A Competency Model for Determining the Professional Profiles of Faculty at Teacher Preparation Schools in Southern Mexico

Juan Carlos Mijangos-Noh

Escuela Normal Rodolfo Menéndez de la Peña

Pedro J. Canto-Herrera

Edith J. Cisneros-Cohernour

Universidad Autónoma de Yucatán

Abstract

In this paper we present the preliminary findings of a study focused on determining the demographic and professional profiles and competencies of professors teaching at the Normal Schools that prepare elementary school teachers in the Southeast of Mexico. Data collection involves multiple methods of data collection including focus group interviews, document analysis, in-depth interviews, and observations. The study centered on professors who prepare future elementary school teachers. The findings of the study will be used for decision makers in order to create a program for faculty evaluation and improvement at the Normal Schools.

Keywords: competencies, teacher preparation programs, faculty evaluation.

A Competency Model for Determining the Professional Profiles of Faculty at Teacher Preparation Schools in Southern Mexico

Antecedents and need of study

In Mexico, like in many other Latin American countries, the preparation of future teachers for k-12 does not take place in Universities but on Normal Schools. In recent years there has been an increasing concern about the quality of preparation provided at these centers. The concern for improving the quality of teaching at Normal Schools is one of the priorities established in the Institutional Program for Improving Public Normal Schools - Programa de Mejoramiento Institucional de las Escuelas Normales Públicas (PROMIN). This program is part of larger program entitled Program for the Transformation and Improved of Normal Schools (1996) this includes the following strategies for improving the quality institutions preparing basic education teachers:

- a) Curriculum reform
- b) Faculty actualization and professional development improvement
- c) Elaboration of norms and orientations for guiding institutional management and regulation of academic work
- d) Improvement of school facilities and equipment at the Normal schools.

Based on the strategic needs established by these policy documents, this research focused on the area of faculty actualization and professional development improvement. The findings of the study will be used for decision makers in order to create a program for faculty evaluation and improvement at the Normal Schools in the Southeast of Mexico. The study centered on professors who prepare future elementary school teachers.

The research also responds to the limited number of studies about the academic processes that take place inside the system for preparing teachers at the Normal Schools in Mexico (Savín, 2004; Jacobo y Pintos, 2004; Czarny, 2004). Given the small number of studies in this area, it is necessary to determine what the professional profiles are of those preparing future teachers at the Normal Schools, particularly under a Competency Model.

Theoretical framework

The main components of competencies, the capacities, skills and knowledge, are developed through learning experiences (Allert y Ritcher, 2003; Semeijn, 2003; Gallart y Jacinto, 1995; Jones y Voorhees, 2002; Katzy y Crawston, 2001, Mansfield, 2000). In

general, competencies are developed in the schools, work, or by participating in community activities, etc. In this way, competencies are a result of integrating the learning experiences, (including capacities, skills, and knowledge in a compacted way), in relation to the task for which they are developed (Spencer, 1993).

When the construction of competency models is required for the standardization and indexation of different types of performance, the formulation and use of competencies require the development of three different, but interactive components: (a) description of the competency; (b) means necessary for measuring and assessing the competency; and (c) the standard by which someone will be judged as competent (Jones y Voorhees, 20002).

Competency models allow the identification of knowledge, skills, and attitudes that are more important for the successful achievement of a specific task. In this sense, they describe the competencies using behavioral indicators, so they can be identified when they are present (Mansfield, 2000). In this way, we can define as the elements of a competency model: (a) the name of the competency; (b) the statements that define in a behavioral way the competency in action, and (c) the knowledge that is behind the competency, and makes it applicable to a specific task.

According to Spencer (2000), competency models are generally presented in a graphic form to show the existing relationships between different domains of the competency, and between different kinas of competencies. For example, a graphic could show that knowledge competencies are more or less important than behavioral competencies, or that competencies related to personnel effectiveness are more important than behavioral competencies.

A competency model, well designed, includes critical competencies to guide the successful accomplishment of an specific task in a particular context, the definitions of each competency, and a list of indicators of each observable behavior for each competency that describes how the competency that is describes can be manifested in each moment of the execution of the specific task (Jones y Voorhees, 2002).

Competency models reflect the context of the educational institution and communicate the values of the organization, if they are constructed with the participation and effort of experts, those who have demonstrated to be the best in performing the competencies required for the successful performance in a work or specific task (Spencer, 2000).

The use of a competency model in teacher preparation can be very useful for (a) identifying the key competencies for accomplishing institutional and goals; (b) defining competencies at the level of observable behaviors, and ensure that they go beyond a list of characteristics (e.g. adaptability, self-reliance, integrity, maturity, etc.); and the incorporation

of competencies and behaviors related to the system of educational development of the institution (such the selection, development, estimation and compensation). In this sense, the recognition of teacher profiles for the centers that prepare future teachers, contrasting with the results and the objectives and purposes of the institutions, are useful elements for developing concrete processes of academic improvement that can lead the faculty at those institutions to acquire needed competencies for the achievement of institutional goals.

Objectives

In this paper we present the preliminary findings of a study aimed to design the demographic and professional profiles and competencies of professors teaching at the Normal Schools that prepare elementary school teachers in the Southeast of Mexico. The research objectives are the following:

- 1. Describing the demographic profiles of all faculty members at the Normal Schools that prepare elementary school teachers in the Southeast of Mexico.
- 2. Describing the working profiles of these faculty members.
- 3. Determining, from the Competency Model, what are the characteristics that should conform the professional profile of the faculty members.
- 4. Determining the similarities and differences among the three faculty profiles
- 5. Determining if there is relationship between the professional competencies of the faculty members and the educational outcomes in their institutions.
- 6. Obtaining information to help informed decision making about faculty development and evaluation.
- 7. Establishing, on the basis of the data collected, a series of recommendations for faculty improvement and development.

Methodology

The research involves the use of quantitative and qualitative methods of data collection. In order to determine what ideal competencies should have the professors at the Normal Schools, the researchers conducted focus group interviews with faculty members at the six Normal Schools in the region. As a result of these focus groups, the researchers identified a list of ideal competencies (knowledge, skills, and attitudes).

Then, the researchers developed a questionnaire to determine what the real competencies of current faculty at the Normal Schools are. The questionnaire was administered to all student teachers at the six Normal Schools. The findings of this survey will

be used for determining what faculty members are those who have the ideal competencies for preparing elementary school teachers.

Once these faculty members are identified, the researchers will conduct case studies of these faculty members. Case studies will involve multiple methods of data collection, such as observations, document analysis, focus group interviews with their students, and in-depth interviews with the instructors. The results of the case studies will allow determining with more precision what competencies have the professors and what need to be developed through a professional development program.

In order to determine the reliability of the questionnaire, a pilot study is being conducted with a sample of students from another Normal School located out of the area where the study is conducted. The researchers will calculate the reliability of the instrument using the Crombach Alpha coefficient. In addition, to determine the consistency among student opinions the K of Kendall will be calculated. Once the instrument is modified with the recommendations from the pilot study, it will be administered to third and forth year student teachers at the Normal Schools.

Subjects

Information was collected from 74 faculty members at the six Normal Schools in the region. Table 1 provides some descriptive information about the faculty:

Table 1. Faculty members who participated in the focus groups at the Normal Schools

Normal School	Gender		Total
	Males	Females	
Dzidzantún	6	6	12
Educación y Patria	3	6	9
ISEN	9	6	15
Rodolfo Menéndez de la Peña	6	4	10
Ticul	10	4	14
Valladolid	8	6	14
Total	42	32	74

Additional information was collected from the 29 faculty members (six males and 23 females) working from at the Normal School selected for the pilot study.

Results

The findings of the first step of the study indicate that there is a list of ideal competencies that faculty members teaching at the Normal Schools should have:

Table 2. List of ideal competencies for faculty at the Normal Schools

Knowledge	Skills	Attitudes
Curriculum planning	Creating a learning environment	Being sensible towards student needs
Research methodology	Developing learning strategies	Having an attitude towards long –
Innovating teaching strategies	Applying theoretical concepts to	life learning
Child learning process	practice	Being a self-controlled person
Adolescent learning needs and	Using of educational media and	Being an affective person
characteristics	instructional materials	Promoting student human
General culture	Conducting educational research	development
Teaching models and approaches	Demonstrating high teaching skills	Modeling values
Pedagogy	Reviewing assignments and	Preparing creative people
Subject matter	providing appropriate feedback	Being an adaptable person
Characteristics of school context	Organizing artistic activities for	Interested in literature exchange with
Working materials	students	peers
Student needs	Doing creative work and	Motivated for professional
	developing the creativity of his or	development
	her students	Working well with others
	Evaluating student assessment	Open to learning from others
	Advising students	Moving towards a holistic education
	Working efficiently in teams	Promoting an ecological
	Motivating students	consciousness among his or her
	Developing competencies of his or	students.
	her students	
	Demonstrating the relationship	
	among different course contents	
	Establishing a relationship	
	between teaching and learning	
	Detecting and solving discipline	
	problems in the classroom.	
	Communicating correctly in oral	
	and written form Adapting to the	
	needs of the students.	
	Coordinating, supervising students	

and other faculty when required.	
Working in administrative tasks of	
his or her department.	
Teaching students to adapt to the	
circumstances of the teaching	
context	
Teaching workshops when	
required.	
Keeping update in the state of the	
art of his or her field.	

According to the findings was evident that for the different faculty members who participated in the focus groups was more important the development of teacher skills or abilities than the knowledge and attitudes. In addition, the participants identified the main roles and responsibilities that are expected from a professor preparing elementary school teachers. The main roles identified were the following:

- Teacher (facilitator, evaluator, communicator, developer, innovator, planning expert and counselor
- Tutor (guide, counselor)
- Administrator (manager, supervisor, department head)
- Advisor
- Researcher

At this stage of the process, the researchers have collected all data from the pilot study and administered the modified version of the questionnaire to all student teachers at the Normal Schools participating in the study. It is expected that by spring 2006, the researchers will conclude the process of data collection, analysis and interpretation.

References

Allert, H.; Ritcher, C. (2003).(Re-)<u>Designing an educational setting trails of competency in an open learning repository.</u> Working Paper.

Cronbach, L. (1951). <u>Coefficient alpha and the internal structure of tests</u>. Psychometrika, , 16, 297-334.

Czarny, G. (2004). <u>Las escuelas normales frente al cambio Un estudio de seguimiento a la aplicación del Plan de Estudios 1997,</u> México, SEP, Cuadernos de Discusión No. 16.

Gallart, M. A. y Jacinto, C. (1995). <u>Competencias laborales; tema clave en la articulación educación-trabajo.</u> Boletín de la Red Latinoamericana de Educación y Trabajo, 6, 2.

Jacobo H. y Pintos J.L. (2004). <u>Nuevos escenarios en la formación de los educadores</u> mexicanos.Una visión sistémica, México, SEP, Cuadernos de Discusión No. 10

Jones, A.; Voorhees, R. (2002). <u>Defining and Assessing Learning: Exploring Competency-Based Initiatives</u>, NCES 2002-159, paper prepared for the Council of the National Postsecondary Education Cooperative Working Group on Competency-Based Initiatives. U.S. Department of Education, National Center for Education Statistics: Washington.

Katzy, B.; Crowston, K. (2001). <u>A process theory of competency rallying in engineering projects.</u> Centre for Science and Technology: USA.

Mansfield, R. (2000). <u>Practical Questions for Building Competency Models.</u> Paper presented at Insight Information Company Conference Competency-Based Management for the Federal Public Service: Ottawa.

Malik, N. H., Yousuf, M. Z. H., Sultana, R. (2003). <u>Identification of university</u> teacher's competencies as perceived by students. International Journal of Agriculture and biology, 5, 4, 521-522.

Savín M.A. (2004). <u>Escuelas normales: propuestas para la reforma integral</u>, México, SEP, Cuadernos de Discusión No. 13.

Semeijn, J. (2003). <u>Competences, their development in education, and labour market outcomes; a conceptual framework for empirical illustrations.</u> Research Centre for Education and the Labour Market: The Netherlands.

Squires, P. (2003). Managing human capital. ASK: USA.

Spencer, L. M., Jr. and Signe M. (1993) <u>Competence at Work: Models for Superior Performance.</u> John Wiley & Sons, Inc. Publishing: USA.