La capacitación docente, factor clave en la calidad de la educación superior en el Instituto Tecnológico de Oaxaca.

Teacher training, key factor in the quality of higher education in the Technological Institute of Oaxaca.

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Resumen

Se busca analizar ¿Cómo la capacitación docente, relacionada al enfoque en competencias influye directamente en el mejoramiento del desempeño docente, mejorando el proceso educativo? Contribuyendo positivamente en la formación de "profesionistas de excelencia, capaces de responder de manera efectiva y específica a las necesidades regionales con calidad, productividad y con una visión nacional e internacional para el presente y el futuro"

Como parte de la metodología empleada se considera la evaluación docente que realizan los estudiantes del departamento de sistemas y computación para analizar el promedio obtenido con respecto al desarrollo docente y de manera general. Identificando que los docentes que se han capacitado en el enfoque en competencias presentan un desempeño docente muy bueno según los estudiantes

Abstract

It seeks to analyze how teacher training, focus on skills related to a direct influence on improving teacher performance, improving the educational process? Contributing positively to the formation of "professionals of excellence, able to respond effectively and specific regional needs with quality, productivity and national and international vision for the   present   and   the   future" As part of the methodology is considered teacher evaluation done by students of the department of computer systems and to analyze the average obtained with respect to teacher development and generally. Identifying teachers who have been trained in the skills approach have a very good teacher performance as students.

Introduction

"The Educational Model of the National System of Higher Technological Education (SNEST) focuses on the human being and all its educational strategies are focused on learning." Allowing the training of competent professionals, who link their life project with their self-realization and permanent improvement of the human being.

For this reason, the Technological Institute of Oaxaca (ITO) has taken as its mission "To be an instrument of community development, training professionals of excellence, capable of responding effectively and specifically to regional needs with quality, productivity and with a vision national and international for the present and the future".

For which it has implemented different strategies to achieve it, among them is implementing the Competency-Based Education Approach (EBC) and the quality management system which is made up of internal processes and guidelines under which

the provision is controlled. of its Educational Service, in accordance with the requirements of ISO 9001:2008 and its national equivalent NMX-CC-9001-IMNC-2008.

Due to the fact that the educational process implemented in the SNEST requires a more active participation by students and teachers, their traditional roles have changed. The teacher has the commitment to guide the development of young people through the cultivation of generic, specific and professional skills, and to accompany the students in their training, in this way he also trains and develops skills, for this reason the pedagogical training In this regard, it takes on great importance.

Teachers who have received the training related to the CBE approach are expected to apply what they have learned to promote the learning of their students, who would be receiving a quality educational service, developing skills for a full and comprehensive life.

From the foregoing, this research analyzes how teacher training on the EBC approach has contributed to improving the academic service, through the Teacher Training program in charge of the Department of Academic Development of the Technological Institute of Oaxaca, considering the evaluation of the teacher, made by students. Comparing the average teaching and total performance between teachers who have been trained with those who have not.

It becomes necessary to interview teachers and coordinators of the courses taught at the ITO, asking them about the usefulness of the courses they have received on the EBC approach, what are their training needs? have faced, as well as knowing the point of view of the students, regarding the assessment of the educational service provided, when analyzing the teaching evaluation carried out by the students of the Computer Systems Engineering and Computer Science degrees during 2010 and 2011 .

Among the results obtained, 100% of the respondents agreed or strongly agreed with the statement "It is important to take courses on the EBC approach". For some, the application of the EBC approach is complicated due to the wide range of activities that are recommended to be applied.

In conclusion, it is considered that the Teacher Training program has allowed teachers to develop and update skills, however it is required that all people involved in the educational process (managers, administrators, teachers, students) take at least one course on EBC, to promote multidisciplinary and collaborative work. If everyone rows together, they reach the finish line together.

Contents

As Francisco Imbermón affirms "Training is an important element of professional development…". In the National System of Technological Education, comprehensive training refers to the "process of human and professional training that promotes the harmonious development of all the faculties of the human being, including all forms of intelligence", so it is pertinent to rely on the approach of the EBC, to integrate cognitive, attitudinal, and procedural knowledge in order to transfer them to the contexts in which the student develops, continuously improving, socializing with their environment.

¿How has the teacher training been carried out?

The Department of Academic Development in conjunction with the Academic Departments (Basic Sciences, Systems and Computing, Metal-Mechanics, Earth Sciences, Chemistry-Biochemistry, Industrial, Electrical, Electronics) analyzes the needs for teacher and professional training and updating in the Technological Institute, and based on these results, the Institutional Training and Teaching and Professional Updating program is elaborated; using the following protocol:

- • The Department of Academic Development sends a letter approximately two months in advance to the Heads of the different academic departments, asking them to deliver a diagnosis of the training needs demanded by their teachers, with fifteen days for delivery, using the formats quality.

- • The Academic Department, in coordination with its teachers, prioritize the thematic content in which it needs to be strengthened or updated. It is worth mentioning that the Department of Academic Development sends an evaluation of the course, which must be requested by those teachers who took the courses in

the immediately preceding period, in which they analyze whether they applied the knowledge acquired in the course, and this is taken into account for the detection of needs.

• Once the diagnosis of training and updating needs has been defined, it is sent to the Department of Academic Development, as well as some proposals for facilitators.

• It is important that the academic departments comply in a timely manner with the information requested, so that the Department of Academic Development organizes the courses that are required.

• The Technological Institute of Oaxaca, applies a survey where students evaluate their teachers and the results of these evaluations are considered for the definition of teacher refresher courses, which until 2009, centralized the information, the Development Department Academic, after being processed by the computer center. Currently the evaluation of students is carried out through the Comprehensive Information System, where the results of the evaluation only have access to the Head of each Academic Department, therefore the analysis of these results is carried out in each Academic Department, since the Academic Development Department does not have access, previously, the results were reviewed and the diagnosis of needs was complemented.

> The evaluation carried out by the student considers: course planning, meaningful learning, mastery of the subject, ethics and sustainable development, evaluation and teaching performance.

- The Department of Academic Development must consider the economic resource to attend to the teaching and professional updating courses that the teachers require.

- Once the Institutional Program for Teaching and Professional Training and Updating has been defined, the Department of Academic Development must publish it and make it known to the Academic Departments and academies.

- The Institutional Training and Updating Teaching and Professional program must be a comprehensive and permanent program, which can be made up of different events that the Technological Institute has defined, among which can be considered: postgraduate courses, diplomas, courses, workshops, seminars. , conferences, congresses, forums, among others as virtual.

At the Technological Institute of Oaxaca, teacher training, managed through the teacher training program, is carried out in the intersemester (January, August) in a morning schedule, in which interdisciplinary groups are formed to work as a team and share their teaching experiences. .

They usually work under the development of projects (products of the workshop course) in which cognitive, procedural, attitudinal, metacognitive knowledge is applied, trying to relate it to the subjects they teach, cultivating the specific skills of the training.

At the end of the training, the participants of the workshop, conference, diploma course evaluate it anonymously, with the Department of Academic Development being responsible for concentrating the evaluations carried out, with the purpose of improving the training offered.

<u>Results.</u>

The results generated through research serve the quality management system to assess the perspective of teachers regarding the training they have received and what is expected, allowing the establishment of a mechanism for continuous improvement.

The Department of Academic Development, through the Teacher Training and Update program, is in charge of the training courses taught at the Technological Institute. These courses are taught mainly in the inter-semester periods, although they are also scheduled

during the semester. According to table No. 1, the Department of Academic Development has offered a total of 9 courses that are listed below, with their respective participants: Didactic strategies applied to competencies (25), Didactic strategies applied to professional competencies (29) , Learning evaluation under the competencies approach (23), Learning evaluation under the competencies approach (24), Teacher training based on competencies (47), Transformation of teaching practice(11), Workshop on the didactic instrumentation of the programs (12), Competency-based didactic instrumentation (30), Competency-based teacher training (16), which gives a total of 219 participants.

CUADRO No. 1 % Asistencia a Capacitación relacionada con el enfoque de EBC, por Departamento en el Instituto Tecnológico de Oaxaca.

CURSO/DEPARTAMENTO	Admon.	C. Básicas	Electrónica	Mecánica	Electrica	Industrial	Sistemas	C. de la Tierra	Química	Posgrado	TOTAL
ESTRATEGIAS DIDACTICAS APLICADAS A LAS COMPETENCIAS 18-20/ NOV/2008	12	12	12	20	12	8	16	8	0	0	100 %
ESTRATEGIAS DIDACTICAS APLICADAS A LAS COMPETENCIAS PROFESIONALES18-20/ FEB/2009	10	14	10	10	10	7	17	7	14	0	100%
EVALUACION DEL APRENDIZAJE BAJO EL ENFOQUE DE COMPETENCIAS24-26/ FEB/2009	12	0	8	24	16	8	16	16	0	0	100%
EVALUACION DEL APRENDIZAJE BAJO EL ENFOQUE DE COMPETENCIAS 4-6/ MARZO/2009	8	13	13	13	4	8	21	4	17	0	100%
FORMACION DOCENTE BASADA EN COMPETENCIAS 24-26/ AGO/2009	13	9	9	11	4	11	15	13	11	6	100%
TRANSFORMACION DE LA PRACTICA DOCENTE26-28/ NOV/2009	0	36	36	0	0	0	18	9	0	0	100%
TALLER DE INSTRUMENTACION DIDACTICA DE LOS PROGRAMAS18-22/ ENE/2010	75	0	0	8	0	8	8	0	0	0	100%

INSTRUMENTACION DIDACTICA BASADA EN COMPETENCIAS 16-20/ AGO/2010	10	27	3	3	3	13	30	7	3	0	100%
FORMACION DOCENTE BASADA EN COMPETENCIAS 24-28/ ENE/2011	25	13	0	6	6	19	0	6	19	6	100%
TOTAL	15	13	9	11	7	10	17	9	8	2	100%

Source: Own elaboration with data from the Department of Academic Development

It is important to mention that the Interdisciplinary Center for Research and Teaching in Technical Education (CIDET) offers a diploma in competencies in which 3 teachers have previously participated and currently 1 is studying said diploma. Additionally, the National System of Technological Higher Education offered through several educational centers (National Polytechnic Institute, Da Vinci University, Institute of University Studies A.C, Intelabra, Mueganus, S.A. de C.V.) the Training and Development of Teaching Competences Diploma for the General Directorate of Higher Technological Education (SNEST), which was attended during this semester (August-December 2011), approximately 40 teachers, it should be noted that unfortunately there are those who have already abandoned the diploma, since initially there were more..

When analyzing by department, it was found that in Economic-Administrative there are 25 teachers who have taken courses on competencies, in Basic Sciences 16, in Electronics 13, in Metal-mechanics 15, in electrical 11, in Industrial 14, in systems and computing 23, in Earth Sciences 15, in Chemistry 13 and in the Division of Postgraduate Studies 4, respectively, these data are registered in the Department of Academic Development.

However, it is important to mention that all the departments have developed Didactic Instrumentation courses for the 2009-2010 programs (Based on competencies) within the same department for those who teach subjects in those semesters (first to third semester), and who are not registered in the Department of Academic Development.

These Instrumentation Courses are given with the purpose that teachers develop the Didactic Instrumentation and Course Management of the subjects to be taught, as part of the follow-up of the Academic process of the Quality Management System.

Regarding the training needs detected by the teachers during the interviews, it was found that: to implement the Competency-Based Education Approach, they request the following courses:

a) Human relations courses.

b) Multidisciplinary development

c) Didactic and pedagogical tools

d) Didactic instrumentation

e) Collaborative work,

f) Teacher training for the competency-based approach,

g) Assessment of learning under the competency-based approach,

h) Teaching/learning strategies for the competency-based approach,

Management of ICTs.

In the methodological aspect, it is required that:

a) the courses are more practical, that is to say that workshops address how to apply the activities to integrate the competencies from a practical approach

b) The training is extensive to all teachers and administrators in order to understand the approach and work collaboratively.

c) The courses that have been taught and the changes caused in the participants are followed up.

d) Work tables are coordinated, integrating them by the subjects, which are taught (it is recommended that it be given on a Saturday, after the first weeks of classes have elapsed, in order to share experiences with other teachers and enrich the didactic instrumentation)

e) In addition to the courses, they can give conferences related to the competency-based approach.

Teachers' perspective on training

60% of those surveyed stated that they strongly agreed with the statement "it is necessary to take training courses related to the EBC approach" and 40% agreed.

With regard to the postulate "Instead of giving us skills courses, they should give us professional updating courses" 100% of the respondents expressed disagreement, which allows us to identify that the ITO teachers do not substitute the pedagogical training courses for the update, both are important in your training.

conclusion

The key point in training is the teacher, but it is also necessary to integrate all the areas that make up the ITO in order to homogenize the understanding of the competency-based approach to education and to be able to work collaboratively and interdisciplinary.

Teacher training courses do not replace professional updating courses

The professors of the Department of Systems and Computing who have taken courses in the competence approach have been evaluated by their students with an average performance of very good,

Practically the difference between the average performance of teachers who have taken courses related to the EBC approach with those who have not taken it is not significant (only two points) and in the January-June 2011 semester, the average was higher. of those who have not taken courses. Part of the above is due to the attitude of some teachers who attend the courses, but have not applied what they learned 100% in the development of their classes.

Bibliography

BENEITONE, P., et. Al (2007). Reflexiones y perspectivas de la Educación superior en América Latina. Informe final Proyecto Tuning América Latina.

Groningen.-HAWES, B. Gustavo. (2008). Evaluación de competencias en el educación superior. Universidad de Talca. Instituto de investigación y Desarrollo Educacional-proyecto

Ibermon, F. (2009) Una nueva formación permanente del profesorado para un nuevo desarrollo profesional y colectivo, R*evista brasileña de formación de profesiones*. 2 (4).