Caracterización del profesorado de educación superior que muestra eficacia docente

Characterization of higher education teaching staff showing teaching effectiveness

Caracterização de professores de ensino superior mostrando efetividade do ensino

Raymundo Murrieta Ortega
Benemérito Instituto Normal del Estado, BI Gral. Juan Crisóstomo Bonilla, México
murrieta.ortega.r@bine.mx
https://orcid.org/0000-0003-4856-9573

Resumen

El objetivo de la investigación fue identificar las características de los profesores de educación superior que muestran eficacia docente; para ello, se aplicaron encuestas con escala tipo Likert a una muestra de 20 docentes y 480 alumnos de cinco licenciaturas de una escuela normal de la región centro de México. La investigación tuvo un enfoque cuantitativo, con diseño no experimental de tipo transeccional descriptivo, para lo que se tomó una muestra por conveniencia con la participación de profesores con resultados favorables y desfavorables en la evaluación docente en los últimos ciclos escolares. La pregunta de investigación formulada fue la siguiente: ¿cuáles son las características de eficacia docente del profesorado de una escuela normal en México desde la mirada de maestros y estudiantes? Para analizar los resultados se establecieron tres dimensiones: a) personal, b) disciplinar y c) didáctico-pedagógica. Los resultados encontrados demuestran que la edad intermedia de los docentes (41 a 50 años), la experiencia en la docencia (de 16 a 30 años), determinados aspectos personales (disposición a la consulta y el ser humanista), rasgos disciplinares (preparación académica óptima y dominio de la asignatura), así como aspectos didáctico-

pedagógicos (saber planear, organizar contenidos, crear ambientes de aprendizaje y realizar evaluación congruente) son factores vitales para que logren eficacia docente.

Palabras clave: competencias del docente, enseñanza superior, evaluación del docente, formación de docentes, habilidad pedagógica.

Abstract

The objective of the research was to identify the characteristics of higher education teachers who show teaching effectiveness; For this, Likert-type scale surveys were applied to a sample of 20 teachers and 480 students from five bachelor's degrees from a normal school in the central region of Mexico. The research has a quantitative approach, with a non-experimental design of a descriptive transectional type, using a convenience sample with the participation of teachers with favorable and unfavorable results in the teacher evaluation in the last school cycles, to answer the research question What Are the characteristics of teaching effectiveness of the teaching staff of a normal school in Mexico from the point of view of teachers and students?

To analyze the results, three dimensions were established: a) personal, b) disciplinary and c) didactic-pedagogical. The results found show that the intermediate age of the teachers (41 to 50 years), their experience in teaching (16 to 30 years), in addition to personal aspects such as willingness to consult and being humanist; disciplinary traits such as having optimal academic preparation and mastery of the subject; as well as didactic-pedagogical aspects such as knowing how to plan, organize content, create learning environments and carry out congruent evaluation, are determining factors for achieving teaching effectiveness.

Keywords: teacher competencies, higher education, teacher evaluation, teacher training, pedagogical ability

Resumo

O objetivo da pesquisa foi identificar as características dos professores do ensino superior que apresentam eficácia docente; Para isso, pesquisas em escala do tipo Likert foram aplicadas a uma amostra de 20 professores e 480 alunos de cinco cursos de graduação de uma escola normal na região central do México. A pesquisa tem abordagem quantitativa, com desenho não experimental do tipo transversal descritivo, utilizando uma amostra de conveniência com a participação de professores com resultados favoráveis e desfavoráveis na avaliação de professores nos últimos ciclos escolares, para responder à questão de pesquisa Qual São as características de eficácia docente do corpo docente de uma escola normal no México do ponto de vista de professores e alunos?

Para análise dos resultados, foram estabelecidas três dimensões: a) pessoal, b) disciplinar ec) didático-pedagógica. Os resultados encontrados mostram que a idade intermediária dos professores (41 a 50 anos), sua experiência na docência (16 a 30 anos), além de aspectos pessoais como disponibilidade para consultar e ser humanista; traços disciplinares, como ótima preparação acadêmica e domínio do assunto; assim como os aspectos didático-pedagógicos, como saber planejar, organizar os conteúdos, criar ambientes de aprendizagem e fazer avaliações congruentes, são determinantes para a eficácia do ensino.

Palavras-chave: competências do professor, ensino superior, avaliação de professores, formação de professores, capacidade pedagógica.

Introduction

The issue of teaching effectiveness leads us to ask ourselves the following questions: what do teachers who obtain outstanding results in teacher evaluation do? What are they unique about in their academic performance? What characterizes them and why do only some demonstrate teaching effectiveness? What are your personal, professional and didactic traits? On this subject, Delors (1996) adds other questions: what can society reasonably expect from teaching personnel? What demand is realistic to formulate with respect to them? Who can be a good teacher?

In this regard, in the document Schools and quality of teaching, published by the Organization for Economic Cooperation and Development (OECD) in 1991, specifically in the chapter The vital role of teachers, it is highlighted that the competence and dedication of teachers they constitute a vital and prerequisite for the achievement of a quality education. In this text, the following approach is recorded: what to do to prepare effective teachers? The OECD maintains that the key lies in their initial training, which is why it highlights four conditions: "a) A correct balance between theory and practice; b) participation of practicing teachers; c) use of competence-based training and d) fully trained teacher educators "(OECD, 1991, p. 99).

Therefore, this research focuses on identifying the characteristics of teachers who show teaching effectiveness in their academic interventions with undergraduate students in five educational programs of a normal school that trains teachers of basic education in Mexico. The hypothesis formulated is that the teaching effectiveness of normal school teachers is due to personal, disciplinary and didactic-pedagogical aspects.

A common way that normal schools and other higher education institutions in Mexico use to measure the effectiveness or ineffectiveness of teachers is the evaluation of teacher performance through the use of Student Teaching Evaluation Questionnaires (CEDA). In the case of the selected normal school, since 2010 there is the Institutional Evaluation and Follow-up Program (PIES), which applies an instrument with 27 items to evaluate each of the teachers in front of the group, which has yielded -according to students' perception — satisfactory, sufficient and poor results.

García (2013) affirms that the CEDAs were implemented since 1927 at Purdue University (Indiana), by Herman Remmers, who is considered the father of the evaluation of teachers by students. However, it is worth noting - as García (2013) explains - that "there is no universal definition of teaching effectiveness or quality teaching; This is because it is a complex activity that includes a great variety of characteristics and teaching styles "(p. 44).

In the normal school under study, the instrument to define the effectiveness of the teachers is the so-called Teacher Performance Evaluation, which includes a heading with the name of the teacher to be evaluated and the instructions for filling in the instrument on a Likert-type scale. The total number of items is 27. The structure is made up of seven sections: 1) organization of the course (six items), 2) mastery of the subject (five items), 3) educational communication (three items), 4) use of ICT (three items), 5) evaluation process (three items), 6) teacher responsibility (four items) and 7) teaching efficiency (two items).

The teacher evaluation is carried out as follows: at the close of school terms (generally in January and June), students evaluate the performance of teachers using said instrument through a digital platform; Subsequently, the teachers responsible for the Institutional Evaluation and Monitoring Program (PIES) process the data and analyze the results to finally prepare the corresponding reports to be delivered to the directors and teachers of each of the educational programs.

Therefore, in normal schools, whose main task is to train teachers for basic education, a recurring problem is manifested: having some teachers who are not experts in the disciplinary area of training and who sometimes have no relation to education. teaching; the latter generates that basic aspects of teacher training are unknown.

On the other hand, there are excellent teachers, who receive recognition as effective teachers based on the satisfactory results in the institutional evaluation surveys, hence comments such as the following are collected: "She is a teacher very committed to her work", " the teacher has didactic skills and creates a good learning environment "," he has knowledge and an unmatched human quality "," the lessons learned from the course strengthened my teacher training ", and so on.

Therefore, by monitoring the evaluation results of teachers who obtain satisfactory results of teaching effectiveness, the following questions were established: 1) What professional training do they have and what experience do they have in teaching and / or normal school? , 2) How do they plan their sessions? 3) What introductory techniques do they use? 4) How do they relate to their students? 5) How do they establish learning environments to generate an optimal teaching-learning process? 6) What interpersonal skills do they show? 7) What are their abilities to use ICT? and 8) how do you evaluate your students' learning?

To achieve this, a list of teachers evaluated during the last school cycles was requested from the school administration of the school under study; In this way, a sample of ten teachers with satisfactory results and ten with poor results was obtained.

The initial research questions, therefore, revolve around the following three topics:

a) Disciplinary dimension: What initial or disciplinary training do they have? And what professional experience do they have in teaching and / or normal schools?

b) Personal dimension: What are their personal traits? What interpersonal skills do they show? And how do they relate to their students?

c) Didactic-pedagogical dimension: What didactic actions do they carry out? How do they plan their sessions? What introductory techniques do they use? What are their capacities to use ICT? And how do they evaluate the learning of their students?

The general research question was the following: what are the general characteristics of the teachers of a normal school in central Mexico that show teaching effectiveness?

In relation to the background of the subject of study, various authors have addressed teaching effectiveness at the higher level. For example, Bain (2004) conducted a systematic study over fifteen years with 63 university professors who performed exceptional pedagogical practices. To achieve this, the author asked the following: 1) what should my students be able to do intellectually, physically or emotionally as a result of their learning? 2) how can I help or encourage them in the best way to develop these skills and the mental and emotional habits to use them ?, 3) how can my students and I better understand the nature, quality and progress of their learning ?, and 4) how can I evaluate my attempts to promote that learning? Furthermore, he states that "the best teachers plan backwards: they start with the results they hope to promote" (Bain, 2004, p. 63)

In this regard, Francis (2006) states that "the characterization of the excellent teacher or the best teacher cannot be conceived without understanding that each teacher is built in a context that makes them particular" (p. 34). The study allows us to identify three dimensions in the effective teaching task: personal, pedagogical and disciplinary, which have a constant interaction that shapes the teaching function, describing that none of the researches analyzed indicates a hierarchy that gives primacy to any dimension in particular.

In this regard, Brombreng, Kirsanov and Longueira (2007) assure that teacher professionalism is built on two fundamental pillars: a) disciplinary training, that is, having a solid scientific preparation that allows the learner to bring true and updated information from the discipline under his charge and b) pedagogical training, which will enable each teacher "to carry out an adequate didactic transposition, synthesizing different variables involved in the educational fact" (p. 133). Therefore, they affirm that "what we call teaching professionalism is achieved at the point of intersection and balance between disciplinary training and pedagogical training" (Brombreng *et al*., 2007, p. 133).

According to Sánchez and Domínguez (2008), the profile of the "good teacher" would be defined "by skills, knowledge, prepared, responsible, organized, committed, punctual, fair, trained, communicative and empathetic and by intelligent, patient and flexible "(p. 628). At the same time, they consider that the most common form of assessment — that is, the use of questionnaires by students — is limited; therefore, they propose the model of vignettes, "where the participant, in this case the teacher, could be presented with situations within the classroom" (Sánchez and Domínguez, 2008, p. 628).

For their part, García and Medécigo (2014) conducted an investigation on teaching effectiveness and ineffectiveness with the aim of exploring the criteria that students use to evaluate teaching effectiveness and ineffectiveness through evaluation questionnaires in a Mexican public university. The results indicate that the variables or criteria to determine the effectiveness of their teachers are related to the process, foreshadowing, and scarcely to the results or products of learning. To determine ineffectiveness, students primarily use foreshadowing and process criteria.

On the subject of teaching effectiveness, Patiño (2015) coined the term effective teaching to refer to the "good" or "authentic" teacher. For them there is a clear distinction between a "real" and a "fake" teacher. The main characteristics of the first are the mastery of the subject he teaches, the permanent updating of his knowledge, the interest in his students learning, the capacity for empathy and sensitivity to capture their interests, concerns and motivations, his ability to communicate with them. indeed, the humility and simplicity to recognize their own deficiencies and be able to continuously learn from them, as well as fair, impartial and democratic treatment. All this is summed up in the concept of truthfulness or authenticity, and the contrary characteristics will constitute the profile of a false or inauthentic teacher.

Patiño (2015) ensures that effective teachers assign a central role to good questions, given that "they constantly resort to the use of the question to promote concern and reflection" (Patiño, 2015, p. 239). The foregoing coincides with the findings of Bain (2004) —cited by Patiño (2015) - in the sense that "the questions that direct students are provocative, enigmatic, novel and, in general, seek to provoke a state of perplexity that moves your interest "(p. 239).

The research carried out by Arbesú and Reyes (2015) describes the characteristics that effective teachers should have from the perspective of higher education students. The perspective of social representations (SR) is taken as a theoretical-methodological basis. Among the main findings, two broad categories are identified: 1) professional qualities and

2) personal qualities. In the first category, the SR of the students indicated that an effective teacher is one who has knowledge, prepares his class and is updated, knows how to explain, evaluates fairly and has good group management. In the second - personal qualities - students commented that an effective teacher must have a taste for teaching, be patient, ethical and empathetic, among others.

Durán-Aponte and Durán-García (2015) affirm that a quality university education implies the transmission of knowledge together with pedagogy to do so, the modeling of certain behaviors, the interaction with the student, the development of the teacher inside and outside the classroom and a series of aspects that make it possible to identify or differentiate the teaching performance of one individual or another. For this reason, they carry out an investigation that consisted of adapting and validating the Institutional Teaching Performance Scale, with the purpose of being used as a means to evaluate teaching performance during an academic period, from the opinion of first-year university students. Two exploratory and confirmatory factor analyzes were carried out, in which an explanatory model was obtained with seven items distributed in two factors called: attitude and organization.

In the research carried out by Villaroel and Bruna (2017), a model of pedagogical competences in the field of higher education was proposed. The research work responds to a case study, with a mixed approach, applying various instruments to collect data in two Chilean universities. Among the results, it stands out that "teachers and students highlighted more the management of knowledge, communication and personal characteristics of the educator as the main competencies of an excellent teacher" (p. 75).

In the work of Herrera, Perendones and Sánchez (2019), it was determined which personal strengths of teachers predict teaching effectiveness, with a sample of 454 teachers of all educational levels, in two countries (Dominican Republic and Spain). The results indicated, firstly, significant positive relationships between the two dimensions of the teacher effectiveness scale and the six personal strengths; and, secondly, the predictive value of two personal strengths (humanity and transcendence) in relation to teaching effectiveness. The need to include in the training - both initial and permanent of the teaching staff - the development of personal strengths, which favors human virtues, is discussed.

In relation to the theoretical framework, the present study is based on the conception of teaching expressed by teachers - also known as implicit theories. This allows analyzing internal processes that the teacher basically activates at the time of planning and intervening

in the classroom, although it is also used to "know the plan that allows you to prevent and assess the way the class will develop and evaluate the students, and to interpret and explain behaviors or make predictions of behavior" (Figueroa, 2013, p. 259).

Materials and methods

The present investigation was quantitative, with a non-experimental design of a descriptive transectional type, because it was intended to make "comparative descriptions between groups or subgroups of people" (Hernández, Fernández & Baptista, 2014, p. 156) —in this case, teachers who show teaching effectiveness and ineffectiveness. A convenience sample was used, made up of 10 teachers with high scores (satisfactory) and 10 with low scores (poor) in the evaluation of teacher performance. Each teacher surveyed was evaluated by the group they were currently teaching; therefore, a sample with intact groups made up of a total of 480 students from different semesters was used (see table 1).

Tabla 1. Docentes y estudiantes participantes

N.°	Clave	Sexo	Seudónimo	Estudiantes	Clave	Sexo	Seudónimo	Estudiantes
1	I-1-D	F	María*	29	I-1-S	M	Rigoberto**	27
2	I-2-D	F	Olivia	16	I-2-S	F	Paulina	24
3	I-3-D	M	Alberto	24	I-3-S	F	Lucía	24
4	I-4-D	M	Pedro	34	I-4-S	F	Dolores	31
5	I-5-D	F	Graciela	16	I-5-S	F	Tania	33
6	I-6-D	M	Víctor	18	I-6-S	F	Lucero	35
7	I-7-D	F	Ivonne	29	I-7-S	F	Adelina	14
8	I-8-D	M	Dionisio	27	I-8-S	F	Lucrecia	20
9	I-9-D	F	Verónica	27	I-9-S	F	Iris	13
10	I-10-D	M	Roque	10	I-10-S	F	Elena	29
		Total		230		Total		250

Nota: I-1-D (informante 1 deficiente) *María evaluada por 29 estudiantes, I-1-S (informante 1 satisfactorio) **Rigoberto evaluado por 27 estudiantes, etc.
Fuente: Elaboración propia

For data collection, two questionnaires were designed: one for teachers and one for students. Through the judgment of experts, these instruments were validated; This activity is defined as an informed opinion of people with experience in the subject, who are recognized by others as qualified experts, so they can provide information, evidence, judgments and evaluations (Escobar-Pérez and Cuervo-Martínez, 2008).

To achieve the instrument validation process, the following actions proposed by the authors Escobar-Pérez and Cuervo-Martínez (2008) were taken: expert data, expert judgment template, instrument validation and general validation concentrate by the judges. Subsequently, three experts on the subject were contacted, who evaluated and provided suggestions for improving the questionnaires. Then, the instruments were piloted: one with a group of teachers and the other with students. The activities carried out contributed to the validity and reliability of the instruments to collect the data.

The teacher questionnaire was made up of 34 items distributed as follows, a) general data (seven items), b) professional training (one item in the box), c) teacher performance (twenty-five items with a Likert-type scale and an open question) . The questionnaire for students was made up of 29 items divided into two headings: a) general data (including sex, semester and educational program) and b) teacher evaluation (25 items with a Likert-type scale and an open question).

Regarding the ethical criteria that were present throughout the investigation, the identity of the participating teachers was protected through the use of pseudonyms; at the same time, the participation of the teachers was absolutely free and voluntary. Before starting the research process, they were openly exposed to the objective of the research and the technique that would be used.

Results

The results are described from three dimensions: a) discipline; b) personal and c) didactic-pedagogical. (See table 2).

Tabla 2. Dimensión disciplinar

Unidad de análisis	Autoevaluación del desempeño docente	Evaluación del desempeño docente
	Reactivos contestados por docentes	Reactivos contestados por estudiantes
Preparación profesional	▪ Mi formación inicial ha contribuido para desempeñarme eficazmente en el ejercicio docente. ▪ Mi formación continua (maestría, doctorado y/o especialización) ha sido factor importante para desempeñarme satisfactoriamente en la docencia.	▪ La formación inicial del profesor (licenciatura) contribuye para su desempeño eficaz en el ejercicio docente. ▪ La formación continua (maestría, doctorado, y/o especialización) del profesor ha sido factor para su desempeño en la docencia.
Dominio de la asignatura	▪ Tengo habilidades y el dominio de mi asignatura para explicar con claridad los temas. ▪ Me enfoco en que los alumnos comprendan los temas, respondiendo con exactitud a sus preguntas. ▪ Generalmente formulo preguntas claras, comprensibles y ajustadas al alumno y al momento de la clase.	▪ Tiene habilidades y domina la asignatura, explica con claridad los temas. ▪ Se enfoca en que los alumnos comprendan los temas, respondiendo con exactitud a sus preguntas. ▪ Generalmente formula preguntas claras, comprensibles y ajustadas al alumno y al momento de la clase.
Capacidad para usar las TIC	▪ Cuento con las habilidades para utilizar las TIC en beneficio de los aprendizajes de los estudiantes. ▪ El uso que hago de las nuevas tecnologías fomenta la participación, la interactividad y la cooperación entre los alumnos.	▪ Cuenta con las habilidades para utilizar las TIC en beneficio de los aprendizajes de los estudiantes. ▪ El uso que hace de las nuevas tecnologías fomenta la participación, la interactividad y la cooperación entre los alumnos.

Fuente: Elaboración propia

Professional preparation

Figura 1. Comparativo: preparación profesional

Fuente: Elaboración propia

Figure 1 shows a favorable balance for the category of satisfactory teachers from both perspectives (teachers and students), since they consider that professional preparation is a fundamental factor for teaching. The results in the deficient teachers -from both points of view- show an almost equal percentage (25% teacher glance and 22% student look) with respect to a state of indecision as to whether the professional training in deficient teachers endowed them for their job performance.

Domain of the subject

It is evident that the teachers of the satisfactory block have a good perception of themselves in the three integrated questions: mastery of the class topics, explanation, solving doubts and formulating questions. These perceptions coincide with those of the students, who show a high percentage in favor of such teachers. In contrast, teachers with poor results show less positive perception compared to the other block. For their part, the students share this appreciation mainly in the lack of skills to explain the topics, in the resolution of doubts and in the formulation of questions.

**Figura 2.** Comparativo: dominio de la asignatura

Fuente: Elaboración propia

Figure 2 shows a favorable inclination for the teachers of the satisfactory block regarding the domain of the subject; on the other hand, from the point of view of the students, satisfactory teachers obtain a gratifying percentage. For their part, the teachers of the deficient block achieve lower percentages in the domain of the subject, but notorious in the area of indecision from both points of view (13% teachers and 26% students).

Ability to use ICT

The teachers of the satisfactory block have the skills to use ICT, a tool that encourages the participation and cooperation of the student body. At the same time, from the deficient block, there are cases of teachers who do not use ICT to achieve learning. Now, from the point of view of the students, a high percentage of indecision is perceived in both blocks (satisfactory and deficient) and even a slight parity in the aspects of agreement and disagreement. (See figure 3).

Figura 3. Comparativo: capacidad para usar las TIC
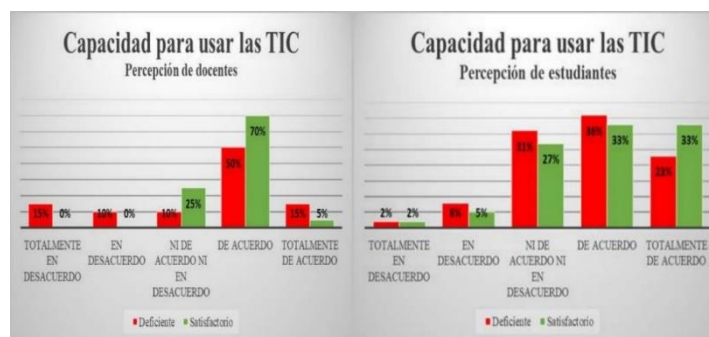
Fuente: Elaboración propia

This unit of analysis provides us with valuable information for reflection. From both points of view, there is similarity in the indecisión results (teachers 25% and students 27%) for the block of satisfactory teachers. The percentage of 70% of satisfactory teachers is also worth noting, although there are 5% of students who disagree that satisfactory teachers have skills for the use of ICT. On the other hand, from the deficient block, there is a percentage of 31% in indecision and 10% who disagree on the ability of teachers to use ICT.

Tabla 3. Dimensión *personal*

Unidad de análisis	Autoevaluación del desempeño docente	Evaluación del desempeño docente
	Reactivos contestados por docentes	Reactivos contestados por estudiantes
Habilidades interpersonales	▪ Muestro disposición ante la consulta de los alumnos dentro y fuera de la clase. ▪ Dispongo de habilidades interpersonales para tratar los conflictos y darles solución.	▪ Muestra disposición ante la consulta de los alumnos dentro y fuera de la clase. ▪ Dispone de habilidades interpersonales para tratar conflictos y darles solución.

Fuente: Elaboración propia

Interpersonal skills

In reference to this aspect, from the point of view of the teachers there is a parity, since one of each block is in indecision, and the rest agree that they have interpersonal skills to interact with their students. From the point of view of the students, the results show that the balance leans towards the teachers of the satisfactory block, since in the block of teachers with poor results, a considerable percentage is observed in indecision and another in disagreement.

Figura 4. Comparativo: habilidades interpersonales

Fuente: Elaboración propia

According to what is observed in figure 4, satisfactory teachers perceive themselves with interpersonal skills, since they reach a percentage of 70% in total agreement and only 5% in indecision; while the students share this opinion by adding 67% in total agreement and 6% in indecision. On the other hand, in the deficient block, the results show a lower favorable percentage, although a notable degree in indecision (teachers 10%, students 21%) and in disagreement (teachers 10%, students 12%).

Tabla 4. Dimensión *didáctico-pedagógica*

Unidad de análisis	Autoevaluación del desempeño docente	Evaluación del desempeño docente
	Reactivos contestados por docentes	Reactivos contestados por estudiantes
Planificación	▪ Tengo habilidades para diseñar planeaciones privilegiando el aprendizaje centrado en el estudiante. ▪ En la planeación del curso incorporo las nuevas tecnologías para lograr mayores aprendizajes en mis alumnos.	▪ Tiene habilidades para diseñar planeaciones privilegiando el aprendizaje centrado en el estudiante. ▪ En la planeación del curso incorpora las nuevas tecnologías para lograr mayores aprendizajes en sus alumnos.
Técnicas introductorias	▪ En cada sesión de clase expreso el objetivo a alcanzar por los alumnos. ▪ Inicio la clase recuperando aprendizajes previos y experiencias anteriores. ▪ El tema principal de la clase es presentado de un modo claro, sugestivo e interesante.	▪ En cada sesión de clase el profesor expresa el objetivo a alcanzar por los alumnos. ▪ Inicia la clase recuperando aprendizajes previos y experiencias anteriores. ▪ El tema principal de la clase es presentado de un modo claro, sugestivo e interesante.
Secuencia de contenidos	• Estructuro el trabajo sobre criterios de orden lógico y de análisis a través de una consecución de acciones que culminen en una experiencia de aprendizaje. • Generalmente coinciden los contenidos de la clase con lo registrado en la planeación.	• Estructura el trabajo sobre criterios de orden lógico y análisis a través de una consecución de acciones que culminen en una experiencia de aprendizaje. • Generalmente coinciden los contenidos de la clase con lo registrado en la planeación.
Proceso enseñanza - aprendizaje	• Identifico la consolidación de conceptos e ideas fundamentales, antes de pasar a un episodio nuevo de aprendizaje. • Provoco que el estudiante construya aprendizajes significativos, creando un ambiente de aprendizaje accesible y con un sentido de autoconfianza.	• Identifica la consolidación de conceptos e ideas fundamentales, antes de pasar a un episodio nuevo de aprendizaje. • Provoca que el estudiante construya aprendizajes significativos, creando un ambiente de aprendizaje accesible y con un sentido de autoconfianza.

Revista Iberoamericana para la
Investigación y el Desarrollo Educativo
ISSN 2007 - 7467

| Evaluación | • Evalúo los aprendizajes de acuerdo con los objetivos establecidos en la planificación.
• Informo a los estudiantes la forma de evaluar, fijando las tareas, los productos que se deben elaborar, el tipo de evaluación que se va a utilizar, etc. | • Evalúa los aprendizajes de acuerdo con los objetivos establecidos en la planificación.
• Informa a los estudiantes la forma de evaluar, fijando las tareas, los productos que se deben elaborar, el tipo de evaluación que se va a utilizar, etc. |

Fuente: Elaboración propia

Planning

**Figura 5.** Comparativo: planificación
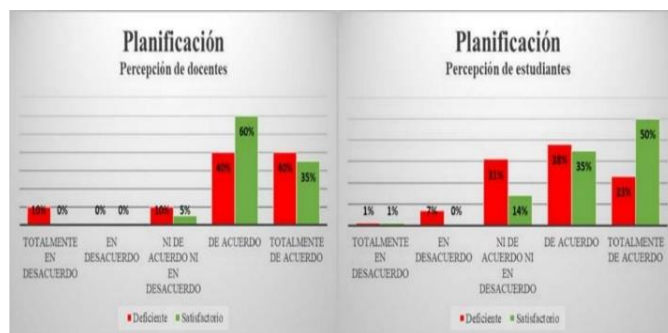
Fuente: Elaboración propia

With respect to the planning unit of analysis, the results show, from both points of view, that it is the teachers of the satisfactory block who obtain the best percentages. On the other hand, from the category of teachers of the deficient block, the results are lower, since it is evident that the rest are located mainly in indecision (31% in students and 10% in teachers), as well as in disagreement (8% in students and 10% in teachers).

Introductory techniques

Figura 6. Comparativo: técnicas introductorias
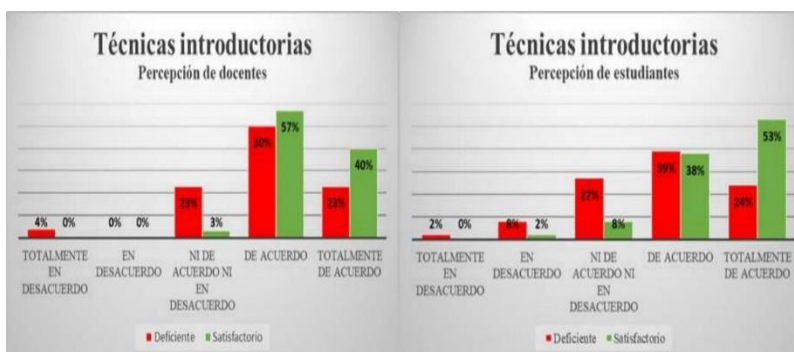
Fuente: Elaboración propia

In the introductory techniques analysis unit of Figure 6, a higher percentage is perceived in the satisfactory block from both points of view. One aspect that draws attention is the levels of indecision in the deficient category (27% from the point of view of the students and 23% of the teachers). The percentage that disagrees is also significant, mainly in the deficient category, with a total of 10% of the students and 4% of the teachers.

Learning environment

In this variable, students have a positive perception of teachers with satisfactory results, since they corroborate the statement that teachers encourage their effective participation, maintain a tension-free class climate and accept different points of view; Compared with the deficient block, there is a higher percentage in the indecision and in the aspects of disagreement.

**Figura 7.** Comparativo: ambiente de aprendizaje
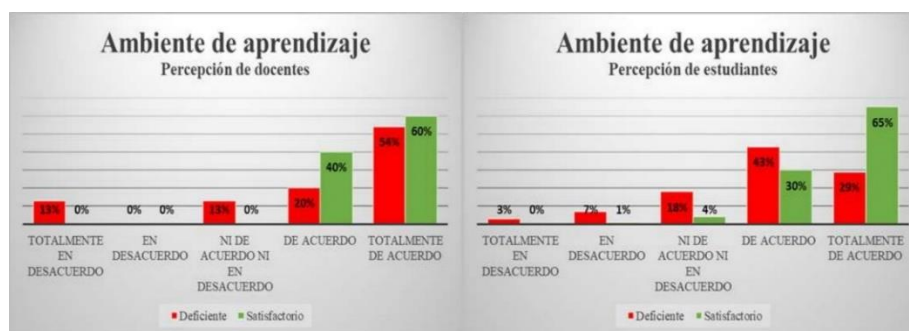
Fuente: Elaboración propia

In figure 7 the balance is clearly favorable for the block of satisfactory teachers, since the effective participation of the students is valued by promoting optimal learning environments. In the deficient category, a considerable percentage is identified in indecision (13% in teachers and 18% in students), in addition to percentages in disagreement (13% in teachers and 10% in students).

Sequence of contents

In this regard, the balance is tilted for the satisfactory block, specifically for the elements to organize the class and create an atmosphere conducive to learning. At the same time, the organization of classes of successful teachers is well perceived by students.

Figura 8. Comparativo: secuencia de contenidos
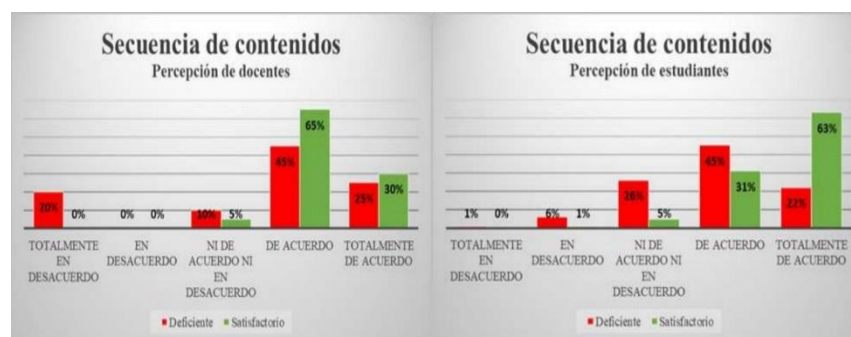
Fuente: Elaboración propia

Figure 8 shows a favorable balance towards the group of teachers in the satisfactory category. This means that they perform well in the assessment, characterized by a relevant sequence of content. For its part, the deficient block shows a lower percentage (25% of students and 10% of undecided teachers). The percentage of 20% of teachers and 7% of students who disagree with the fact that they carry out an adequate sequence of contents is also notable.

Teaching-learning process

In this indicator the balance is tilted for the satisfactory block because the teachers show a constant positive perception of the items established in the questionnaire, preferably of appropriation of knowledge by the students before continuing with other topics, as can be seen in figure 9.

**Figura 9.** Comparativo: proceso de enseñanza-aprendizaje
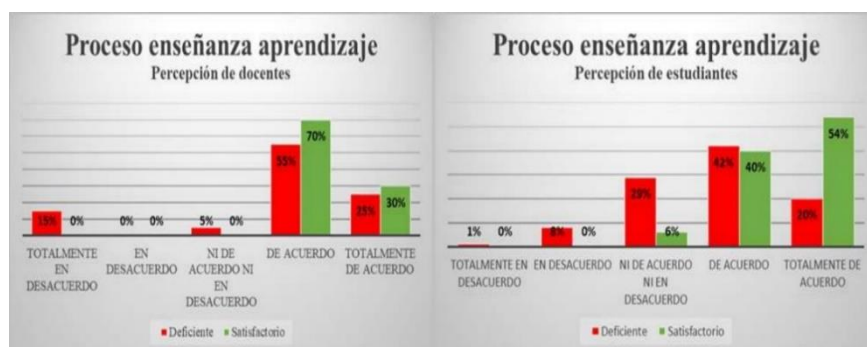
Fuente: Elaboración propia

The previous results show a high percentage of approval from both the teachers themselves and the students that they carry out optimal teaching-learning processes. Only 6% of students are in indecision. From the deficient block a lower percentage of approval is identified (compared to the other block). Likewise, there is a high percentage of students who are in indecision (29%) and a lower percentage (9%) in disagreement. While the teachers note a minimal percentage in indecision (5%) and a notable percentage in disagreement (15%).

Evaluation

The opinions of the students about the evaluation (figure 10) tip the balance towards the teachers of the satisfactory block, specifically in the agreements for the evaluation and in the evaluation of the learning that they established in the planning; On the other hand, for the deficient block this appreciation decreases, since in the same items they show a high percentage of indecision and a considerable number of cases of disagreement are noted.

Figura 10. Comparativo: evaluación
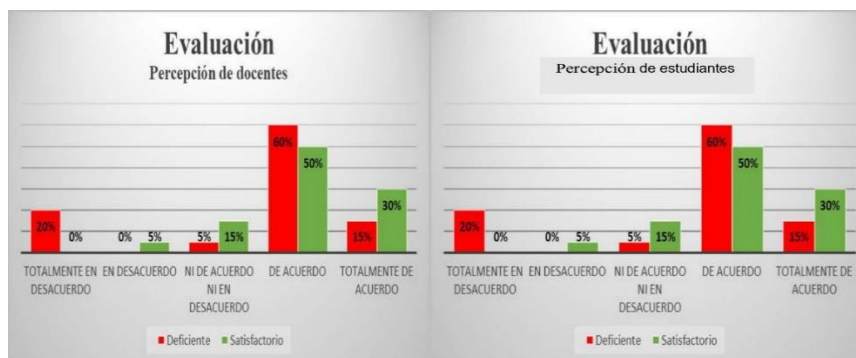
Fuente: Elaboración propia

Discussion of the results

The subject of teaching effectiveness has been studied mainly in university contexts (Arbesú and Reyes, 2015; Bain, 2004; Brombreng et al., 2007; Durán-Aponte and Durán-García, 2015; Francis, 2006; García and Medécigo, 2014 ; Herrera et al., 2019; Patiño, 2015; Sánchez and Domínguez, 2008; Villaroel and Bruna 2017), and not so much in normal schools. For this reason, the results of this work are significant and pertinent to be contrasted with other investigations, since in this way it can contribute to decision-making and the strengthening of teacher training.

The students and teachers surveyed indicate that teachers who show teaching effectiveness have disciplinary, personal and didactic-pedagogical aspects that influence their performance in front of the group. From the disciplinary dimension, the value of professional preparation (initial and continuing training) is highlighted as a determining factor in teaching effectiveness.

At the same time, both views coincide on the importance of the personal dimension as a primary element in the results of teacher evaluation and, consequently, in teacher effectiveness. The personal environment, therefore, is considered a relevant factor for teaching effectiveness in the studies of Francis (2006) and Herrera et al. (2019), so it can be indicated that it is not possible to separate the personality of the teacher from his work method.

In addition, the respondents confirm the value of the didactic-pedagogical dimension as a core part of the intervention of teachers who show teaching effectiveness, highlighting aspects such as planning, introductory techniques, learning environments, content sequences, the teaching process. teaching-learning and evaluation.

A prominent aspect is planning, which is approached from two angles: the first refers to the ability of teachers to plan, and the other to the ability to incorporate ICT in planning. Regarding the ability to plan, both perceptions (teachers and students) agree that teachers who show teaching effectiveness show greater mastery. Regarding the incorporation of ICT in planning to achieve learning in students, the perception of teachers is positive (all agree). To more clearly appreciate the characteristics identified in the effective teachers studied, Table 5 is presented:

Tabla 5. Características de los profesores eficaces de la escuela normal en estudio

N.°	Dimensión	Características
1	Disciplinar	• Tienen una preparación académica óptima. • Dominan la asignatura. • Tienen muy buen autoconcepto de su preparación profesional. • Saben realizar preguntas provocadoras.
2	Personal	• Muestran disposición a la consulta de los alumnos. • Gozan del reconocimiento de los alumnos por su humanismo.
3	Didáctico-pedagógica	• Saben realizar planeaciones. • Crean un ambiente óptimo para el aprendizaje. • Establecen un adecuado proceso de enseñanza-aprendizaje. • Saben organizar los contenidos desde la planeación hasta su ejecución. • Saben utilizar las técnicas introductorias. • Aplican una evaluación congruente. • Gozan del reconocimiento de los estudiantes por sus saberes didácticos.

Fuente: Elaboración propia

Likewise, on the subject of teaching effectiveness, Patiño (2015) uses a related term to indicate it: authentic and effective teaching; that is, authentic because the teacher demonstrates mastery of the subject, interest in the students learning, empathy, humility, simplicity and truthfulness, which would correspond to the personal dimension of this study; Furthermore, effective because he achieves deep learning in his students and has mastery of the subject and pedagogical ability, approaches that coincide with the didactic-pedagogical dimension of the present investigation.

The positive perception that effective teachers have about the reagents in the use of techniques to introduce the student to the class is notorious. Therefore, this research confirms that effective teachers have personal, disciplinary and didactic-pedagogical traits that contribute to the achievement of educational practices recognized as suitable by students.

Conclusions

This section is divided into three parts: first, the main findings found are pointed out, then the personal, disciplinary, and didactic-pedagogical characteristics of the teachers who show teaching effectiveness are described, and finally the future lines of research are recorded.

Regarding the findings, it can be stated that of the ten teachers with effective teaching, five (50%) are between 41 and 50 years old. This is very significant because it coincides with a stage of intellectual maturity, where the teacher has extensive experience and still retains the vitality for the undertaking of pedagogical proposals. Another important finding is the years of experience in teaching. Eight of the teachers who show teaching effectiveness are between 16 and more than 30 years of experience, while four teachers from the deficient block have between 6 and 15 years of experience. Therefore, it can be assured that this is a significant factor in obtaining efficiency.

Likewise, academic preparation is ratified in the study as a determining finding to obtain satisfactory results in the teacher evaluation. In this sense, eight teachers of the satisfactory block have a master's degree, one with a specialty and one with a PhD. In fact, they themselves consider that professional preparation is a factor that influences satisfactory performance, while in the case of the handicapped, three only have a bachelor's degree (even one does not have that degree).

On the other hand, effective teachers show a willingness to consult students, encourage their participation, avoid tensions in the class and accept different opinions and points of view. This serves to promote an environment of openness, freedom, and respect. In addition, they evaluate learning through a diversification of instruments that guide the process towards a formative evaluation.

Therefore, the disciplinary characteristics of teachers who show teaching effectiveness in their interventions are described below. For example, they have a professional training that meets the requirements to perform sufficiently in HEIs, all have completed master's studies related to education (of the ten teachers only one is not qualified). Except for three cases, seven teachers show initial training in education. Three have completed doctoral studies, although only one has a degree. For all the above, it is perceived that professional training, focused on the disciplinary area of education, has been a determining factor in obtaining very good results in teacher evaluation.

In addition, effective teachers are recognized by their students for mastering subjects. This is demonstrated by the item Has skills and masters the subject, clearly explains the topics, where 98% (of 480 students) agree. In addition, they receive encouraging comments such as "she really is a teacher who masters the content correctly" or "a great teacher, she is always willing to clarify doubts and listen to opinions".

In addition to the above, effective teachers manifest a successful self-concept regarding their professional training and, from the perspective of the students, there is acceptance and approval for their preparation. In addition, they know how to ask questions, which is evidenced in the reagent. Generally, they formulate clear, understandable and adjusted questions to the student and at the time of class, which achieved a favorable percentage.

On the other hand, with regard to personal characteristics, teachers who obtain satisfactory results show a willingness to consult students. Its qualities include being in a position to serve students. The item I show willingness to consult the students inside and outside the class corroborates this statement. On this subject, the perception of the students (in the option of agreement) is located at 96%, while from the perspective of the teachers (that is, from the self-perception) the same criterion is located at 100%.

Likewise, they are recognized by the students for their humanism. In other words, effective teachers are identified because they have qualities that lead them to obtain favorable comments from their students, among which we find: "He is an excellent teacher, especially a very humanist", "The teacher is excellent as a person and as a professional "and" I consider that she is a very human person and an excellent teacher ".

At the same time, in the didactic-pedagogical field, from both points of view (teachers 90% self-perception and students 94% acceptance when agreeing), teachers with satisfactory results stand out because they show competencies for the design of planning, as It is observed in the item I have / have skills to design planning, favoring student-centered learning.

Another favorable element had to do with the ability to generate an appropriate atmosphere where students learn. In fact, in all moments of the class they encourage effective and constant participation of the student, thus avoiding creating climates of tension.

In terms of establishing an adequate teaching-learning process, outstanding teachers achieve 100% approval scores from self-perception (that is, they know they are competent in their classroom performance). The two items that make up this process refer to the "consolidation of fundamental concepts" and the "construction of meaningful learning".

From the students' perception, they reach more than 90%. The following are statements from the students that corroborate the previous scores: "The teacher is excellent teaching, since as a primary school teacher she knows how to explain us more and with experiences how we should be for or in practice" and "I think she is an exemplary teacher ".

In addition, they know how to organize content from planning to execution. That is to say, they achieve that the contents of the class coincide with what is registered in the planning, which leads them to have a perfectly structured organization for the sequencing of topics in each of the classes. This statement is based on the opinion of a surveyed student: "The teacher is very good, he relies heavily on planning, following it correctly, he knows how to explain his classes well and provides a lot of support."

With regard to introductory techniques, effective teachers apply them to the benefit of their students; for example, they take into account previous learning, the clarity in the presentation of the topic and the objective to be achieved. These are some opinions of the students: "His teaching method is very good, since he always tries to make his classes more dynamic and attract the attention of the students", "he has always known how to give the class in a didactic and interesting way", and "it makes the classes very dynamic and easy to understand.

Likewise, they apply an evaluation consistent with what was planned, which is evidenced in comments such as "it evaluates learning according to the objectives established in the planning", where they reach 94% acceptance by the students and 100% in self-perception.

Finally, students recognize their didactic knowledge, which is demonstrated in opinions such as these: "The teacher is very good, has a high capacity to teach and transmit their knowledge", "is a teacher in all the extension of the word, of the ones who really care and see a way for everyone to learn".

Future lines of research

Carrying out this research allowed us to identify potentially interesting aspects that triggered ideas for the design of complementary academic works. Therefore, the future lines of research that emerge from the present study are recorded below: a) explore what refers to the calls for stimuli for the teaching performance of higher education teachers and their effect

on academic performance, and b) inquire about of the suitable instruments for evaluating the performance of Higher Education teachers in distance learning.

References

Arbesú, M. I. y Reyes, L. (noviembre, 2015). La eficacia docente: representaciones sociales de estudiantes universitarios. *Observar, Revista electrónica de didáctica de las artes* (9), 37-57. Recuperado de https://www.observar.eu/index.php/Observar/article/view/62

Bain, K. (2004). *What the Best College Teachers Do*. Massachusetts, E.U.A: Harvard University Press.

Brombreg, A., Kirsanov, E. y Longueira, M. (2007). *Formación profesional docente. Nuevos enfoques*. Argentina: Bonum.

Delors, J. (1996). *La educación encierra un tesoro*. México: UNESCO.

Durán-Aponte, E. y Durán-García, M. (octubre, 2015). Adaptación y validez de un instrumento para la evaluación de docencia universitaria: escala de desempeño docente institucional (EDDI). *Perspectiva Educacional. Formación de Profesores, 54*(1), 75-89. Recuperado de https://www.redalyc.org/pdf/3333/333333042006.pdf

Escobar-Pérez, J. y Cuervo-Martínez (junio, 2008). Validez de contenido y juicio de expertos: una aproximación a su utilización. *Avances en Medición*, *6*, 27-36. Recuperado de http://www.humanas.unal.edu.co/psicometria/files/7113/8574/5708/Articulo3_Juicio_de_expertos_27-36.pdf

Figueroa, A. (2013). Una alternativa para la evaluación de la enseñanza en educación superior desde la perspectiva de los profesores. En M. Rueda y F. Díaz-Barriga (Eds.), *Evaluación de la docencia. Perspectivas actuales* (pp. 255-282). México: Paidós Educador.

Francis, S. (noviembre, 2006). Hacia una caracterización del docente universitario "excelente": una revisión a los aportes de la investigación sobre el desempeño del docente universitario. *Revista Educación, 30* (1). Recuperado de https://www.redalyc.org/pdf/440/44030103.pdf

García, J. M. (2013). Las dimensiones de la efectividad docente, validez y confiabilidad de los cuestionarios de evaluación de la docencia: síntesis de investigación internacional. En M. Rueda y F. Díaz-Barriga (Eds.), *Evaluación de la docencia. Perspectivas actuales* (pp. 41-62). México: Paidós Educador.

García J. M. y Medécigo, A. (abril, 2014). Los criterios que emplean los estudiantes universitarios para evaluar la in-eficacia docente. *Revista Perfiles Educativos, 35*(142), 124-139. Recuperado de https://www.redalyc.org/pdf/132/13229888008.pdf

Hernández, R., Fernández, R., y Baptista, P. (2014). *Metodología de la investigación*. México: McGraw-Hill.

Herrera, L., Perendones, T. M. y Sánchez, L. C. (abril, 2019). Fortalezas personales y eficacia docente. *International Journal of Developmental and Educational Psychology*, *1*(1), 317-324. Recuperado de https://revista.infad.eu/index.php/IJODAEP/article/view/1431/1210

Organización para la Cooperación y Desarrollo Económico [OCDE] (1991). *Escuelas y calidad de la enseñanza*. Informe internacional. España: OCDE.

Patiño, H. (2015). *¿Qué hacen los docentes de excelencia? Claves para la formación humanista en la universidad*. México: Universidad Iberoamericana.

Sánchez, S. y Domínguez A. (mayo, 2008). Elaboración de un instrumento de viñetas para evaluar el desempeño docente. *Revista Mexicana de Investigación Educativa*, *13*(37), 625-648. Recuperado de http://www.redalyc.org/pdf/140/14003713.pdf

Villaroel, V. y Bruna, D. (abril, 2017). Competencias pedagógicas que caracterizan a un docente universitario de excelencia: un estudio de caso que incorpora la perspectiva de docentes y estudiantes. *Revista Formación Universitaria, 1*(4), 75-96. Recuperado de https://www.redalyc.org/pdf/3735/373552294008.pdf