring initiatives.

Though this study did not seek to determine relationships between curricular offerings and worldmindedness, teacher educators might reflect on the courses presently required in their programs at the junior and senior college levels and consider requiring a course in global perspectives that addresses understanding the complexities of globalization and global pedagogy for all subject areas of the curriculum. Teacher educators in Florida might consider offering the state-approved Developing a Global Perspective course (or similar title) for students in all subject areas. One author's ten year experience in integrating a global perspective during Miami Dade County Public Schools' global education reform movement and her experiences in teaching from a global perspective in two of Florida's university teacher education programs attest that systemic integration of global perspectives in required subject-specific methods courses and elective courses result in positive outcomes in the globalization of curriculum and instruction in teacher education programs (Kirkwood-Tucker 2002; 2004; 2009a; 2009b).

Given the prevalence of Americans' perception of superiority to the other nations of the world, preparation of worldminded teacher candidates poses grave challenges to the profession. Despite these challenges, we believe our recommendations have the potential to produce in the United States a sophisticated teaching force comparable to the best in the world. Those of us who reach for the highest possible standards in teacher education programs will prevail in preparing worldminded teachers for teaching our children.

Appreciation

We wish to extend our sincere appreciation to our social studies colleagues for their cooperation in making this study a reality: Drs. Penelope Fritzer and Ernest A. Brewer, Florida Atlantic University, Bárbara C. Cruz, University of South Florida; William Gaudelli and Elizabeth Smith, University of Central Florida; Hilary Landorf, Florida International University; Robert Gutierrez, Sara Brown, and Lisa Martin, Florida State University.

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Notes

¹ I introduced two global education courses in the social studies education program at Florida State University: Developing a Global Perspective is required of all undergraduate and graduate students; Teaching Global Issues Simulating the United Nations is required of all Master's Degree students.

2 Age distribution of teacher candidates are: ages 18 to 21 32.4 per cent; ages 22 to 25 39.4 per cent; ages 26 to 30 10.9 per cent; 31 to 39 11.5 per cent; 5.6 per cent were in their forties.

3 Due to their large representation in the study (28.4 per cent), Hispanic teacher candidates descending from immigrant or first generation immigrant families are identified separately.

4 The Worldmindedness Survey is not attached due to length constraints. Colleagues interested in the survey are invited to request a copy.

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