CONTEXTUALIZING TEACHING PRACTICES IN A DIVERSIFIED CLASSROOM : AN ASSESSMENT

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Abstract:

Managing diverse populations is one great challenge facing Philippine society. Educators affirm that the classroom is diverse, but continue to treat all learners alike while paying lip service to the principle of diversity. This study looks into the extent by which teachers contextualize teaching and learning practices amidst diversity in cognitive preference modality and personal, academic status, demographic profile, and socio-economic condition. Teacher Education students from the six state universities and colleges in the Cordillera Administrative Region, Philippines (n=715) were randomly selected to assess teachers regarding their level of effectiveness in managing diversity in various areas of pedagogical approaches while teachers (n=45) were purposively selected to validate data through a focused group discussion. Results show that teachers were competent but insufficiently observe students' preferred teaching practices (mean=3.29, SD=.37), management of diverse learning environment (mean=3.21; SD=.46), and accommodation of diversity (mean=3.24, SD=.47). Analysis of variance and t-test for independent means revealed significant differences ($p<.05$) in ratings according to the respondents' cognitive modality, gender, ethnicity, degree program, academic status, and socio-economic condition. These variables bring about diversity in the classroom.   A model for improving instructional practices and classroom management efforts addressing areas in teaching diversified group of learners is devised.

Keywords:

cognitive preference modality, pedagogical approach, classroom diversity, teaching practices, differentiated instruction

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Introduction

The challenge of the 21st century in the field of education is to maintain the distinctiveness of learning at the tertiary level and to enhance teaching to improve students' learning. Virtually all higher education institutions have mission statements that emphasize the importance of learning and teaching. Several programs in education have evolved, leading teachers to develop strategies in their teaching plans and establish classroom activities for this purpose.

Every nation's changing cultural demographics play a critical role in teacher preparation. The learners of the future will be even more socially, economically, and educationally diverse than ever before (Roberts, 1993); and more will have a cultural and ethnic membership.

The need to address the balance between uniformity and diversity is urgent because the current imbalance has an adverse effect on many learners and teachers. The emphasis on uniformity is a serious disadvantage for students whose culture has taught them behaviors and beliefs that are different from the norms of the majority, most often emphasized in schools. Teachers are held accountable for thoughtful planning using distinct approaches to teaching methods, content instruction, and curriculum organization for a specific group of learners.

Promoting and managing diverse populations is the next great challenge facing Philippine society and its schools. Educators are aware of diversity among students, but too often educators continue to treat all learners alike. Most schools still function as if the students were the same. Teachers given the task of educating large numbers of people, efficiently justify this consistency and uniformity in the process. Even more valid is the argument for general standards and equality across schools, districts and regions. This is a realistic perspective, but to better match beliefs about diversity to practice, the imbalance between uniformity and diversity needs to be addressed. Sameness is always easier to accommodate than difference, and education practices to have been developed to consciously promote the same education for all students. There are a few teaching models that appropriately accommodate both consistent educational values and human diversity.

Results of the study provide opportunities in contextualizing teaching practices and will highlight on the educational context for diversity in teacher education. It opens doors for future researches concerning teaching and learning contexts across different fields in education confronting differences in the classroom. This raises the stakes on researchers' ability to identify effective teachers and teaching practices.

Review of Related Literature

Contextualizing instruction is a key component of quality instruction that encourages teachers to start their instructional planning with real-life contexts . This focuses on the active application of acquired skills and knowledge in a context, rather than focusing only on the possession of basic skills and knowledge.

A report from the Secretary's Commission on Acquiring Necessary Skills (SCANS) in 1990 emphasized that *interpersonal, decision-making,* and *planning skills* along with the knowledge of when and how to apply these skills within the context of the workplace is very important. This same report indicated that teaching these skills would require instructional approaches that focus on cooperative learning, apprenticeship models, and teamwork. Thus, contextualized instruction aimed directly at developing the skills and knowledge that adult and youth learners need in order to deal with *specific situations* or perform specific tasks in their *everyday* lives.

Learning styles preferences guide the way students learn in a contextualized instruction. Research conducted by Dunn and Griggs (2000) has proven that learners are most effective when they are taught in their preferred learning styles. McCombs and Whisler (1997) pointed out two important factors for a learner-centered teacher to consider: (1) characteristics of the learners and (2) teaching practices. It was stated further that students learn differently and appreciating their differences will help the teacher to teach them better. Lubrica et al. (2012) supports this findings revealing a significant relationship between the learners' characteristics and their perceptual learning skills. Felder and Brent (2005) presented three ways in which students differ and these differences affect the way they learn: (1) learning styles (i.e., characteristic ways of taking in and understanding information); (2) approaches to learning and orientations to studying (i.e., surface, deep or strategic approach); and (3) intellectual development (i.e., attitudes about the nature of knowledge and how it should be acquired and evaluated). A learner-centered teacher must take these differences into consideration and address them by employing various teaching strategies, while providing a learning environment that encourages students to take charge of their own learning at the same time (Weimer, 2002).

The concept of learning styles is based on the theory that an individual responds to educational experiences with consistent behavior and performance patterns. Research does not support the supposition that members of a particular ethnic group have the same learning style. The body of research does have implications for enhancing the academic achievement of culturally diverse students by reminding teachers to be alert to individual students' learning styles as well as their own actions and methods in reference to their students' cultural experiences and preferred learning environments (Irvine and York, 2010). In a study conducted by Lubrica, et al. (2012), it revealed that the most preferred

dimensions for learning are observed in visual and auditory language, auditory numerical, group learner and kinesthetic tactile. It is likewise observed that least preferred dimensions in learning are observed in expressing their ideas through oral and written. Similarly, a study by Al-Hebaishi (2012) showed that the visual learning style was the most preferred by the majority of participants. The strategies most frequently employed were cognitive strategies followed by metacognitive strategies. The results also revealed a significant relationship between visual learning style and memory strategies. Another significant relationship was found between visual learning style and affective strategies. However, the findings demonstrated the lack of a significant relationship between learning styles and academic performance. In contrast, a significant positive relationship was found between participants' use of learning strategies and their academic performance (Al-Hebaishi, 2012).

Similar findings were found by Obralić (2012), that determining students learning styles will help and contribute a lot to the learning process. In order to provide suitable learning atmosphere and provide better teaching procedure it is necessary to adjust the questionnaire based on the Perceptual Learning Style Preference (PLSP). Same study stressed that matching learning and teaching styles is required in order to approach to the problem. Therefore, language instructors should define students' profiles and define their learning style, as well as create learning environment which includes and appreciate students learning styles. In that case, it is for sure that learning will be optimized.

Recent research has confirmed both the importance of teachers in producing student achievement growth, and in the variability across teachers in the ability to do that. Such findings raise the stakes on our ability to identify effective teachers and teaching practices. It was found that classroom based measures of teaching effectiveness are related in substantial ways to student achievement growth (Kane et al., 2010). In a survey on effective teaching practices, it was found that the degree of influence teachers have over students and the classroom strategies and techniques that they use affect what students learn. Further, studies of classroom effectiveness show that teachers' methods, which vary greatly, affect learning.

The increasing focus on student learning as the central indicator of institutional excellence challenges many tacit assumptions about the respective roles of college students and faculty. In student-centered education, faculty members take on less responsibility for being sources of knowledge, and take on greater responsibility as facilitators of a broad range of learning experiences. For their part, students are called on to take on more responsibility for their own learning (Frye, 2010). Continuous conduct of research on teaching and learning over the last thirty years, have provided detailed lists of "best practices" in teaching" and these include the following: engage students in active learning experiences; set high, meaningful expectations; provide, receive, and use regular, timely,

and specific feedback; become aware of values, beliefs, preconceptions and unlearn if necessary; recognize and stretch student styles and developmental levels; seek and present real-world applications; understand and value criteria and methods for student assessment; create opportunities for student-faculty interactions; create opportunities for student-student interaction; and promote student involvement through engaged time and quality effort.

Diversity, from a multicultural stance, deals with a broad band of differences among human beings in general. It encompasses the dimensions of ethnicity, race, gender, socio-economic status, religious beliefs, and other factors. Diversity is not only viewed from the teacher's role of meeting the needs of the student and from a teacher's viewpoint of just knowing and understanding the student as a total person. More importantly, it is looking at the learner as a unique individual who brings a dimension of flavor differences in the classroom (Williams, 2010). A study made by Lubrica, et al. (2012) cited Guild (2009), and suggested a practical application in accommodating differences in the classroom which is related to awareness of learning styles and cultural differences. Having deep awareness of diverse learning styles requires a commitment to the belief that all students can be successful learners. Guild further reported that learners whose styles are accommodated more frequently in school achieve more immediate success, while students who struggle to adapt to an uncomfortable way of learning often underachieve. This further implies that a limited acknowledgment of individual learning differences encourages a continual search for the one best way for students to learn, teachers to teach, and the curriculum to be studied. This is confirmed by Guild (2009) , who says that it is unrealistic to expect that a particular approach will be successful for all learners. This expectation implies that experienced teachers use the best of a variety of approaches to benefit many learners. In a review of learning styles research on culturally diverse students, Irvine and York (1995) echoed their sentiment that all students are capable of learning, provided that the learning environment attends to a variety of learning styles. Reid (1995) further supports that Learning styles are internally based on characteristics of individuals for intake of understanding of new information. All learners have individual attributes related to the learning processes.

Richards (2006) noted in his study that if instruction reflects the cultural and linguistic practices and values of only one group of students, then the other students are denied an equal opportunity to learn. Instruction that is culturally responsive addresses the needs of all learners. The educational system plans the curriculum for schools, and teachers as their "institutional agents" transfer the prescribed content to their students. The issues on mainstream classroom and inclusion in schools have become a global concern. Crosby (2012) highlighted in his research that in the last ten (10) years, culturally diverse population in US public schools has grown 65% and continues to grow. One of the reasons cited in the study is due to emergence of different languages spoken and teachers are not

adequately prepared to work for these students. This is also true across Europe as reported by Donnelly and Watkins (2011), issues in teacher education are found to be high on policy agenda across Europe. Support provided by the European Agency for Development in Special Needs Education highlights on opportunities and challenges within its member countries in addressing issues on inclusion as a global concern, Fortuijin (2002) cited that internationalizing learning and teaching based on a European experience is a confrontation with diversity.

In the context of aforementioned literature reviews, this study hinges on the effect of cognitive preference modality and preferred pedagogical approaches, particularly in terms of classroom teaching practices, management of learning environment, and accommodation of diversity. The independent variable of the study included the cognitive learning strategies of education students which sets a groundwork for identifying their learning preferences relative to the criterion as to the level of effectiveness of teachers in their functioning and adequacy in their teaching practices, management of a learning environment and accommodation of a diversified classroom. Aside from cognitive preference modality, the framework posits that classroom diversity is affected by factors such as the personal, academic, demographic, and socio-economic conditions of students. Such factors draw the teaching strategies used by the teacher. These variables under each major factor were measured.

Goal and Objectives of the Study

This study draws on analysis of current learning and teaching strategy documentation to examine how teachers use learning and teaching strategies. It also examined the perceived purpose of these strategies. Specifically, this study aims to determine students' cognitive preference modality for learning; identify the level of adequacy and competency of teachers along classroom teaching practices, management of learning environment, and accommodation of diversity in the classroom; ascertain differences in level of adequacy and competency among teachers as perceived by students grouped according to cognitive preference modality; and determine differences in level of adequacy and competency among teachers as perceived by students grouped according to personal profile (age, gender), academic profile (degree, academic status), demographic profile (ethnicity), and socio-economic condition (parents' jobs, family monthly income, and family size).

Methodology

The study employed causal-comparative (*ex-post facto*) research design. The study was conducted in the Cordillera Administrative Region, with six state colleges and universities

(tagged as SUC A-F). Institutions were selected on the basis that their Teacher Education programs as participants are similar, thereby ensuring objectivity based on the context of teaching in a diversified classroom.

To address the first objective of this study, respondents were randomly selected involving third year students (n=715) enrolled during the second semester of school year 2013-2014 in both Bachelor of Elementary Education (BEEd) and Bachelor of Secondary Education (BSEd) programs. The data were gathered using a survey questionnaire consisting of *four* parts: profile, cognitive preference modality adopted from Joy Reid (1987).

Same group of students were considered as participants of the study in addressing the objective related to identifying adequacy and competency of teachers along different areas of pedagogical approach. The questionnaire provided data on   teachers' classroom teaching practices, management of learning environment, and accommodation of diversity in the classroom.

The objective to ascertain differences in level of adequacy and competency among teachers as assessed by students grouped according to cognitive preference modality included open-ended questions on students' preferred teaching practices.

Lastly, to address the objective related to determining the differences in the level of adequacy and competency among teachers as assessed by students when grouped according to personal profile, academic profile, demographic profile, and socio-economic condition, involved cross tallying   the related data gathered.

The instrument was pilot tested and was found to have acceptable reliability coefficient (α > 0.90). Validation of data was conducted through a focused group discussion with at least 10 teachers from each of the six SUCs. Data were analyzed using descriptive statistics (frequency count, percent, mean, and standard deviation). Hypotheses were tested at .05 level of significance using t-test and analysis of variance with post-hoc analysis (Tukey's HSD) when appropriate.

Results and Discussions

This section presents analysis and interpretation of data according to the order of the statement of objectives including the cognitive preference modality for learning, level of adequacy and competency of teachers along various areas of pedagogical approach, preferred teaching methods by students, differences in the perceived level of adequacy and competency among teachers according to cognitive preference modality; differences in preferred teacher's pedagogical approach according to students' cognitive preference

modality, preferred teachers' pedagogical approach according to students' personal profile; and effect of students' cognitive preference modality on the level of adequacy of teachers on the three pedagogical approaches.

Cognitive Preference Modality for Learning

Analysis was done based on the respondents' scores in the Perceptual Learning Skills questionnaire adopted from Joy Reid (1987). Scores ranging from 33 to 40 in a particular cognitive modality are considered a major learning style of the respondent; 20 to 32, minor; and 5 to 20, negligible. Among the nine learning styles, visual-numerical was found to be dominant among the respondents (f=348, 48.67%). Following in decreasing order of frequency were kinesthetic-tactile (f=243, 33.99%), group learning (f=224, 31.33%); individual learning (f=185, 25.87); visual language (f=173, 24.20); auditory-numerical (f=146, 20.42%); expressiveness oral (f=103, 18.46%); expressiveness-written (f=103, 14.41%), and auditory-language (f=74, 10.35%). The same trend was observed among the different institutions, except for SUC B whose students are mostly kinesthetic-tactile. Results suggest that students in the different teacher education institutions in the Cordilleras learn best by *vision*, especially when numbers are involved. This finding specifically indicates that visual aids are requisites in teaching lessons that contain numerical figures, which may be in the form of mathematical calculations, formula derivations, and statistical facts.

Figure 1. Cognitive preference modality for learning
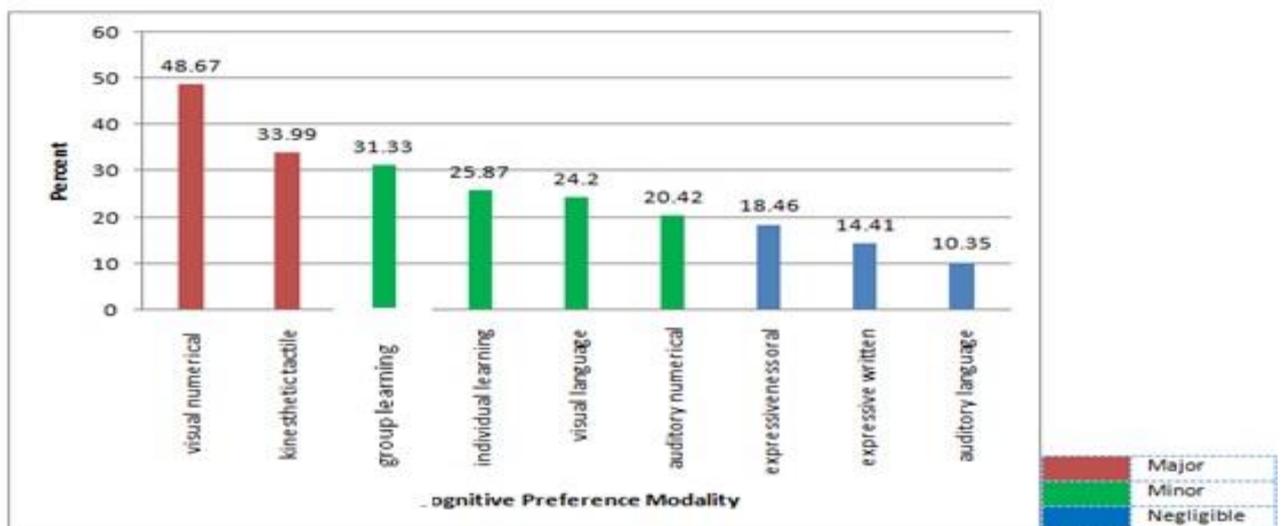
Source: Own data gathered by researchers from all state colleges and universities in Cordillera Administrative Region,Philippines

The above results are supported by the study of Lubrica, et al. (2012) revealing that the most preferred dimensions for learning are observed in visual and auditory language, auditory numerical, group learner and kinesthetic tactile. It is likewise observed that the least preferred dimensions in learning are observe in expressing their ideas through oral and written methods. Similar finding were reported by Al-Hebaishi (2012) that the visual learning style was the most preferred by the majority of participants. Attributes of this as reported by Al-Hebaishi (2012) were the strategies most frequently employed that includes cognitive strategies followed by meta-cognitive strategies. The results also revealed a significant relationship between the visual learning style and memory strategies and between the visual learning style and affective strategies.

Level of Adequacy and Competency of Teachers along Varied Areas of Pedagogical Approach

Students rated their teachers in terms of adequacy and competency in the use of pedagogical approaches. In this study, pedagogical approaches were classified into three aspects, namely *Classroom Teaching Practices, Learning Environment, and Accommodation of Diversity in the Classroom.*

Table 1 shows that the respondents regarded their teachers to be highly adequate and competent (HAd) in terms of *classroom teaching practices* (mean=3.29), while adequate but insufficient (Ad) in terms of *management of learning environment* (mean=3.19) and *accommodation of diversity in the classroom* (mean=3.24). Results indicate that students regard teachers as being capable in terms of content and execution of teaching strategies; however, students feel that teachers do not perform the good practices as much, especially with regards to supervision of the learning environment and adaptation of diversity in the classroom. Similarly, in a survey conducted by Kane et al. (2010) on effective teaching practices, it was found that the degree of influence teachers have over students and the classroom strategies and techniques that they use affect what students learn. Further, studies of classroom effectiveness show that teachers' methods, which vary greatly, affect learning.

Table 1. Pedagogical Approaches: Classroom Teaching Practices

Pedagogical Approach	Mean	Descriptive Value
Classroom teaching	3.29	Highly adequate
Management of learning environment	3.21	Adequate
Accommodation of diversity in the classroom	3.24	Adequate
OVERALL MEAN	3.25	Highly Adequate

Source: Own data gathered by researchers from all state colleges and universities in Cordillera Administrative Region,Philippines

Preferred Teaching Methods by Students

As gleaned from Table 2, teachers use varied teaching methods indicating that the greater majority (f=296, 41.40%) of student respondents have high preference for the lecture method indicating that they learn best with their teachers using discussion inductive and deductive as their methods of teaching. This is followed by the use of the demonstration method (139 ,19.44%) indicative that students learn from their teachers through examples, demo lessons and with the use of models. On the other hand, other teaching methods preferred by students are *eclectic* or varied *interactive-cooperative* or activity-based, *technology-aided instruction* and *Socratic* or question-and-answer (f=47, 6.57%).

It is noteworthy that lecture method is observed as most preferred teaching method by students. while demonstration method ranked 2nd in the students' preference. Presented in decreasing percentage of students' preference on teaching methods are: (1) eclectic method (f=102, 14.27%) using *varied teaching strategies* in order to demonstrate accommodation of diversity in the classroom teachers attempt to address individual needs of students by making use of different teaching strategies; (2) i*nteractive- cooperative learning* (f=100, 13.99%), where teachers encourage classroom activities, peer teaching and reporting; (3) technology–aided instruction (f=72, 10.07%), emphasizing on v*isualization and use of instructional materials* in teaching; and (4) Socratic-evaluation method through assessment, question-and-answer and competency evaluation.

Findings stresses diversity in the classroom. Attributes of the above findings as drawn from the perceptions of respondents manifest that teachers recognize and respect individual differences in the classroom. As per interview with students, the greater majority of student-respondents claim they recognize c*ultural sensitivity* as the most employed strategy by teachers in accommodating diversity in the classroom. Further, the same group claim that teachers show consideration in the way they communicate with their students, regardless of age, ethnicity, academic status, etc. Similarly, other students bared that their teachers find ways to integrate not just one but *all* the different cultural practices in with their subject matter.

Table 2. Teaching strategies preferred by the students

Teaching Method	Frequency (N=715)	Percent	Rank
Lecture (Discussion, Inductive, deductive)	296	41.40	1
Demonstration (Examples, Demo, Model)	139	19.44	2
Eclectic (Varied, Individual differences)	102	14.27	3
Interactive-cooperative Learning (Activities, peer, report)	100	13.99	4
Technology-aided Instruction(Visualization, IM)	72	10.07	5
Socratic - *Evaluation(Assessment, Questions, competencies)*	47	6.57	6

Source: Own data gathered by researchers from all state colleges and universities in Cordillera Administrative Region,Philippines

These findings point out diversity in the way the students learn, which leads teachers to vary their teaching methods. This is similar to the findings of Al-Hebaishi (2012) that with the respondents' being visual learners, the strategies most frequently employed were cognitive strategies followed by meta-cognitive strategies. Al-Hebaishi further revealed a significant relationship between the visual learning style and memory strategies and between visual learning style and affective strategies. It can therefore be inferred that the teacher's method counts a lot In developing the learner along the three dimensions of learning. This suggest that student-centered education should be emphasized. Frye (2010) supports this proposition stating that faculty take on less responsibility for being sources of knowledge, and take on greater responsibility as facilitators of a broad range of learning experiences.

Differences in the Perceived Level of Adequacy and Competency Among Teachers According to Cognitive Preference Modality

Ratings differed according to the cognitive modality of students. For all the nine cognitive preference modalities, it was found that a student who has a well-defined learning style gives a comparatively higher rating for teachers' classroom teaching practices, management of learning environment, and accommodation of diversity. Analysis of variance confirmed that there is a significant difference among students of varying levels of cognitive preference modality in terms of ratings they give to teachers' pedagogical approaches ($p < .05$). The more defined the learning style of a student, the higher the rating he/she gives to teachers' pedagogical practices. The finding implies that a student whose learning style is well defined recognizes teachers' pedagogical approaches better. The student tends to be more satisfied with the way a teacher teaches only if his/her (the student) cognitive preference modality is well-defined. Such result suggests that determining students' cognitive preference modality is vital in designing appropriate strategies for the teaching-learning process to be more effective.

As emphasized by Guild (2009), it is unrealistic to expect that a particular approach will be successful for all learners. This expectation implies that experienced teachers use the best of a variety of approaches that benefits many learners. This is corroborates the findings of Obralić (2012), that determining students learning styles will help and contribute a lot to the learning process. Same study stressed that matching learning and teaching styles is required in order to approach to the problem. Further, it was suggested that to optimize learning among the students, teachers should define students' profiles and define their learning style, as well as create learning environment which includes and appreciate students learning styles.

<u>Differences in Preferred Teacher's</u>
<u>Pedagogical Approach According to</u>
<u>Students' cognitive preference modality</u>

Managing diversity in the classroom affirm various factors as affected by students' cognitive preference modalities for their learning. With the assumptions that the cognitive preference modality of students affect these factors, correlational analysis was made with the students' preferred pedagogical approach used by their teachers (Table 3). While their effects to the level of adequacy of teachers on the three pedagogical approaches were determined (Table 4).

<u>Preferred Teachers' Pedagogical</u>
<u>Approach According to Students'</u>
<u>Personal Profile</u>

As gleaned in Table 3, students grouped according to age, parents' monthly income and family size do not differ significantly in their perceptions as to the level of adequacy of their teachers in classroom teaching practices. This is supported by the computed F- values being not significant as compared to the probability values (p > .05). On the other hand, all the other students' factors were observed to significantly affect their perceived level of adequacy of their teachers in classroom teaching practices. Manifestations of this is evident in the computed F-values being significant (p<.05). Findings on the non-significant difference point out that student factors related to degree, academic status, parents' occupation and ethnicity can be used as determinant factors for the level of adequacy of teachers in their classroom teaching practices.

Similarly, a non-significant difference is evident in students' perceptions as regards to the level of adequacy of teachers in the management of learning environment according to age, sex and family size. All other factors such as students' degree, academic status, parents' occupation and monthly income, and ethnicity were observed to be significant (p<.05) factors in determining the perceived level of adequacy of teachers in managing a classroom environment. One of the attributes on the finding related to sex of the students is that female students have higher regard on their teachers adequacy in management of classroom environment. This is supported by the findings Reid (1995) that all learners have individual attributes related to the learning processes and that learning styles are internally based on characteristics of individuals for intake of understanding of new information.

Consequently, it is evident that the students' age and sex cannot be used as determining factors on the perceived level of adequacy of teachers in accommodating diversity in the classroom This means that students, regardless of age and sex, get the same treatment

Table 3.   Differences in Preferred Teachers' Pedagogical Approach According to Students' Personal Profile

Profile	Classroom Teaching Practices	F- Value Management of Learning Environment	Accommodation of Diversity in the Classroom
Age	2.854^{ns}	1.305^{ns}	2.668^{ns}
Sex	1.979^{*}	1.752^{ns}	1.582^{ns}
Degree	2.590^{*}	2.684^{*}	3.446^{*}
Academic Status	0.289^{ns}	2.484^{*}	2.172^{*}
Father's Occupation	2.871^{*}	4.234^{*}	4.612^{*}
Mother's Occupation	3.563^{*}	3.162^{*}	3.367^{*}
Monthly Income	1.794^{ns}	3.054^{*}	3.926^{*}
Family Size	2.810^{ns}	2.812^{ns}	3.059^{*}
Ethnicity	6.457^{*}	4.294^{*}	4.214^{*}

Legend: *- significant, ns- not significant, alpha= .05
Source: Own data gathered by researchers from all state colleges and universities in Cordillera Administrative Region,Philippines

and learning experiences in the classroom for their own learning. Student factors such as degree program, academic status, parents' occupation and income, family size and ethnicity were found to be significant (p<0.05) in affecting the perceptions of students on their teacher's adequacy in accommodating diversity in the classroom.

Overall, findings affirm that student factors significantly affect the teachers' perception of their adequacy for their teaching. It is inferred from this study that the identified student factors affect their perceptions on the adequacy of their teachers. Such results confirm the findings reported by While Felder and Brent (2005) stating that students differ and these are affected by the way they learn: their learning style, approaches to learning and orientations to studying and intellectual development.   Further, similar factors were identified by Williams (2010) where diversity encompasses the dimensions of ethnicity, race, gender, socio-economic status, religious beliefs, and other factors. It was further pointed out that diversity would be viewed from the teacher's role of meeting the needs of the student. From a teacher's viewpoint of just knowing and understanding the student as a total person, but more importantly, it is looking at the learner as a unique individual who brings a flavoring dimension of differences in the classroom . The teachers' sensitivity in addressing the needs of learners is the central point in teachers' preparation for teaching. Guild (2009) stressed that the practical application in accommodating differences in the classroom is related to awareness of learning style and cultural differences. Such accommodation requires a commitment to the belief that all students can be successful learners.

Effect of Students' Cognitive Preference
Modality on the Level of Adequacy of
Teachers on the Three Pedagogical
Approaches

As gleaned from Table 4, students with varied cognitive preference modality for learning significantly differ in their perceptions on the level of adequacy of their teachers along the three pedagogical approaches. Such findings imply that the students' cognitive preference modality affects their perceptions on the level of adequacy of their teachers. This means that the higher the preference on the cognitive learning modality, the higher the perceived level of adequacy of teachers along the three pedagogical approaches. This indicates that students who like and prefer all the learning styles (major) perceived their teachers to be highly adequate in their pedagogical approach. While students who may have cognitive preference which does not match with their teachers' approach perceived their teachers to be adequate in their pedagogical approach. On the other hand, students who may have difficulty in learning (negligible) and can function well in some cognitive preference modality (minor) perceived their teachers to be less adequate in management of learning environment and accommodation of diversity in the classroom. In view of such findings, the teachers must be sensitive on these factors when preparing instructional plans.

The aforementioned findings are supported by Richards (2006) stating that culturally-responsive addresses the needs of all learners. An instruction reflects the cultural and linguistic practices and values of only one group of students, then the other students are denied an equal opportunity to learn. In a review of learning styles research on culturally diverse students, Irvine and York (1995) claimed that all students are capable of learning, provided that the learning environment attends to a variety of learning styles.

Table 4.   Effect of students' cognitive preference modality on their perception as to the level of adequacy of their teachers along the three pedagogical approaches

Cognitive Preference Modality	F- VALUES		
	Classroom Teaching Practices	Management of Learning Environment	Accommodation of Diversity in the Classroom
Visual-Language	15.191*	8.096*	4.259*
Individual Learner	4.252*	4.136*	7.961*
Audio-Numerical	4.091*	3.144*	4.608*
Visual-Numerical	7.224*	4.304*	3.129*
Group Learner	17.137*	16.328*	10.777*
Audio-Language	3.790*	4.814*	6.258*
Expressive-Oral	5.048*	4.986*	5.743*
Expressive-Written	8.522*	9.542*	8.186*
Kinesthetic-Tactile	13.521*	9.682*	8.084*

Legend: *- significant, ns- not significant alpha= .05
Source: Own data gathered by researchers from all state colleges and universities in Cordillera Administrative Region,Philippines

Guild (2009) affirmed that learners whose styles are accommodated more frequently in school achieve more immediate success, while students who struggle to adapt to an uncomfortable way of learning often underachieve. Recognition of individual learning differences encourages a continual search for the one best way for students to learn, teachers to teach, and the curriculum to be studied. Further, we see the importance of Learning styles preference, which guide the way students learn in a contextualized instruction. Such is proven by the research conducted by Dunn and Griggs (2000) pointing out that learners are most effective when they are taught in their preferred learning styles.

Conclusions

Diversity predominates in the classroom. The profile and cognitive preference modality of students are significant factors in determining their perceptions on their teachers' level of adequacy in classroom teaching practices, management of classroom environment and accommodation of diversity in the classroom. The greater the preference on the cognitive learning modality, the higher the perceived level of adequacy of their teachers' pedagogical approaches. Students whose cognitive preference modality is well defined rate teachers highly as regards level of adequacy and competency along classroom management, learning environment, and accommodation of diversity in the classroom.

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