I propose to the Major Professor and to the Committee Members a study of the following topic to be conducted in partial fulfillment of the requirements for the degree of Doctor of Education in Curriculum and Instruction: THE DEVELOPMENTMENT OF A PROCEDURE FOR THE CREATION AND VALIDATION OF AN INSTRUMENT FOR THE ATTAINMENT OF COMPETENCIES AT AN INTERCULTURAL UNIVERSITY IN MEXICO.
Introduction

The intercultural universities (IUs) of Mexico are institutions of higher education that have been created to serve indigenous students from different ethnic groups in the country. The IUs are considered to be one way to respond to historical and recent demands of indigenous people (Schmelkes, 2009) for access and representation in Mexican higher education. The establishment of universities with the pedagogical and sociopolitical goals of opening spaces in higher education for young indigenous students from different ethnic groups has no precedent in Mexico.

The IUs’ existence and operations are invariably challenging (Schmelkes, 2009; Fábregas, 2008). Their challenges include inadequate funding, limited curriculum development, poor living conditions for their students, and government resistance to the revitalization/recognition of indigenous knowledge (Pineda, 2007) and racism (Fábregas, 2008). Numerous publications about the IUs point to many of their needs, which range from financial resources (Dietz, 2008; Fábregas, 2008; Guerra, 2005; Schmelkes, 2009) to degree accreditation (Schmelkes, 2009), to quality production of knowledge (Schmelkes, 2009), and the need to overcome unequal educational experiences and achievement of the indigenous students (Ahuja, et al., 2004; Schmelkes, 2009), including markedly poor performance on standardized tests (Schmelkes, 2009). IUs’ learning assessment strategies and self-assessment pointers, which might pave the way to meeting many of these needs, are missing. A performance-based instrument with acceptable validity and reliability estimates to measure the attainment of the student learning competencies is also missing, and no research project with this goal is being conducted at this time (CGEIB, 2011). Furthermore, research on the IUs’ assessment of learning, including self-assessment, performance-based assessment and pertinent instruments is scant. The General Office of Intercultural Bilingual Education (Coordinación General de Educación Intercultural Bilingüe, CGEIB), which is the governmental institution that orchestrates the creation and operations of the IUs, supports numerous IU research projects (CGEIB, 2011). With the exception of a master’s thesis done at an IU in 2010 on the process of accreditation of degrees among students (Caro Dueñas, 2010), no other studies on assessment and performance-based assessment instruments at the IUs were located.
Purpose of the Study

The purpose of this study is to create a performance-based instrument with acceptable validity and reliability estimates to measure the attainment of competencies outlined in the Intercultural Management for Development (IMD) undergraduate program of study at one of Mexico’s IUs. The IMD major has the highest enrollment of all majors at this IU. This instrument will be created with the participation of recent IU graduates, a group of IU experts and the researcher, using mixed methodology.

Research Question

To what extent can acceptable validity and reliability estimates be established for an instrument developed to measure the attainment of the competencies of the Intercultural Management for Development academic program of study at an intercultural university in Mexico?

Research Subquestion

According to recent IU graduates, what evidence demonstrates the attainment of the competencies of the Sustainability track of the Intercultural Management for Development academic program of study at an intercultural university in Mexico?

The Competencies of the Intercultural Management for Development Major

The IMD major offers five tracks (orientaciones): Communication, Sustainability, Languages, Rights and Health. This study will be conducted with the participation of recent graduates of the IMD major, regardless of their tracks, because the IMD is the program with the highest number of enrolled students (Dietz, 2009, personal communication). The five competencies of the IMD major are as follows:

Students will be able to:

1. Articulate scientific and indigenous knowledge and create initiatives that address both
2. Facilitate negotiation for and management of resources and information
3. Strengthen and design intercultural initiatives
4. Make visible regional indigenous knowledge and regional initiatives
5. Generate diagnostic and proposal-oriented knowledge
Conceptual Frameworks

The human capabilities approach (HCA) and Dewey’s Communities of Inquiry (COI) are the conceptual frameworks guiding this study. The writings of Nobel Prize winning economist Amartya Sen and research practitioners Melanie Walker and Pedro Flores Crespo will provide the foundation for the human capabilities approach. John Dewey’s communities of inquiry will serve as an organizing principle for decision-making for this study.

The human capabilities approach allows us to view human development beyond the lens of income. In brief, Sen’s (2001) capabilities approach allows for contextually evaluating well-being from a broader perspective than the utilitarian economic approach for equating income with well-being. This approach highlights human capabilities, or potential functionings, which deal with what people are able to do or achieve, that is, their freedoms. In education, the human capabilities approach has been used as a framework for assessing student learning in higher education from the students’ perspectives, mainly through the work of Melanie Walker (2008). This assessment is based on students’ input and negotiation, as Walker (2008) has argued in her research in higher education.

The IUs project is designed to move away from the historic failures of assimilationist education for indigenous groups and a utilitarian approach to education (Casillas & Santini, 2006). This is done in several ways, such as exploring different ways of being, learning, and implementing the acquired and the existing knowledge or saberes (indigenous knowledge and academic knowledge; Casillas & Santini, 2006). The human capabilities approach, with its concern with the quality of life and criticism of social arrangements that limit people’s freedoms (Sen, 1992, 1999; Walker, 2008), echoes the mission of the IUs project.

The second framework for this study is Dewey’s COI, which is an organizing principle where communities address a problematic situation in a systematic and holistic manner carried out with participatory democracy (Shields, 2003).

Methodology

This study will use a monostrand conversion design (Teddlie & Tashakkori, 2009), which is a type of mixed methods design where only one type of data is analyzed and only one type of
inference is made (either qualitative or quantitative). It encompasses transforming data from one form to another (quantitative to qualitative and/or vice versa), and then analyzing it accordingly. In a monostrand conversion design, exploratory or confirmatory research questions are answered through the analysis of the data that have been transformed (Tashakkori & Teddlie, 2003; Teddlie & Tashakkori, 2009). The monostrand conversion design can be categorized as a sequential mixed methods design. In this category, either quantitative or qualitative data are collected in early phases of a study; then, these data are used for the following phase(s). A meta-interpretation is inferred at the end based on the findings (Newman, Newman, & Newman, 2011). The qualitative data collected through focus groups in the early stages of the study will be the foundation for creating the assessment instrument.

**Data Sources**

The data sources for this study are focus group data, recent graduates’ research projects (graduation requirement artifacts), and professors as expert judges.

**Data Collection, Analysis, and Sampling**

Data will be collected via two focus group/working sessions with recent graduates. One focus group/working session will take place with recent graduates and will provide the content of the instrument, which will be the content that the researcher will then use for the development of a table of specifications for the rubric. The second focus group/working session will be with another group of recent graduates. This group will be given the table of specifications to provide an estimate of agreement of the appropriateness of the evidence used to estimate the goals. Based on this table the researcher will then develop a rubric to access the level of achievement of the IU goals.

A third group will be composed of five professors of education in the United States who speak Spanish. These professors will score the available artifacts on the developed rubric. Their collective responses will be used to estimate the reliability of the rubric in two ways; to look at the percentage of agreement between scorers and a month later to check on the stability of their judgments over time (inter- and intra-judge reliability). The recent graduates will be contacted
through the director of research at the IU who is currently working with them on a separate research endeavor; the researcher will personally invite the five professors.

**Significance of the Study**

This study will contribute to the quality of student learning assessment by providing a process to develop performance-based assessment instrument with acceptable validity and reliability estimates, and that can be used across the IU network. A more flexible, constructivist and participatory approach to assess student learning in the form of performance-based assessment may provide a useful alternative to standardized testing (Anderson, 1998; Moskal, 2000). This process and the instrument it produces will allow indigenous students to demonstrate their attainment of competencies in a performance-based and participatory manner.
References


Guerra García, E. (2005). La aneregogía de la voluntad, propuesta educativa sociointercultural de la Universidad Autónoma Indígena de México [The aneregogy of the will, the sociocultural educational project of the Autonomous Indigenous University of Mexico]. Ra Ximhai, 1(1), 15-38.


