A Pilot Study on the Development of a Multicultural Education Paradigm Scale for Public School Teachers in Iloilo Province, Philippines

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Abstract

This paper reports the salient results of a pilot study aimed at developing a Multicultural Education Paradigm Scale (MEPS). Initially, a total of 60 public school teachers from the Iloilo Province of the Western Visayas region of the Philippines took part in the pilot study but only 49 valid responses were gleaned. The 30-item scale obtained a Cronbach's alpha (α) reliability coefficient of 0.899. Weak items were singled out. The participants had a generally positive attitude towards multicultural education based on their mean scores. Also, no significant differences in their means were found across the demographic and professional groupings except for the weekly number of hours spent lesson planning. Only two factors, the weekly number of hours spent lesson planning and the weekly number of hours spent in non-teaching related work had the positive and significant relationship with attitude towards multicultural education. The Multi-factor paradigm was the most subscribed while the Cultural Ecology paradigm was least subscribed among the participants. Data shows that the weak items were the theoretical and sociological bases of their respective multicultural education paradigms.

Keywords*: multicultural education, teacher training, in-service teachers*

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Introduction

This paper reports the salient results of a pilot study aimed at developing a Multicultural Education Paradigm Scale (MEPS) for public school teachers in the province of Iloilo, Republic of the Philippines as part of a teacher training initiative. Specifically, it aimed to describe the steps undertaken to construct and ascertain the reliability and validity of the scale and the questionnaire; (b) provide a profile of the participants in the pilot study based on the initial field results; and (c) discuss salient insights generated from this phase of the project . This undertaking rides along the prevailing interest on teachers' professional development in the Philippines which has spanned for more than 20 years now (Villegas-Remiers, 2003; Mileisea, 2016; Morales, 2016; World Bank Group, 2016). This is a concern that the Philippine educational system shares with other countries and most especially with its immediate neighbors in the Southeast Asian region (UNESCO, 2017).

Contemporary teacher training in the Philippines needs to consider the challenges posed by the country's Enhanced Basic Education Act of 2013 or Republic Act 10533 which became the legal basis for the current K-12 Curriculum. This legislation mandates the curriculum to adapt and implement principles along the lines of "learner-centered, inclusive and developmentally appropriate," "relevant," "gender-and culture sensitive," "contextualized and global," "constructivist, inquiry-based, reflective, collaborative and integrative," and "flexible enough to enable and allow schools to localize, indigenize and enhance the same based on their respective educational and social context" (RA 10533, 2013, p.3). This is a recognition of the diversity of learners of whom the educational system expects to develop a certain set of cognitive and cultural competencies. The same law has mandated teacher education and training as a key aspect of this educational program.

Yet even before the promulgation of **Republic Act 10533**, there has already been the National Competency-Based Standards for Teachers (NCBTS) which was one of the initial frameworks to concretely articulate the professional expectations for teachers in the field and also to inform how teacher training institutions should educate preservice teachers (Tronco, 2010). This evolving document integrates both prevailing and emerging competencies for teachers. Notable among these are the necessary knowledge, skills, and attitudes to address the background and uniqueness of every learner, and thereby create learning environments and experiences that would promote their full potentials. The current version has seven domains: (1) content knowledge and pedagogy; (2) learning environment; (3) diversity of learners; (4) curriculum and planning; (5) assessment and reporting; (6) community linkages and professional engagement; and (7) personal growth and professional development (Department of Education and Teacher Education Council, 2017).

The available curricular materials and guidelines of professional competencies, however, seems to prefer and gravitate towards a set of foci within the larger multicultural education movement (see Department of Education and Teacher Education Council, 2017). The educational system has indeed made strides to adopt a multicultural education agenda, but how it interprets the key principles and theories behind this has not been made explicit and appears to be unclarified. Also, the

competencies in the NCBTS **does not** seem to outrightly acknowledge or support a specific multicultural education agenda.

Previous studies looking into the use of multicultural education approaches and perspectives in Philippine education were not able to clarify which paradigms they were referring or ascribing to. Often studies in the Philippines seemed to be generally focused on the cultural diversity and anti-discriminatory aspect of multicultural education (Palces, Abulencia & Reyes, 2015). Notions of multicultural education from other studies usually focused on the teacher's professional development and classroom practice (Gallavn & Putney, 2004), general pedagogical attitudes (Aktoprak, Yiğit & Güneyli, 2017; Gursoy, 2016), socio-cultural competencies (Acar-Ciftci, 2016), and their intercultural sensitivity, multicultural acceptability, learning cultures, and multicultural teaching competencies (Kang & Jun, 2017). These studies were not able to recognize and acknowledge the existence of several paradigms with their respective assumptions, goals and practices (Banks, 2009; Banks & Banks, 2010; May & Sleeter, 2010; Wren, 2012). The presence and the agenda of these paradigms are left out or have not been considered whether as a theoretical and practical basis for collecting and analyzing data, and the subsequent policies, curricular planning and implementation, and teacher training initiatives that were generated from them.

Considering that there had been a number of teacher training endeavors done along the course of the current Philippine curricular reform, the current frameworks does not seem to recognize and account for the existence of independent yet inter-linked paradigms and assumptions exist within the wide scope of multicultural education (see Department of Education K-12 Primer, 2012; Department of Education and Teacher Education Council, 2017). Thus, there is a need to ascertain which of these key theoretical assumptions, or paradigms, do the public school teachers in the field currently subscribe to as tangible basis for the (re)orientation and training gaps that teacher training efforts may require to focus on with regards to multicultural education.

Review of Related Literature

In-service Teacher Training

It has long been thought of that in-service teacher training has positive links to school achievement among Third World countries (Fuller, 1987). It has been used to promote and strength social advocacies and reforms by first investing on building the capacities of teachers who would then teach and integrate them into their teaching practices (Fien & Maclean, 2000). Borg's (2011) qualitative longitudinal study on teachers' beliefs attribute significant changes in the teachers' beliefs to their in-service teacher training experience. These changes in beliefs are the translated into changes in their respective teaching practices.

Avalos (2011), in her synthesis of published studies on teachers' professional development contended that analyses of these endeavors must also take into consideration a host of social, cultural, and political factors at play in the communities where the teachers serve.She notes that along the cognitive side, previous beliefs and personal notions of self-efficacy are notable factors in the operations of teachers' professional development while the socio-cultural aspect often points out to several external factors. This resonates with the core of multicultural education. Galvan and Putney (2004) reported that the idea and aims of multicultural education are gaining

more footing among teachers and has become rooted in the framework of schools and classrooms. Teachers want multicultural education to "(a) offer natural and authentic learning experiences; (b) balance integration and emphasis of concepts, content, and processes; (c) create caring communities and solid citizenry; (d) apply powerful pedagogical theories and practices;(e) promote growth, development, and transformative change in both educators and their learners." (Galvan & Putney, 2004, p. 58). A critical analysis, therefore, of the socio-cultural factors on teacher training as an integral part of overall teacher professional development is in order given the changes in the curriculum, and the more inclusive and multicultural education stances that these curricular reforms has declared to adopt. In the Philippine case, this comes along the challenge of teacher competency statements that expects teachers to "demonstrate knowledge of teaching strategies that are inclusive of learners from indigenous groups," "adapt and use culturally appropriate teaching strategies to address the needs of learners from indigenous groups" among others (Department of Education and Teacher Education Council, 2017).

Defining Multicultural Education

The growing plurality and diversity of Western societies **have given rise** to the economic and civil rights issues that persist until today.The effects of globalization and other geo-political factors have exposed some fundamental issues that affect the learners in the classrooms (Provenzo, 2002). The school and the classrooms have become one of the key topics and sites for the larger social discourse when issues such as of power, oppression, diversity, opportunity, privilege, equity and equality, discrimination, identity, agency, and democracy came into the fore (Giroux, 2004; Giroux & McLaren, 1986). Bennet (2007) recalled that "for the proponents of multicultural education argue that the primary goal of public education is to foster the intellectual, social, and personal development of *all* students to their highest potential" (p.4). Consequently, teaching as an enterprise is gradually being recognized as a "political activity" (Giroux, 2004; Provenzo, 2002).

One of the most influential definitions of multicultural education was put forward by James Banks and Cherry Banks (2002) when they proposed for multicultural education to be viewed as…

> At least three things: an idea or concept, an educational reform movement, and a process. Multicultural education incorporates the idea that all students – regardless of their gender and social class and their ethnic, racial, or cultural characteristics – should have an equal opportunity to learn in school. Another important idea in multicultural education is that some students, because of their characteristics, have a better chance to learn in schools as they are currently structured than do students who belong to other groups or who have different cultural characteristics (Banks & Banks, 2002, p.3).

This appears to be an evolving definition that they have also proposed an earlier definition (see Bank & Banks, 1995, in Gay, 2000, p. viii). These definitions have gained importance for being part of pivotal volumes on multicultural education edited by the same authors. Prior to the publication of these definitions, there have also been

movements by other scholars and proponents to extend and deepen or reexamine the idea based on the areas it had missed (see May, 1999).

Other scholars and practitioners have so offered their own definitions and dimensions. For instance, Bennet's (2007) definition viewed multicultural education as "…an approach to teaching and learning that is based on democratic values and beliefs and affirms cultural pluralism within culturally diverse societies in an interdependent world" (p.4). Globalization and the pluralization of society are felt ubiquitously and are recognized as phenomena to be acknowledged and reckoned with in education (Provenzo, 2002). Consequently, she proposed her own broader or global conceptual framework of multicultural education which is influenced by the "…rapidly increasing interconnections among all nations, particularly in the face of global issues related to ecosystem, nuclear weapons, terrorism, human rights, and scarce natural resources" (p.4).

Geneva Gay (1994), a prominent educational theorist, argued that despite the diversity and inconsistencies of the various definitions of multicultural education, there is no fundamental rift among them since they all aim towards the same general goal: learning for *all* students. The diversity, overlap, and some incidental rifts among the various definitions and focus of multicultural education, however, has been seen as bothersome if not problematic by some scholars.

Definition of Culture vis-à-vis Multicultural Education

Thomas Wren (2012), a professor of philosophy, argues that the problem on the ambiguity within the realm of multicultural education does not stem from the definition of multicultural education in itself, but rather from the definition of *culture* that scholars and practitioners choose and use, and their underlying natures and subsequent consequences.Ironically, he points out, that scholars and practitioners of multicultural education have not been very clear or explicit about their definitions of culture. In his observation, this is concept, which is almost glossed over when in fact, this is an essential component of the term itself. He argues that the chosen definition of culture carries with it certain repercussions about how the theory and task of multicultural education is viewed, approached, and implemented. Since the notions of culture change overtime, the way activities related to its also change. He proposed nine ways of defining culture: topical, structural, functional, historical, normative, behavioral, cognitive, symbolic, and critical. Wren contends that the massive amount of literature on multicultural education and how there has not yet been any effort to navigate and make sense of the inconsistencies of how culture is thought about and studied. This entails, according to him, a recognition of **a chosen definition's** fundamental theoretical assumptions which would subsequently determine the appropriate practice or course of action. He then proceeds to review the definitions of culture used by key multicultural education scholars and advocates and how their chosen definitions shaped their inquiry and practice on this subject. Thus, multicultural education is not one massive homogenous heap. It is rather a collection of various perspectives or paradigms.

The Paradigms of Multicultural Education

Banks (2009) maintained that multicultural education is a is a product of socio-historical movements within and beyond the United States describing it as "…an approach to school reform designed to actualize educational equality for students from diverse

racial, ethnic, cultural, social-class, and linguistic groups. It also promotes democracy and social justice" (p.13). He also recognized that the various focus or paradigms in addressing social, economic, and political tensions and unfairness in schools and society stemmed from various responses and phases of the ethnic revitalization movements.

The acknowledgement of paradigms within the multicultural education realm supports Wren's (2012) observations that this idea/movement/process, despite its general claim for cohesiveness, is still a venue for rifts regarding how its various proponents and users view culture, society, enculturation, and the tasks of education. Banks (2009, p.19-20) proposed the following paradigms of multicultural education: ethnic additive, self-concept development, cultural deprivation, cultural difference, language, cultural ecology, protective disidentification, structural, and anti-racist. Each of them comes with their respective theoretical and socio-cultural assumptions, major goals, and their typical school programs and practices. He clustered the ethnic additive and self-concept development together and the structural and antiracist paradigms as belonging one group respectively. He also raised the prospect of having another paradigm that acknowledges a multi-factor reality as a basis for a multicultural educational response. He noted that the prior paradigms are often single-factor paradigms and therefore fail to the multifarious forces that shape the experiences of marginalized learners.

This is where one of the gaps on the current scholarship on multicultural education emerges: there seems to be no apparent acknowledgement of such paradigms when studies regarding teachers' and prospective teachers' with regards to multicultural education (see Palces, Abulencia & Reyes, 2015; Gallavn & Putney, 2004; Aktoprak, Yiğit & Güneyli, 2017; Gursoy, 2016; Acar-Ciftci, 2016; Kang & Jun, 2017; Erbas, 2019a). In two relatively recent scale development projects the proponents were not able to articulate nor acknowledge the paradigms from which they have taken their items for their respective scales (see Toraman, Acar & Aydin, 2015; Yildirim & Tezci, 2016). Indeed, these two studies sourced their items from key and respected literature on multicultural education and also from expert reviewers, but they were not able to position and acknowledge the key theoretical and advocacy assumptions that these items stemmed or represented from. Wren (2012) has already pointed out that this is a potentially problematic view and practice. Definitions, positions, goals, and actions with regards to this must be duly addressed. Thus, there needs to be a more conscious and deliberate articulation of these paradigms in the conceptualization, planning, and customization of any teacher training activities that uses multicultural education frameworks.

Method

Objectives

This paper aims to present the salient steps in the pilot-testing phase of the development of a Multicultural Education Paradigm Scale (MEPS) for public school teachers in the province of Iloilo, Philippines. Specifically, it sought answers to the following questions:

1. What is the reliability coefficient of the MEPS and its components?
2. What is the mean score of the participants in the MEPS?
3. What are the mean scores of the participants in the MEPS when grouped according to (a) sex; (b) school location; (c) number of years in teaching; (d) school

level taught; (e) number of subject areas taught; (f) number of classes currently taught; (g) number of in-service trainings attended; (h) highest educational attainment; (i) number of hours spent in lesson preparation every week; (j) number of hours spent for non-teaching related work per week; and (k) number of hours spent for student-support activities per week?

4. Is there a significant difference in the score of the participants in the MEPS when grouped according to (a) sex; (b) school location; (c) number of years in teaching; (d) school level taught; (e) number of subject areas taught; (f) number of classes currently taught; (g) number of in-service trainings attended; (h) highest educational attainment; (i) number of hours spent in lesson preparation every week; (j) number of hours spent for non-teaching related work per week; and (k) number of hours spent for student-support activities per week?

5. Is there a significant relationship between the mean score of the participants in the MEPS and their (a) sex; (b) school location; (c) number of years in teaching; (d) school level taught; (e) number of subject areas taught; (f) number of classes currently taught; (g) number of in-service trainings attended; (h) highest educational attainment; (i) number of hours spent in lesson preparation every week; (j) number of hours spent for non-teaching related work per week; and (k) number of hours spent for student-support activities per week?

6. Which dimensions in the MEPS was the most and least subscribed by the participants based on their mean scores when grouped according to (a) sex; (b) school location; (c) number of years in teaching; (d) school level taught; (e) number of subject areas taught; (f) number of classes currently taught; (g) number of in-service trainings attended; (h) highest educational attainment; (i) number of hours spent in lesson preparation every week; (j) number of hours spent for non-teaching related work per week; and (k) number of hours spent for student-support activities per week?

Hypotheses

The following null hypotheses were advanced:

1. There is no significant difference in the mean scores of the participants in the MEPS when grouped according to (a) sex; (b) school location; (c) number of years in teaching; (d) school level taught; (e) number of subject areas taught; (f) number of classes currently taught; (g) number of in-service trainings attended; (h) highest educational attainment; (i) number of hours spent in lesson preparation every week; (j) number of hours spent for non-teaching related work per week; and (k) number of hours spent for student-support activities per week?

2. There is no significant relationship between the mean scores of the participants in the MEPS and their (a) sex; (b) school location; (c) number of years in teaching; (d) school level taught; (e) number of subject areas taught; (f) number of classes currently taught; (g) number of in-service trainings attended; (h) highest educational attainment; (i) number of hours spent in lesson preparation every week; (j) number of hours spent for non-teaching related work per week; and (k) number of hours spent for student-support activities per week?

Participants

This study invited 200 public school teachers to participate in an online survey via

Google Forms. Emails and social media messages were sent to invite them which garnered 60 affirmative responses. Those who declined cited being "busy" as their unanimous excuse. Out of the 60 responses, however, only 49 responses were considered for the final analysis because some of the respondents were not able to finish answering the questions. The geographical coverage of the survey is the province if Iloilo in the Western Visayan region of the Philippines. They were mostly females (65.3%). There were more rural public school (59.2%) than from urban schools (40.8%). Majority have been teaching for 4-6 years (30.6%) and 7-10 years (30.6%). Most of them taught at the elementary (32.7%) and junior high school (32.7%) levels, handled 1-2 subject areas (53.1%) with taught 5-6 classes (49.1%). Majority of them have attended less than five in-service trainings (34.8%) while more than half holds a bachelor's degree (55.1%). They report that most of them spend 5-10 hours a week preparing for their lessons (57.2%), while a sizeable number of them spend less than 5 hours a week (44.9%) and 5 to 10 hours a week on non-teaching related schoolwork (44.9%). Majority of them spend 5-10 hours a week in student support activities. Details are found in Appendix A.

Scale and Questionnaire Development

The scale and questionnaire development process went through the following stages:

1. *Salient Review of Institutional Experience*. The researcher culled through the various publicly accessible documents pertaining to teachers' professional development, particularly that of in-service teacher training in the Philippines.
2. *Review of Related Literature*. Notable authors on the theory and practice of multicultural education were reviewed. This review provided the framework for the theoretical dimensions manifested in the instrument.
3. *Distilling of Paradigms into Dimensions and Items*. Using Banks' (2009) and Wren's (2012) discussions on the various agenda and theoretical assumptions of the sectors avowing multicultural education, nine paradigms were identified. Their basic theoretical assumptions, approaches, and main activities were transformed into normative statements that became the prototype items for the main scale of the questionnaire. The developed scale was a 30-item five-point Likert scale aimed at measuring public school teachers' attitudes towards multicultural education whose theoretical assumptions, approaches, and activities cuts across the various independent yet interrelated paradigms. The options ranged from strongly disagree to strongly agree. At this point, the operational name of the questionnaire, the Multicultural Education Paradigm Questionnaire (MEP-Q) was made up of two parts: Part One was the Multicultural Education Paradigm Scale (MEPS), and Part Two was the demographic and professional data.
4. *Content and Face Validity*. Copies of the initially developed questionnaires were sent to three groups for face and content validity. The first group were three professors: a cultural scholar, a historian and social studies educator, and, a political science scholar. All three had differing opinions on the questionnaire, particularly on the multicultural education construct. Some compromises were made after the researcher shared some of the key literature that was used in making the framework and items of the scale. This resulted into the initial version of the instrument. They were also in agreement to add another

dimension to the then existing nine, which was also consistent with the idea put forth by Banks (2009) on the having multi-factor paradigm. The second group were five graduate teacher education students in a state university in the Philippines. They were four females and one male. They mostly took care of the face validity portion and they also tried out the questionnaire and made suggestions on revising some of the items they found ambiguous. The last were four public school teachers from the same general locale where the pilot study was to be administered. They were not included in the pilot sample. Each was a male and female pair, each coming from a rural and urban public school respectively.

5. *Revision of the Instrument.* After the comments and suggestions of the validators were taken into consideration, revisions on the questionnaire were made. It was during this time when the prospect of having an online survey form was decided upon for ease of administration and data retrieval. Given the sizeable logistical implications of a survey, this option was taken since this was still yet a pilot study. The questionnaire was constructed using the Google Forms application. As suggested by the validators, items for demographic and professional information were also included.

6. *Pilot-Testing of the Questionnaire.* 200 public school teachers from the province of Iloilo, Philippines was recruited using online messaging systems to participate in the pilot study. The fielding and accepting of the questionnaire started on December 12, 2017 and ended on January 8, 2018. Prompts and follow up messages were sent to the target participants. There were only, however, 60 responses. There were only 49 valid responses since most of the voided questionnaires were incomplete and therefore, could not be used as data sources.

7. *Response Collection and Organization.* The responses were tallied and organized using the Microsoft Excel program, coded, and processed using the Statistical Package for the Social Sciences program. Reliability testing was conducted. Factor analysis for construct validity, however, could not be conducted since the sample is small. Another pilot test, this time, with a substantially larger sample should be made in the future.

8. *Generating Insights from the Initial Pilot Test*. Data from the initial pilot test was organized and analyzed to help improve the instrument and to make the next administration more efficient and systematic.

Data Analysis Tools

Descriptive statistical tools such as frequency counts, means, percentages, and standard deviations were used. Also, inferential statistical analysis tool such as Cronbach's alpha (α), one-sample t-test was used to determine significant difference in the mean scores when the participants were taken as one group, Kruskal-Wallis and Mann-Whitney for comparison of means between groups, and the Spearman's *rho* for correlation were also used. Microsoft Excel and the Statistical Package for the Social Sciences (SPSS) were used the electronic data processing tools. The degree of significant was set at 0.05 α. Nonparametric statistical tools were used because of the small sample and the irregular distribution of the samples among the various subgroups. Factor analysis could not be conducted because of the same sample size issue.

Results

Scale Reliability

The MEPS items in the questionnaire were subjected to a Cronbach's alpha (α) correlation analysis tool to determine the extent of their inter-item correlations. The analysis yielded an α of 0.899. Although, generally obtaining this value could lend reliability to the instrument, one of the main interests of this paper is to identify which items in the questionnaire contribute the most and the least to its reliability. It appears that that items EA1 (α=.222), CDe1 (α=.225), CE1 (α=.102), PD1 (α=.313), and S1 (α=.261) have contributed the least to the reliability of the instrument as shown in Table 6. These items belonged to the Ethnic Additive, Cultural Deprivation, Cultural Ecology, and Structural paradigms. The analysis revealed that the overall α of the instrument would become higher than 0.899 if any of these items were consequently removed. Interestingly, all these items provided the statement of the basic assumption of their respective multicultural education paradigms. The co-efficient values for each item is found in a table in Appendix B.

Participants' Mean Scores

Table 1 presents the data on the mean scores of the participants as an entire group and when they are broken down into subgroupings. The entire group garnered a mean score of 4.31 and a standard deviation of 0.379, indicating that they generally have a positive attitude towards multicultural education. The groups with the highest means are the female teachers (M=4.32, SD=.395), teachers from urban public schools (M=4.31, SD=.43), those with 11-15 years of teaching(M=4.47, SD=.36), elementary level teachers (M=4.37, SD=.37), those who teach 11 or more subject areas (M=4.49, SD=.23), those with 1-2 classes (M=4.46, SD=.33), those who have attended 11-15 in-service teacher trainings (M=4.41, SD=.30), master's degree holders (M=4.35, SD=.41). Also, those who spend 11-15 hours of lesson preparation weekly (M=4.55, SD=.35), those who spend 11 or more hours doing non-teaching related work (M=4.44, SD=.24), and those who spend less than 5 hours a week on student-support activities (M=4.35, SD=.41) had the highest means. A detailed table with the means for the rest of the other categories are found in Appendix C.

Table 1 presents the results for the Mann-Whitney U test and the Kruskal-Wallis test of significant differences in the means among groups are shown. For the groups, sex, school location and educational attainment, the both the above tests were used. Both tests generated the same test values. However, for the rest of the groups, only the Kruskal-Wallis test was used. It was observed that there was no significant difference in the participants' mean scores across the different groups except for the groups in the number of hours spent in lesson preparation every week. Thus, the first null hypothesis is rejected in this group and retained among the rest.

Table 1: Differences of the mean scores of the participants among groups

Categories	Sig.
Sex	.721
School Location	.093
Number of Years in Teaching	.378
School Level Taught	.828
Number of Subject Areas Taught	.914
Number of Classes Currently Taught	.518

Number of In-Service Trainings Attended	.723
Highest Educational Attainment	.277
Number of Hours Spent in Lesson Preparation every Week*	.039
Number of Hours Spent for Non-Teaching Related Work per Week	.072
Number of Hours Spent for Student-Support Activities per Week	.678

Table 2 shows the result of the Spearman *rho* correlation test to determine if there were any significant relationship between the participants' mean scores and some selected factors. The data revealed that there was significant positive relationship between their mean scores and their number of hours spend in planning their lessons weekly and their number of hours spent for doing non-teaching related work every week. Negative relationships were noted for sex, school level taught, number of classes taught, number of in-service trainings attended, and number of hours spent every week doing student-support activities. Thus, the second null hypothesis is rejected in these two specific groups and retained among the rest.

Table 2: Spearman *rho* correlation of the mean scores of the participants with selected factors

Categories	*rho*	Sig.
Sex	-.052	.725
School Location	.018	.904
Number of Years in Teaching	.190	.192
School Level Taught	-.094	.521
Number of Subject Areas Taught	.142	.332
Number of Classes Currently Taught	-.171	.240
Number of In-Service Trainings Attended	-.081	.579
Highest Educational Attainment	.157	.282
Number of Hours Spent in Lesson Preparation every Week*	.318	.026
Number of Hours Spent for Non-Teaching Related Work per Week*	.316	.027
Number of Hours Spent for Student-Support Activities per Week	-.119	.417

The theoretical construct of multicultural education in this paper was a combination of items from various paradigms within the realm of the scholarship, advocacy, and practice of this topic. Thus, it would be of interest for both the enterprise of pilot testing and that of developing a pertinent instrument to analyze the performance of each of these paradigms. Table 3 presents the ranks of the various paradigms and their respective mean scores. It shows that the Multi-factor paradigm topped the list and Cultural Ecology ranked last.

Table 3: Rank of multicultural education paradigms from most to least subscribed

Rank	Paradigms	Mean	SD
1	Multi-factor	4.61	.46
2	Self-Concept Development	4.60	.46
3	Cultural Difference	4.58	.43
4	Antiracist	4.35	.43
5	Protective Disidentification	4.25	.53
6	Cultural Deprivation	4.20	.53
7	Ethnic Additive	4.16	.61
8	Language	4.15	.59
9	Structural	4.10	.64
10	Cultural Ecology	4.01	.60

Discussion

The results of the reliability test suggest that the scale generally strong items. However, the results also showed that five items garnered low values in the Croncbach alpha (α) test as shown in Table 4. These items are the theoretical assumptions and sociological bases for the paradigms they represent. Curiously, the items pertaining to their approaches and major activities did get substantial item-total correlation ratings. It appears that the public school teachers have a favorable attitude towards the actual approaches and activities, but they have ambiguous or unfavorable notions towards the very theoretical assumptions and sociological bases on which these approaches and activities are based on. This could be a possible knowledge and understanding gap that could be explored in the future: *Is it possible that public school teachers accept and affirm multicultural practices without much knowledge, regard, or reflection as to the deeper theoretical and sociological bases for such practices?* Furthermore, this confirms the predisposition of teachers and even researchers towards practices or phenomena related or attributed to certain paradigms in multicultural education. Oftentimes, these studies and the measurements or data gathering tools they use focus only on culturally-relevant and sensitive teaching and learning practices (Galvan & Putney, 2004), or on cultural sensitivity, multicultural acceptability, learning cultures, and multicultural teaching competencies (Kang & Jun, 2017; Aktoprak,Yiğit & Güneyli, 2017; Acar-Ciftci, 2016). These are typically concepts, approaches, and perspectives that aim to use multicultural education to benefit and support the general aims of instruction and not much on either adding cultural elements of marginalized groups into the educational content and process or critiquing (Ethnic Additive) or providing a more just alternative to the current oppressive system (Structural and Antiracist).

Table 4: The scale items with the lowest item-total correlations.

Items	Corrected Item-Total Correlation	α if Item is Deleted
EA1. Ethnic content can be added to the curriculum without re-conceptualizing or restructuring it.	.222	.905
CDe1.Many low-income and ethnic minority youth are socialized within homes and communities that prevent them from acquiring the cognitive skills needed to succeed in.	.225	.903
CE1. The low academic achievement of cultural minorities is primarily due to their resistance to the mainstream culture in society.	.102	.904
PD1. When individuals sense the possibility of conforming to a group stereotype, it becomes threatening to their sense of self.	.313	.900
S1. Schools are limited in the role they can play to eliminate racial and ethnic discrimination and in promoting equality for low-income and minority students.	.261	.903

The garnered means from the public school teachers surveyed did not differ remarkably among the different groupings, although it indicated some segments having a higher mean that the rest. This confirmed prior observations that claimed that attitudes towards multicultural education across some selected personal professional characteristics such as gender, marital status, educational attainment, membership in unions, and years of experience does not significantly differ (Özdemir & Dil, 2013). Among the groupings used in this study, it is consistently the weekly number of hours spent in planning lessons that displayed significant differences in the means. Consequently, it was also the one that showed a significant positive correlation with the mean scores (alongside weekly number of hours spent in doing non-reaching related tasks). These paints the picture of a dedicated teacher, working long hours to plan for the lessons of her or his learners as the one who would have the most positive attitude towards multicultural education. These portrayed different results from studies that attributed strong factors on attitudes towards multicultural education to years of teaching (Patrick, 1994), school location, and educational attainment (Wang, 2004).

The Multi-factor paradigm was the most subscribed by this group of public school teachers. This means that they see "school politics and policy, the school culture and hidden curriculum, teaching styles and strategies, the languages and dialects of the school, community participation and input, the counseling program, the formalized curriculum and course of study, assessment and the testing procedures, the instructional materials, and the school staff: attitudes, perceptions, beliefs, and actions" (Banks, 2009, p. 27). This paradigm, being the most subscribed paradigm among the public school teachers could very well the current or emergent one in many schools in the locale. In contrast, the least subscribed paradigm was that of Cultural Ecology. This perhaps reflects the current mood of how socio-cultural inclusion practices are being operationalized in many Philippine schools. The current practice now is more of acceptance rather than assimilation.

Conclusion

The MEPS has a generally high and acceptable reliability coefficient, but revisions could still be done to improve the poorly performing items. The public school teachers generally have a positive attitude towards multicultural education. However, it appears that the teachers may not be very aware or conscious of the theoretical and advocacy sources of the multicultural education approaches and practices of whom they have expressed positive attitudes towards. This positive attitude is a welcome development as it seemed to cut across almost all the various sectors of the public school teachers. The results of the study, however, could not decisively pinpoint to a set of personal or professional factors that could influence such attitudes except for time spent in planning the lesson. It appears that the teacher who puts in the most amount of time for the benefit of her or his learners and for the school embraces multicultural education the most. For future teacher training projects anchored on multicultural education, it is perhaps helpful to provide teachers with a substantial grounding on the theoretical and sociological bases instead of merely focusing on the pedagogical practices. Also, a replication study could consider other categorizations with regards to the teachers' attitudes towards multicultural education as suggested by previous studies: teachers' previous experience of interactions with marginalized populations (Patrick, 1994), teacher's experience of teaching classes with students of different languages and classes

with students of mixed ethnic backgrounds (Wang, 2004; Erbas, 2019b; Karakas &Erbas, 2018), and whether they come from academic major or vocational training backgrounds (Özdemir & Dil, 2013).

References

Acar-Ciftci, Y. (2016). Critical Multicultural Education Competencies Scale: A Scale Development Study. Journal of Education and Learning; 5(3): 51-63 Retrieved from http://dx.doi.org/10.5539/jel.v5n3p51.

Aktoprak, A., Yiğit, P. & Güneyli, A (2017). Attitudes of primary school teachers toward multicultural education. *Quality and Quantity: International Journal of Methodology*. 51:1-14 Retrieved from https://doi.org/10.1007/s11135-017-0600-x

Avalos, B. (2011) Teacher professional development in teaching and teacher education over ten years. *Teaching and Teacher Education*, 27: 10-20. https://doi.org/10.1016/j.tate.2010.08.007

Banks, J. (2009). Multicultural education: Dimensions and paradigms. *The Routledge international companion to multicultural education*. Banks, J. (Ed.). New York: Routledge

Bennet, C.I. (2007). *Comprehensive multicultural education: Theory and practice*. 6th Ed. Boston, MA: Pearson-Allyn and Bacon.

Borg, S. (2011). The impact of in-service teacher education on language teachers' beliefs. *System*. 39(1): 370-380.

Dyno, N. (2010). *The relationship of teacher attitudes toward multicultural education to student achievement*. (Doctoral Dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3489101).

Erbas, Y.H. (2019a). Dimensions of Multicultural Education: Pedagogical Practices Knowledge of Graduate Students Towards Multicultural Education in Turkey . *Mediterranean Journal of Educational Research, 13*(27), 142-181.

Erbas, Y.H. (2019b). A qualitative case study of multicultural education in Turkey: Definitions of multiculturalism and multicultural education. *International Journal of Progressive Education, 15*(1), 23-43.

Fien J., Maclean R. (2000) Teacher education for sustainability. In: Wheeler K.A., Bijur A.P. (eds) *Education for a Sustainable Future. Innovations in Science Education and Technology*. Boston, MA: Springer. (pp.91-111).

Fraenkel, J.R. & Wallen, N. (2009). *How to design and evaluate research in education*. 7th Ed. New York: McGraw-Hill.

Fuller, B. (1987). What school factors raise achievement in the Third World? *Review of Educational Research*. 57(3): 255-292.

Galvan, N.P. & L.G. Putney (2004). Effective multicultural education: What today's teachers want. *Northwest Passage: Journal of Educational Practices*, 3(1), 55-63. https://labs.wsu.edu/nw-passage/documents/2016/05/effective-multicultural-education-what-todays-teachers-want.pdf.

Gay, G. (1994). A synthesis of scholarship in multicultural education. *Urban Education Monograph Series.* Washington, D.C.: North Central Regional Educational Laboratory. http://files.eric.ed.gov/fulltext/ED378287.pdf Date Retrieved: May 15, 2014.

Gay, G. (2000). *Culturally responsive teaching: Theory, research, and practice*. New York: Teachers' College Press.

Giroux (2004). Public pedagogy and the politics of neo-liberalism: making the political more pedagogical. Policy Futures in Education. 2(3 & 4): 494-503.

Giroux, H.A. & McLaren, P. (1986). Teacher education and the politics of engagement: The case for democratic schooling. Harvard Education Review. 56(3): 213-238.

Gursoy, A. (2016). Teachers' attitude towards multicultural education according to some variables: Native or foreign. Romanian Journal of Experimental Applied Psychology. 7(2): 60-72. Retrieved from www.rjeap.ro.

Kang, J., & Jun, J. (2017). Structural relationships between elementary school teachers' intercultural sensitivity, multicultural acceptability, learning cultures, and multicultural teaching competency. *International Information Institute (Tokyo).Information, 20* (4), 2337-2344. Retrieved from https://search.proquest.com/docview/1973006849?accountid=10534.

Karakaş, H., ve Erbaş, Y. H. (2018). Multicultural experiences of teacher candidates and thoughts about the cultural and social groups that exist within Turkey. International Journal of Social and Educational Sciences, 5(9), 59-81.

May, S. (Ed.) (1999). *Critical multiculturalism: Rethinking multicultural and antiracist education*. London: Falmer Press.

Morales, M.P.E. (2016). Participatory action research (PAR) cum action research (AR) in Teacher Professional Development: A Literature Review. *International Journal of Research in Education and Science*. 2(1): 156-165 http://ijres.net/index.php/ijres/article/viewFile/96/60 Retrieved September 30, 2017.

Özdemir, M & Dil, K. (2013). Teachers' attitudes toward multicultural education: Case of Çankırı Province. *Ankara University, Journal of Faculty of Educational Sciences. 46(2): 215-232.*

Palces, K.R.M., Abulencia, A.S., & Reyes, W.M. (2015). Predicting the priorities of multicultural education in a Philippine teacher education institution: An exploratory study. *EDUCARE: International Journal for Educational Studies*. 8(1): 63-72. Bandung, Indonesia: Minda Masagi Press and UMP Purwokerto, ISSN 1979-7877. Available online also at: http://educare-ijes.com/07-predicting-the-priorities-of-multicultural-education/.

Patrick, R.L. (1994). *Elementary teachers' attitude towards multicultural education*. (Doctoral Dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 9503401).

Provenzo, E. (2002). *Teaching, learning and schooling: A 21st century perspective.* Boston, MA: Allyn and Bacon.

Republic Act 10533 (2013). Enhanced Basic Education Act of 2013 Implementing

Rules and Regulations. Republic of the Philippines. *http://www.gov.ph/downloads/2013/09sep/20130904-IRR-RA-10533-BSA.pdf. Accessed December 20, 2017.*

Toraman, C., Acar, F. & Aydin, H. (2015). Primary school teachers' attitudes and knowledge levels on democracy and multicultural education: A scale development study. *Revista de cercetare si interventie sociala.* 49: 41-58.

United Nations Educational, Scientific and Cultural Organization (2017). *Accountability in education: Meeting our commitment. Global education monitoring report 2017/8.* Paris: UNESCO Publishing. Retrieved from http://unesdoc.unesco.org/images/0025/002593/259338e.pdf.

Villegas-Remiers, E. (2003). *Teacher professional development: An international review of the literature.* Paris: International World Bank Group and Australian Aid (2016). Institute for Educational Planning Retrieved September 30, 2017.

Wang, L.H. (2004). *Kindergarten teachers' attitudes towards multicultural education in Taiwan.* (Doctoral Dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3147695).

World Bank Group. 2016. Developing a proficient and motivated teacher workforce in the Philippines. *Philippines education* note. Washington, DC.: World Bank https://openknowledge.worldbank.org/handle/10986/24746. December 15, 2017.

Wren, T.E. (2012). *Conceptions of culture: What multicultural educators need to know.* Lanham, Maryland: Rowman & Littlefield Publishers.

Yildirim, S. & Tezci, E. (2016). Teachers' attitudes, beliefs and self-efficacy about multicultural education: A scale development. *Universal Journal of Educational Research.* 4(12): 9-17. Accessed from https://search.proquest.com/docview/1895969120?accountid=10534

Appendices

Appendix A

Profile of the Pilot-Study Participants

Groupings	n	%
Total	49	100%
Sex		
Female	32	65.3
Male	17	34.7
School Location		
Rural	29	59.2
Urban	20	40.8
Number of Years in Teaching		
Less than one year	6	12.2
1-3 year	9	18.4
4-6 year	15	30.6
7-10 years	15	30.6
11-15 years	3	6.2
16 and more	1	2
School Level Taught		
Pre-school	4	8.2
Elementary	16	32.7
Junior High School	16	32.7
Senior High School	13	26.4
Number of Subject Areas Taught		
1-2 Subject Areas	26	53.1
3-4 Subject Areas	9	18.4
5-6 Subject Areas	4	8.2
7-8 Subject Areas	6	12.2
9-10 Subject Areas	1	2
11 and more	3	6.1
Number of Classes Currently Taught		
1-2 Classes	9	18.2
3-4 Classes	13	26.6
5-6 Classes	24	49.1
7 or more Classes	3	6.1
Number of In-Service Trainings Attended		
Less Than 5	17	34.8
5-10	12	24.5
11-15	8	16.3
16-20	6	12.2
21 and more	6	12.2
Highest Educational Attainment		
Bachelor's Degree	27	55.1
Master's Degree	22	44.9
Number of Hours Spent in Lesson Preparation every Week		

Less than 5 Hours a Week	10	20.4
5-10 Hours a Week	28	57.2
11 and more Hours a Week	11	22.4
Number of Hours Spent for Non-Teaching Related Work per Week		
Less than 5 Hours a Week	22	44.9
5-10 Hours a Week	22	44.9
11 and more Hours a Week	5	10.2
Number of Hours Spent for Student-Support Activities per Week		
Less than 5 Hours a Week	22	44.9
5-10 Hours a Week	24	49
11 and more Hours a Week	3	6.1

Appendix B

Reliability coefficients of the items in the MEPS

Paradigm		Items	Corrected Item-Total Correlation	α if Item is Deleted
EA	1.	Ethnic content can be added to the curriculum without re-conceptualizing or restructuring it.	.222	.905
	2.	Education must aim to integrate special units, lessons, and ethnic holidays or celebrations to it.	.635	.892
	3.	Schools must have classes and lessons that highlight ethnic cultural elements like food, holidays, and folklore.	.677	.893
SCD	4.	Ethnic content in the curriculum can increase the self-concept of ethnic minority students.	.348	.897
	5.	Education must increase the self-concept and academic achievement of students from ethnic minority backgrounds	.714	.892
	6.	There needs to be lessons that emphasize the contributions that ethnic groups made to the building of the nation such as those of famous individuals with ethnic backgrounds.	.663	.892
CDe	7.	Many low-income and ethnic minority youth are socialized within homes and communities that prevent them from acquiring the cognitive skills needed to succeed in.	.225	.903
	8.	Education needs to enable low-income and ethnic minority students to catch up cognitively and academically with the rest of the learners.	.649	.893
	9.	Schools need to provide compensatory educational experiences such as additional classes and learning support to ethnic minorities and low-income learners so they can catch up with the rest of the students.	.614	.893
CDi	10.	Ethnic groups have strong, rich, and diverse cultures that need to be recognized and appreciated.	.302	.898
	11.	Schools need to change so that it will respect and reflect the cultures of minority youths by using teaching strategies that are consistent with their cultural characteristics.	.470	.895
	12.	The curriculum must provide and the teachers must implement culturally-responsive and culturally-sensitive teaching strategies.	.642	.894
L	13.	Students who speak another language often achieve poorly in school because instruction is not conducted in the language of their family or in the language of their community.	.412	.897

	14. Schools must provide initial instruction in the learner's home and community language.	.617	.893
	15. Schools should enable learners to learn in various languages, and not just English or the mainstream national language.	.619	.893
CE	16. The low academic achievement of cultural minorities is primarily due to their resistance to the mainstream culture in society.	.102	.904
	17. Education must enable ethnic minorities to assimilate into mainstream culture and to become structurally included into the society.	.734	.891
	18. Schools must implement cultural interventions among ethnic or marginalized communities so that their culture would gradually become like that of the mainstream culture.	.437	.897
PD	19. When individuals sense the possibility of conforming to a group stereotype, it becomes threatening to their sense of self.	.313	.900
	20. Schools must reduce any form of stereotypes for students who are members of marginalized groups and are vulnerable to harm caused by these stereotypes.	.691	.892
	21. Schools need to institute programs that reduce the harm done on students who are subjected to unfair stereotypes by creating environments where they are expected to have high achievement.	.661	.893
S	22. Schools are limited in the role they can play to eliminate racial and ethnic discrimination and in promoting equality for low-income and minority students.	.261	.903
	23. Education must help both students and teachers to understand the forces and policies in the economics and politics that hinder their economic and social improvement and to help them develop a commitment to change these systems.	.669	.893
	24. Schools and lessons must help students to understand how society is currently organized in such a way that some are given the privileges while others are not.	.308	.899
A	25. The educational inequality experienced by cultural minorities or of a particular race are largely due to individual, cultural, social, institutional and structural, forms of discrimination.	.391	.897
	26. Education must encourage teachers, schools, and students to understand and address the various forms and levels of discrimination.	.523	.896
	27. Schools need to implement programs that appreciate the strengths and limitations of different cultures, and	.695	.892

		the understanding of a cultural group's identity and relationship with other cultural groups.		
MF	28.	The academic achievement problems of students from diverse, marginalized, or low-income groups must be viewed as a result of many factors where the school needs to be seen as part of an interrelated whole.	.643	.892
	29.	Education must begin any plans by recognizing that schools are micro-culture with norms, values, roles, stratification, and goals that needs to be managed and negotiated.	.615	.894
	30.	Schools must come up with programs that enable students from minority, marginalized, or low-income backgrounds to feel safe and accommodated in a school or classroom.	.671	.894

EA Ethnic additive, *SCD* Self-concept development, *CDe* Cultural deprivation, *CDi* Cultural difference, *L* Language, *CE* Cultural ecology, *PD* Protective disidentification, *S* Structural, *A* Antiracist, *MF* Multi-factor

Appendix C

Mean scores and standard deviations of the participants

Categories	M	SD
Total	4.31	.379
Sex		
Female	4.32	.395
Male	4.29	.357
School Location		
Rural	4.30	.35
Urban	4.31	.43
Number of Years in Teaching		
Less than one year	4.46	.44
1-3 year	4.37	.31
4-6 year	4.31	.42
7-10 years	4.23	.33
11-15 years	4.47	.36
16 and more	3.57	.00
School Level Taught		
Pre-school	4.32	.43
Elementary	4.37	.37
Junior High School	4.27	.39
Senior High School	4.28	.39
Number of Subject Areas Taught		
1-2 Subject Areas	4.28	.39
3-4 Subject Areas	4.28	.41
5-6 Subject Areas	4.30	.30
7-8 Subject Areas	4.37	.50
9-10 Subject Areas	4.43	.00
11 and more	4.49	.23
Number of Classes Currently Taught		
1-2 Classes	4.46	.33
3-4 Classes	4.28	.44
5-6 Classes	4.29	.37
7 or more Classes	4.15	.39
Number of In-Service Trainings Attended		
Less Than 5	4.38	.37
5-10	4.21	.39
11-15	4.41	.30
16-20	4.30	.37
21 and more	4.21	.51
Highest Educational Attainment		
Bachelor's Degree	4.28	.36
Master's Degree	4.35	.41
Number of Hours Spent in Lesson Preparation every Week		
Less than 5 Hours a Week	4.20	.39
5-10 Hours a Week	4.25	.36

11-15 Hours a Week	4.55	.35
Number of Hours Spent for Non-Teaching Related Work per Week		
Less than 5 Hours a Week	4.18	.40
5-10 Hours a Week	4.41	.35
11 and more Hours a Week	4.44	.24
Number of Hours Spent for Student-Support Activities per Week		
Less than 5 Hours a Week	4.35	.41
5-10 Hours a Week	4.29	.36
11 and more Hours a Week	4.19	.38