

Writing Competence as an Outcome in Language Teaching Bachelor Degree Programs: A Comparative Analysis in Five Latin American Countries

La Competencia de la Escritura en los programas de Licenciatura en Docencia de Idiomas: Análisis Comparativo en cinco países Latinoamericanos

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Abstract

In the following research, the graduate profile competences that students in the bachelor's teaching programs have to acquire by the end of their studies were explored. In this research, the main focus was to find out if the writing competence was included in the graduate profile competences. First, the bachelor language teaching program from, *La Universidad Autónoma de Baja California, México*, known as UABC, was studied. Then, a comparative analysis of UABC's program with other universities in Mexico was carried out. Also, to widen the investigation of this topic, the graduate profiles of the following Latin America universities' teaching programs were overviewed and contrasted: Argentina, Panama, Chile and Colombia. In addition, after performing an analysis of the graduate profile competences, those findings were compared with what the UNESCO [United Nations Educational, Scientific and Cultural Organization] and the SEP [Ministry of Education in Mexico] establish.

Keywords: graduate profile, writing, competences and characteristics of teacher training.

Resumen

En la siguiente investigación se revisaron las competencias del perfil de egreso que los estudiantes de los programas de las licenciaturas en docencia (licenciaturas en formación de maestros) tienen que desarrollar al finalizar sus estudios. Cabe destacar que el enfoque principal fue de encontrar si la competencia de escritura se incluye en los perfiles de egreso. Primero, se revisó el perfil de egreso de la licenciatura en docencia de idiomas de la Universidad Autónoma de Baja California, México [UABC]. Segundo, para tomar una muestra fuera del contexto de México, se realizó un análisis comparativo del programa de la UABC con los programas de

docencia de los siguientes países latinoamericanos: Argentina, Panamá, Chile y Colombia. Y por último, los datos obtenidos del análisis se compararon con lo que establece la SEP [Secretaría de Educación Pública de México] y la UNESCO [Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura].

Palabras clave: perfil de egreso, escritura, competencias y habilidades en la formación docente.

Background study

What competences do our future teachers need to have to teach in the current global context? The answer to this question is being profoundly discussed and investigated all over the world. It is an important concern that teachers have the adequate competences to teach at any educational level (So et al., 1996). Nevertheless, the graduate teaching competences expressed in many programs are divorced from the actual work context (Tavárez, 2006). Moreover, the competences defined in the graduate profiles do not have a relationship with the educational goals of the institutions, nor even with the teaching practices carried out to train a teacher (Secretaría de Educación Pública [SEP], 2002).

In higher education in Mexico, bachelor degree programs identify the competences that graduates are expected to develop by the end of any course of study (SEP, 2002). The mission of higher education in Mexico is to train professionals that the government and the job field demand (Alcántara, n.d.). For this reason, the universities create study programs to fulfill the expectations that society needs, especially developing the essential competences throughout the professional learning. (SEP, 2000 & 2001; So, Cheng & Tseng, 1996; Comisión Nacional de Acreditación y Posgrado [CNAP], n.d.; Eljadue, 2007).

In order to reach the goal of preparing professionals in education, the SEP (2000 and 2001), the Department or Ministry of Education that develops the educational programs in Mexico, indicates that the graduate profile must be taken into consideration. In teaching programs, the SEP (n.d.) mentions that the characteristics of training – called “rasgos de formación” in Spanish- which are then defined by competences, refer to the professional abilities, knowledge, attitudes and values which characterize an effective teacher. Based on the competences from each of the characteristics of the teaching profile, the bachelors’ teaching programs must be consistent with the program’s curriculum and have a solid plan of study and of diverse formative tasks (SEP 2000 y 2002; Letelier 2005, CNAP, n.d.). As Letelier (2005) mentions, the only effective way of developing competences is through the practice of activities which integrate the diverse components of the characteristics of teacher training.

Professors who are qualified in teacher development must be chosen (SEP, 2000 and 2002). Moreover, there must be academic meetings of these teachers to be able to develop and effectively evaluate the competences of the graduates (CNAP, n.d; Letelier, 2005; SEP 2000 y 2002).

So, as De Lella (1999) states, “the institutions with teaching programs need to organize their graduate profiles with effective teaching competences that are congruent with the country’s context”.

Writing: One of the Teaching Competences of the SEP

Writing is a process of construction and it has been one of the most difficult skills that students have to learn. Moreover, writing is an important part of language learning, because it is an essential activity that requires enough thinking about a specific topic to analyze and classify any background knowledge (Guemide, 2008).

In teacher training programs, the universities need to work in developing writing across the curriculum to develop academic writers. Teachers need to know how to write in order to teach it efficiently. In addition, written language is not merely oral language written down. “Teachers need to know how written language contrasts with speech so that they can help their students acquire literacy” (Wong and Snow, 2000).

The graduate profiles of teacher training programs worldwide present competences that teachers have to acquire at the end of their studies. Writing is a communicative competence that is defined in these profiles. It’s relevant to indicate that when the writing competence was explored in the programs revised for this study, it was observed that there are different definitions of competences in the programs.

For example, in Mexico, the Secretary of Education (SEP) uses the UNESCO documents to define educational competences. Based on these competences selected by the SEP, all of the universities in Mexico have to take them into consideration when developing their bachelors’ programs.

In Mexico, the SEP establishes the following characteristics in teacher training defined by competences of professional development in the bachelor programs, offered in the universities to form quality teachers (SEP, 2002). These characteristics are:

- 1.- Intellectual abilities
- 2.- Knowledge of teaching content
- 3.- Didactics
- 4.- Professional ethics and identity
- 5.- Capacity to interact within the context of the school

For this research, the first characteristic of the above list is the most relevant because this is where the **writing competence** is presented as one the priorities to be developed in future teachers (SEP, 2002). This characteristic is defined as follows:

I. Intellectual abilities:

- a) Possesses a high comprehension capacity of the written material and has the habit of reading; particularly values critically what is

being read and relates it with the real world, especially with the teaching practice.

- b) Clearly expresses written and oral ideas; describes, narrates, explains arguments and adapts the teaching material to the development and cultural characteristics of the students.
- c) States, analyzes and solves problems. Faces intellectual challenges generating suitable answers starting from basic knowledge and experiences; in consequence is able to orient students in acquiring abilities to solve problems.
- d) In scientific research, uses the following abilities: curiosity, observation, and applies critical thinking skills to ask and answer questions.
- e) Finds, selects and uses different kinds of information from several written sources for the teaching practice.

As reading, writing is an essential competence to construct a democratic society. In teacher training, writing not only needs to be understood as an individual pedagogical action but it also needs to be considered as a social practice that aids teachers to interpret the school and community context in order to set new objectives and participate to rebuild and transform education (UN, 2007). In other words, education needs teachers that reflect critically about day to day situations that are presented in and out the school context, by analyzing students' needs and adapting planning to succeed in teaching and learning.

The SEP (2002) establishes in its official educational documents, that the **writing competence is an important skill that** has to be included in the programs of the 'Escuelas Normales Superiores', which are schools that specialize in training teachers.

Nowadays, 'La Ley General de Educación' in Mexico (the general education law) has let the State open more schools (universities or institutes) to train teachers. In consequence, these schools have a commitment to educate teachers using the programs from the 'Escuelas Normales' which are based on the competences presented by the SEP (Santillán, 2004).

Durkheim (1979, in SEP, n.d.) arguments that although the State in the public interest must open more schools to train teachers, there also has to be a supervision of their training tasks as in the 'Escuelas Normales'. In relation to this statement, the laws of education have the mission of watching over the performance of each State with the collaboration of the teaching forming standards from the SEP (Santillán, 2004).

Nevertheless, the SEP (n.d.) stresses that Mexican education programs don't have a congruent relation with its training standards. Also, the lack of relation between their own programs and graduate profiles affects the development of competences in their graduates. Moreover, they have disregarded the development of **academic writing**. In addition, it is argued that these programs are centered in theory and not in practice (SEP, 2008). In spite of this reality, the universities have the tools to succeed. The

academic professors need to work together to define a contextual graduate profile, and based on that, develop a contextual teaching program (SEP, 2005).

If the superior educational institutes base their programs on a graduate profile defined by competences, they will be able to satisfy the needs of future teachers in relation to the learning experiences where they can build a cultural structure of knowledge.

The UNESCO Competency Framework for Teachers

Like the SEP, The United Nations Educational, Scientific and Cultural Organization [UNESCO] was used in this research to contrast competency standards.

The United Nations Educational, Scientific and Cultural Organization [UNESCO] (2008) states that it is important that teachers possess competences, knowledge and skills, and be able to integrate the teaching program curricula with the use of ICT (Information and Communications Technology). For this reason, UNESCO (2008) created a standard competency technological project to improve the teaching practice in any level of education. The objective of this project is that teachers integrate the ICT with innovation in pedagogy to improve teaching (UNESCO, 2008).

The following are the standards UNESCO (2008) defines:

- **Technology literacy approach:** Increase the technological uptake of the workforce by incorporating technology skills in the curriculum.
- **Knowledge deepening approach:** Increase the ability of the workforce to use knowledge to add value to economic output by applying it to solve complex, real-world problems.
- **Knowledge creation approach:** Increase the ability of the workforce to innovate and produce new knowledge and of citizens to benefit from this new knowledge.

The definition of the graduate profile by competences in ICT of the teaching programs is the key to enable teachers to face the current changes in teaching (UNESCO, 2008).

Comparative Analysis Results

The higher education institutions chosen for the comparative analysis in this research were selected based on their equivalence with what SEP and UNESCO stipulate, and with what the researchers Eljadue (2007), De Lella (1999), Tavárez (2006) and So, Cheng and Tseng (1999) state based on the **writing competency** in the graduate profiles of the teaching programs.

From Latin America, the institutions with teaching programs chosen for this study were: 1.) UPN from Colombia, 2.) La Universidad Católica de la Santísima

Concepción from Chile (UCSC) and 3.) La Universidad Nacional del Nordeste (UNNE) from Argentina. In addition, MEDUCA (Ministry of Education) was included in this research because it defines the teaching graduate profile for Panama, which is important because of its competency standards. In general, these institutions present a graduate profile by characteristics of teacher training defined by competences.

From México, the institutions with teaching programs chosen for this study were: 1.) La Universidad Pedagógica Nacional (UPN), 2.) La Universidad Autónoma del Estado de Morelos (UAEM), 3.) La Universidad de Sonora (UNISON), 4.) La Universidad Popular Autónoma del Estado de Puebla (UPAEP) and 5.) La Universidad Autónoma de Baja California (UABC). These universities were selected because their programs have graduate profiles defined by competences, competences by area of specialization, professional competences, educational evaluation by competences and approaches by competences.

Using the above institutions, the SEP and UNESCO, the following charts present the comparative analysis between the teaching competences, highlighting the presence or lack of presence of the **writing competence**. Note that the institutions selected label the characteristics of teacher training differently, for example: approaches, professional competences, competences and formation areas.

Chart I.- Comparative Analysis between SEP and UNESCO

SEP Characteristics of teacher training →	Intellectual abilities (writing , reading, listening and speaking)	Knowledge of teaching content	Didactics	Professional ethics and identity.	Capacity to interact within the context of the school.
UNESCO Approaches (Characteristic s of teacher training) →	Basic notions in ICT -Analyze knowledge -Development of knowledge (the use of the 4 skills: writing , reading, listening, speaking)	Study plan and evaluation.	-Pedagogy Organization and administra tion. -Use of ICT in the classroom	-Professional Development of Teachers.	

Looking at this chart, we can see that UNESCO and SEP show similar characteristics of teacher training. Both include the **competence of writing** as an important ability to be developed in future teachers.

However, UNESCO presents the *basic notions in ICT in teaching* while the SEP doesn't. On the other hand, the SEP presents the area of *capacity to interact within the context of the school* while UNESCO doesn't.

Chart II.- Comparative Analysis of the characteristics of teacher training from the Bachelor's in Language Teaching of 'La Universidad Autónoma de Baja California' and the SEP.

SEP Characteristics of teacher training -->	Intellectual abilities (writing , reading, listening and speaking)	Knowledge of teaching content	Didactics	Professional ethics and identity.	Capacity to interact within the context of the school.
UABC Professional competences (Characteristic s of teacher training) -->	Communication: Teacher role, teacher guidance in the classroom Teacher-Student interaction		Plan and design of pedagogical-didactic actions Educational Evaluation	Educational Research	Educational Intervention

The comparison between the SEP and UABC characteristics of teacher training shows several differences. First, in comparison with the SEP, the following three characteristics are missing from the UABC's graduate profile: knowledge of teaching content, professional ethics and identity, and capacity to interact within the context of the school. Second, UABC doesn't specifically define the competences in each characteristic in accordance with the SEP guidelines. If we contrast the first characteristic from UABC, communication, and the first characteristic from SEP, intellectual abilities, the **writing ability**, is not considered. In consequence, UABC should contemplate this missing ability, define competences and make the adequate changes to its graduate profile.

Chart III.- Comparative Analysis between the SEP's characteristics of teacher training, UNESCO, MEDUCA, the teaching program from UABC, and other Mexican and Latin America universities.

SEP Characteristics of teacher training	Intellectual Abilities (<u>Writing</u>, reading, speaking, listening)	Knowledge of teaching content	Didactics	Professional ethics and identity	Capacity to interact with the context of the school	Others
UNESCO Characteristics of teacher training	-Basic notions in ICT - Development of knowledge: the use of the 4 skills: writing , reading, listening, speaking.	-Study plan: Basic knowledge	- Evaluation, Organization And administration. - Pedagogy	-Professional Development of Teachers.	-Pedagogy (solving problems)	The use of ICT
MEDUCA Panamá (Characteristics of teacher training)	Personal: having teaching attributes and teaching traits. -Good use of the four skills: writing , listening, speaking and reading.	Academic: Dominating the Teaching content	Being pedagogic in the classroom.		Being Pedagogic in the community	
UABC (Professional competence = Characteristics of teacher training)	-Communication: Teacher role, teacher guidance in the classroom,		-Plan and design pedagogical-didactics actions -			-Educational intervention -Educational research

	Teacher-Student interaction.		Educational evaluation			
Mexican universities (UPAEP, UNISON) (Characteristics of teacher training)	-Abilities: writing , listening, reading and speaking. -Attitudes.	- Knowledge.		-Vocational Interest. -Values.		
UPN Mexico (professional competences = Characteristics of teacher training)	-Communication.		Innovation (materials, courses, strategies). -Create didactic and pedagogic learning environments. - Evaluation.	-Develop learning processes with the positive disposition to innovate. -Being an autonomous learner.	-Advise students and institutions.	Use the ICT
UAEM Mexico (competences = Characteristics of teacher training)			- Teaching activities. - Evaluation - Didactic material	-Research.		
UPN Colombia (areas = Characteristics of	Language	Knowledge of Teaching content	Integral development	Research, ethics and values.		

teacher Training)						
<i>UNNE Argentina</i> (<i>competences = Characteristics of teacher Training</i>)	-Being able to use the 4 skills: writing , reading, listening and speaking to teach the discipline content.	-Use of methods related with the discipline contents and in relation with other disciplines.	- Didactic and pedagogic development. -Design manage and evaluate projects.	-Give pedagogic advise.		
<i>UCSC Chile</i> (<i>Characteristics of teacher Training</i>)	General development	Discipline development.	Teaching practice development.	Professional development		

In this final chart, the SEP was selected as the main standard to compare because it establishes the guidelines in Mexico's educational programs. As we can see in this chart, the organizations of higher education and the Mexican and Latin American universities show differences between the definitions of several characteristics of teacher training. Focusing on the development of **writing**, half of them do define and include it in the definition of competences of their first characteristic of teaching training, while the other half don't define it clearly or don't include it at all.

Conclusion

Are the countries' departments of Education really taking responsibility, as Durkheim (1979, in SEP, n.d.) states, to ensure that the university programs are accomplishing what they propose, which is developing competent teachers? Based on this study, it seems that the answer to this question is difficult to find.

This research found that the graduate profiles in Mexico's and Latin America's language teaching programs are not uniform among the different institutions, nor with UNESCO or SEP. Even though the SEP and UNESCO establish the main characteristics in teacher training, comparative chart III shows that the universities are not following these higher organizations standards.

Finally, the results of the comparative analysis show the competence of **writing** in some programs is included but not in others. An implication of this research is that

there are changes needed in the bachelors programs in language teaching to develop quality and efficient teachers. The **competence of writing** is as important as the other communicative skills (reading, listening and speaking). Nevertheless, based on this research, writing is not being considered a fundamental skill to be developed across the curriculum of the programs of language teaching.

Teaching languages entails a broad range of language proficiency. Teachers need to know how to teach the four skills meaningfully and they need to know a lot of language development. If teachers learn and practice academic writing, they will also develop the capacity to distinguish between imperfect knowledge of English and cognitive obstacles to learning. Teachers must know enough about language to discuss it and to support its development in their students. Therefore, by including the writing competence in the teaching training programs, the result lies in having an impact in quality education.

Of all those arts in which the wise excel, Nature's chief masterpiece is writing well.

Anonymous quote

References

- ALCÁNTARA, A. (n.d) Perfiles Educativos. Los retos de la Educación Superior en América Latina frente al ajuste estructural: Por Una Universidad Reflexiva. *Redalyc*. 1-10. Retrieved May 27, 2008, from: <http://redalyc.uaemex.mx/pdf/132/13206901.pdf>
- DE LELLA, C. (1999). Seminario taller sobre el perfil del docente y estrategias: Modelos y tendencias de la formación docente. Retrieved January 10, 2008, from: <http://www.oei.es/cayetano.htm>
- COMISIÓN NACIONAL DE ACREDITACIÓN [CNAP] (n.d).Criterios Genéricos de Evaluación de Carreras Profesionales. 2-6. Retrieved February 12, 2008, from: <http://acreditacion.bibliotecologia.cl/Criteriosgenericos.doc>
- ELIJADUE, P. (2007). Seminario Práctica Educativa. 1-5. Retrieved March 27, 2008, from: <http://practicaeducativa.wordpress.com/category/paola-eljadue/>
- GUEMIDE, B. (2008). A New Way of Developing Coherence in Writing. The Quarterly Journal of David's English Teaching World. Issue 5. 22-23 Retrieved December 12, 2011, from: <http://www.eltworld.net/journal/Horizons%20ISSUE%2005.pdf>
- LETELIER M. (2005). Currículos Basados en Competencias. Retrieved May 27, 2008, from: www.uncu.edu.ar/contenido/skins/unc/download/creatividad.ppt
- MINISTERIO DE EDUCACIÓN [MEDUCA] (2005) Perfil del Nuevo Docente Panameño. Retrieved November 17, 2008, from: <http://www.meduca.gob.pa/files/diredocentes/perfilnuevdocentes.pdf>

- ORGANIZACIÓN DE LAS NACIONES UNIDAS PARA LA EDUCACIÓN, LA CIENCIA Y LA CULTURA [UNESCO] (2008) Estándares de Competencias en TIC Para Docentes. 1-28. Retrieved May 19, 2008, from: <http://www.eduteka.org/pdfdir/UNESCOEstandares Docentes.pdf>
- SANTILLÁN, M. (2004). Situación y Perspectivas de las Universidades e Institutos Pedagógicos y su Rol en la Formación de Maestros en la Región. 3-6. Retrieved December 14, 2007, from: http://www.anuies.mx/e_proyectos/pdf/unesco-resumen2.pdf; http://www.anuies.mx/e_proyectos/pdf/10_Las_Univ_Pedag_en_Mex_MarcelaSantillan.pdf
- SECRETARÍA DE EDUCACIÓN PÚBLICA (2000) Acuerdo Número 269 por el que se establece El Plan de Estudios para la Formación Inicial de Profesores de Educación Secundaria. 1-21. Retrieved May 28, 2008, from: <http://www.reformasecundaria.sep.gob.mx/doc/sustento/a269.pdf>
- SECRETARÍA DE EDUCACIÓN PÚBLICA (2001). Programa Nacional de Educación 2001-2006. Por una educación de buena calidad para todos: un enfoque educativo para el siglo XXI. 83-219. Retrieved November 24, 2007, from: <http://www.sep.gob.mx/work/appsite/programa/plan.zip>
- SECRETARÍA DE EDUCACIÓN PÚBLICA (2002). Licenciatura en Educación Secundaria. Plan de estudios 1999 Documentos básicos. México.
- SECRETARÍA DE EDUCACIÓN PÚBLICA (2005). Construyendo Puentes Rumbo al Perfil de Egreso en la Ene: Estado – Educación: binomio indisoluble. Autor. 1-10, Retrieved December 2, 2007, from: http://www.ene.edu.mx/identidad/archivos/FORO_NORMALISTA.doc
- SECRETARÍA DE EDUCACIÓN PÚBLICA (2008) Formación docente: desafíos de la política educativa. 1-5. Retrieved February 27, 2008, from: http://ses4.sep.gob.mx/dg/dgespe/cuader/cuad8/3drfd_cd8.htm
- SECRETARÍA DE EDUCACIÓN PÚBLICA (n.d). Formación docente. Retrieved March, 2009, from: http://pronabes.sep.gob.mx/dg/dgespe/cuader/cuad1/4_vis.htm
- SO, W., CHENG, M. AND TSANG C. (1996). Un Impacto en la Práctica de la Enseñanza: Percepciones de las competencias del maestro entre estudiantes-maestros. Universidad de Hong Kong. 1-12. Artículo 1 y 6. Retrieved April 1, 2008, from: <http://sunzi1.lib.hku.hk/hkjo/view/48/4800041.pdf>
- TAVÁREZ, M. (2006). Ciudades virtuales. ¿Perfil del Docente Latinoamericano: mito o realidad. República Dominicana. 1-20 Retrieved November 24, 2007, de: <http://www.educar.org/MFDTIC/Documentos/perfildocente.asp>
- UNIVERSIDAD AUTÓNOMA DE BAJA CALIFORNIA [UABC] (2007). Licenciatura en Docencia de Idiomas UABC. Descripción general. Retrieved January 5, 2008, from: <http://idiomas.mx1.uabc.mx/portal07/licenciaturas/docencia.html>

- UNIVERSIDAD AUTÓNOMA DEL ESTADO DE MORELOS [UAEM] (n.d). Instituto de Ciencias de la Educación. Retrieved March 27, 2008, from: <http://www.uaem.mx/oferta/facultades/ice/ldocencia.pdf>
- UNIVERSIDAD CATÓLICA DE LA SANTÍSIMA CONCEPCIÓN [UCSC] (2008) Pedagogía en Educación Media en Inglés. Retrieved November 17, 2008, from: <http://www.ucsc.cl/admision2009/PEDAGOG%CDA%20EN%20EDUCACI%D3N%20MEDIA%20EN%20INGL%C9S.htm>
- UNIVERSIDAD NACIONAL DEL NORDESTE [UNNE] (2008). Licenciatura en la Enseñanza de Lengua y Literatura. Retrieved November 12, 2008, from: <http://www.unne.edu.ar/>
- UNIVERSIDAD DE SONORA [UNISON] (n.d). Licenciatura en Enseñanza del Inglés. Retrieved April 19, 2008, from: http://www.uson.mx/oferta_educativa/pe/licensenanzaingles.htm
- UNIVERSIDAD PEDAGÓGICA NACIONAL (2002) La UPN y la Formación de Maestros de la Educación Básica. Retrieved July 7, 2008, from: <http://ses4.sep.gob.mx/dg/dgespe/cuader/cuad15/5diver.htm>
- UNIVERSIDAD PEDAGÓGICA NACIONAL [UPN] (2008) Licenciatura en Educación Básica con Énfasis en Humanidades: español e inglés. Retrieved November 17, 2008, from: <http://www.pedagogica.edu.co:8080/portal/contenido.php?esquema=577>
- UNIVERSIDAD POPULAR AUTÓNOMA DEL ESTADO DE PUEBLA [UPAEP] (2007). Licenciatura en Pedagogía. Retrieved September 7, 2008, from: <http://humanidades.upaep.mx/bbcswebdav/institution/portales/humanidades/pedagogia/pedagogia.htm>
- UNITED NATIONS [UN] (2007). Recomendaciones para el desarrollo y fortalecimiento de políticas y programas de formación docente en lectura y escritura. *CERLAC*. Retrieved December 12, 2011, from: http://www.cerlalc.org/Escuela/enlaces/Recomendaciones%20Formacion_Docente.pdf
- WONG L. AND SNOW C. (2000). What teachers need to know about language. *ERIC*. 1-41 Retrieved December 12, 2011, from: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.92>

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