

<https://doi.org/10.23913/ride.v11i22.934>

Artículos científicos

La percepción del buen profesor en universitarios: el caso de una universidad politécnica de México

*The perception of the great teacher in university: the case of
A polytech university of mexico*

*A percepção de um bom professor em estudantes universitários: o caso de
uma universidade politécnica no México*

Daniela Cruz-Delgado

Universidad Politécnica de Victoria, México

dcruzd@upv.edu.mx

<https://orcid.org/0000-0003-0289-7483>

Estela Torres-Ramírez

Universidad Politécnica de Victoria, México

etorresr@upv.edu.mx

<https://orcid.org/0000-0002-9601-7274>

Juan López-Hernández

Universidad Politécnica de Victoria, México

jlopezh@upv.edu.mx

<https://orcid.org/0000-0002-9252-6338>

Juan Enrique Lira-Uribe

Universidad Politécnica de Victoria, México

jlirau@upv.edu.mx

<https://orcid.org/0000-0002-3499-597X>

Resumen

Introducción: Los profesores universitarios son un factor clave para el desarrollo de los profesionales que requiere la sociedad. Por eso, es trascendental que las universidades cuenten con docentes competentes. Pero ¿cuáles son las características que debe reunir un buen profesor? **Objetivo:** Identificar las características y cualidades que definen al buen profesor desde la percepción de estudiantes de una universidad politécnica de México. **Método:** Se aplicó un cuestionario de 91 preguntas, con una sección de identificación general del encuestado y ocho dimensiones de las características y cualidades del buen profesor. El universo fueron 646 alumnos y la muestra probabilística estratificada por carreras impartidas de 241 elementos. **Resultado:** De las ocho dimensiones evaluadas por los estudiantes, las más importantes para definir a un buen profesor fueron las cualidades profesionales y las características de las explicaciones. Entre las cualidades profesionales, la competencia sobre su materia la perciben como la más importante; en otras palabras, el perfil del buen docente se basa en las competencias profesionales que posee, en qué tan bueno es para impartir su materia, qué tanto conoce los temas que aborda, y en su capacidad para transmitir el conocimiento de modo que el alumno adquiera un aprendizaje significativo. Así, la competencia, la responsabilidad y la buena comunicación son los tres elementos de las características profesionales que los alumnos valoran del docente. Respecto a la dimensión *características de la explicación* (segunda más importante), la mayor puntuación fue para claridad de las explicaciones, así como uso de ejemplos prácticos y reales. **Conclusiones:** Si el docente cuenta con algunas de las características de un buen profesor, deberá seguir trabajando y fomentando sus fortalezas, así como sus debilidades a través de cursos y talleres de capacitación para optimizar sus actividades de enseñanza-aprendizaje.

Palabras clave: cualidades, desempeño, evaluación docente.

Abstract

Introduction: University professors are a key factor for the development of professionals required by society. For this reason, it is essential that universities have competent professors. But are they the functions that a good teacher should meet? **Objective:** Identify the characteristics and qualities that define a good teacher from the perception of students from a polytechnic university in Mexico. **Method:** A 91-question questionnaire was applied, with a general identification section of the respondent and eight dimensions of the characteristics and qualities of a good teacher. The universe consisted of 646 students and the probabilistic sample stratified by courses taught with 241 elements. **Result:** Of the eight dimensions evaluated by

the students, the professional qualities and the characteristics of the explanations are perceived as the most important to define a good teacher. Among the professional qualities, the competence on their subject is perceived as the most important, in this way, the profile of a good teacher is based on the professional skills they have, how good they are at teaching their subject, how much they know and know of the topics it addresses and in which it has the ability to transmit knowledge optimally so that the student acquires meaningful learning. Thus, competence, responsibility and good communication are the three elements of the professional characteristics that students value from the teacher. Regarding the dimension of explanation characteristics, the second most important, the clarity of the explanations, as well as the use of practical and real examples, resulted with the highest score. Conclusions: If the teacher has some of the characteristics that make the teacher a good teacher, they should continue to work and promote the strengths that they identify in their person and improve their weaknesses through courses and training workshops, in such a way that it increases its potential and quality, which must be manifested in the teaching-learning process.

Keywords: qualities, performance, teacher evaluation.

Resumo

Introdução: O professor universitário é um fator fundamental para o desenvolvimento dos profissionais que a sociedade exige. Portanto, é essencial que as universidades tenham professores competentes. Mas quais são as características que um bom professor deve ter? **Objetivo:** Identificar as características e qualidades que definem um bom professor a partir da percepção dos alunos de uma universidade politécnica no México. **Método:** Foi aplicado um questionário de 91 questões, com uma seção de identificação geral do respondente e oito dimensões das características e qualidades de um bom professor. O universo era de 646 alunos e a amostra probabilística estratificada por carreiras ensinou 241 elementos. **Resultado:** Das oito dimensões avaliadas pelos alunos, as mais importantes para definir um bom professor foram as qualidades profissionais e as características das explicações. Dentre as qualidades profissionais, a competência na matéria é percebida como a mais importante; Em outras palavras, o perfil de um bom professor é baseado nas competências profissionais que possui, quão bom ele é no ensino da matéria, quão bem conhece os temas que aborda e sua capacidade de transmitir conhecimentos para que o aluno adquira uma aprendizagem significativa. Assim, competência, responsabilidade e boa comunicação são os três elementos das características profissionais que os alunos valorizam do professor. Em relação à dimensão características da explicação (a segunda mais importante), a maior pontuação foi para a clareza das explicações,

bem como a utilização de exemplos práticos e reais. Conclusões: Se o professor possui algumas das características de um bom professor, ele deve continuar trabalhando e promovendo seus pontos fortes, assim como seus pontos fracos, por meio de cursos de capacitação e oficinas para otimizar suas atividades de ensino-aprendizagem.

Palavras-chave: qualidades, desempenho, avaliação de professores.

Fecha Recepción: Agosto 2020

Fecha Aceptación: Mayo 2021

Introduction

University professors are a key factor for the development of professionals that society requires, hence it is essential that universities have competent teachers. But what are the qualities that a good teacher must have? The answer to this question will vary depending on the group to which it is asked, although it will be the teachers themselves who will be most interested in knowing the aspects that must be taken into account to optimize pedagogical practice.

From the normative point of view, there are diverse organisms in charge of promoting the education of the population, a human right that transforms lives, as indicated by the United Nations Educational, Scientific and Cultural Organization (Unesco, 2020). That is why, in May 2015, within the World Education Forum, the global educational community committed to “ensuring that teachers are adequately recruited, empowered, well-trained, professionally trained, motivated and supported by systems with resources, efficient and well regulated”(Unesco, 2015, p. 3). With this, it seeks to improve the quality of education, an essential element to contribute to the solution of problems such as poverty and hunger.

In this sense, at the General Assembly of the United Nations (UN) held in September 2015, world leaders approved the 2030 Agenda, which consists of 17 sustainable development goals (SDG) that seek to transform the world. Goal four, for example, focuses on “ensuring inclusive, equitable and quality education”, while goal 4.C seeks to increase “substantially the supply of qualified teachers by 2030, including through international cooperation to teacher training in developing countries, especially least developed countries and small island developing states”(UN, 2015, pp. 19-20).

To support the achievement of this goal on teachers, the International Task Force on Teachers for Education for All (EFA), in close coordination with Unesco entities and external partners of the Task Force, developed the Guide for the Development of Teaching Policies, where what they consider to be the most important dimensions for teaching policy are presented:

1. Hiring and retention of teachers.
2. Teacher education (initial and continuing).
3. Distribution.
4. Career structures / paths.
5. Employment and working conditions of teachers.
6. Rewards and salaries for teachers.
7. Teaching standards.
8. Responsibility of teachers.
9. School management.

These nine dimensions are key to any comprehensive teaching policy, although it is also worth highlighting the need to know the student's perception of pedagogical practice to identify aspects of education that can be improved.

This research, therefore, focuses on points seven and eight listed above, although examined from the perception of higher-level students who are in the last cycle of training at a polytechnic university in Mexico, an educational level that articulates technological growth, scientific and economic of a country.

Teaching standards and their responsibility are elements that must be considered in the selection and hiring processes of university professors, hence there is a need to specify the characteristics and qualities that good teachers must have. In this sense, the National Development Plan 2013-2018, in Mexico, endorses the priority of quality education by including it as one of its five national goals, where it indicates that the country's development possibilities depend on quality education . This purpose is consistent with the provisions of the General Education Law, whose goal is to guarantee the right of access to education established in the Political Constitution of the United Mexican States, recognized in its article 3 for the well-being it confers on all people. (Official Gazette of the Federation [DOF], 2021). In short, the country's higher education seeks to promote, through support policies and programs, the necessary conditions for Mexican society to receive quality university education (Ministry of Public Education [SEP], 2011).

In this context, there are various investigations that analyze the factors that make teachers provide quality education. For example, Miranda (2007) points out that the quality of life of a country is closely linked to the quality of its educational system, a space where the teacher has an essential role, since he is the one who trains the new generations every day. Teachers, therefore, are a determining factor in the quality of the results of the teaching-learning process, whose primary objective is the development of students' competencies through flexible educational approaches that seek to respond to the requirements of the production process, the

forms of labor organization, the new information technologies and the permanent and innovative updating of every profession (Torres-Rivera, Badillo-Gaona, Valentin-Kajatt y Ramírez-Martínez, 2014).

Likewise, Ruiz-Bueno, Mas-Torelló, Tejeda-Fernández and Navío-Gámez (2008) point out that the higher education teacher goes from being a transmitter of knowledge to a facilitator, tutor and manager of learning, while Cardona-Rodríguez, Barrenetxea-Ayesta, Mijangos-del-Campo and Olaskoaga-Larrauri (2009) consider that every teacher must know and develop new roles different from the traditional ones in the classroom, such as directive, transactional, transformational, shared leadership and also the negotiation of conflicts.

For his part, Santos-Guerra (1991) mentions that the higher-level teacher must not only master his discipline, but also know what happens in the classroom and how students learn to implement appropriate intervention strategies according to each context. In this sense, Hamer-Flores (2013), Tarabay-Yunes (2009) and Rocha-Chávez (2012) managed to identify a series of characteristics that a competent teacher must have: open to communication with students, organized in their classes, clear in his explanations, open to accepting corrections from the students, able to assess the student's effort and to use a continuous, punctual and demanding evaluation system, among others.

Now, from the students' point of view, it can be said that they qualify a good teacher from different perspectives. Cabalín-Silva, Navarro-Hernández and Zamora-Silva (2010) point out that for students who are in the last year of the curriculum, the essential attributes of the university professor must be responsibility, respectfulness and empathy, intelligence, punctuality, kindness, commitment and motivation.

Sayós, Pagés, Amador and Jorba (2014), Abadía-Valle et al. (2015) and Merellano-Navarro, Almonacid-Fierro, Moreno-Doña and Casto-Jaque (2016) agree that a university professor is the manager of knowledge and learning activities, hence he must be creative, with the ability to innovate, socializer and generator of attitudes; also, a professional and human model to imitate, which conceives learning as something emotional and not only cognitive, capable of working in groups and using new technologies appropriately, as well as managing and investigating their own teaching. That is to say, the students not only value the competitiveness and professionalism of the teacher as a pedagogue, but also show interest in interpersonal, formative-pedagogical, humanistic-emotional and ethical-moral features, highlighting at all times the centrality in student learning (Gutiérrez, 2017).

For their part, Hickman, Alarcón, Cepeda, Cabrera and Torres (2016) indicate that students mainly value teacher knowledge, which supports the idea that good teachers incorporate professional knowledge into their teaching practice (Vaillant and Siqueira, 2017),

while Yurén, García-García, Escalante Ferrer, González-Barrera and Velázquez Albavera (2020) point out that teachers estimate more the ways of relating to students, and Valencia (2019) points out that “what society longs for they are men and women devoted to their passions and who know how to transmit them ”(p. 10).

Now, aware that teachers are the main actors vis-à-vis the students, we consider that it is extremely important to evaluate the teacher based on the students' perception. Therefore, the general objective of this study was to identify the attributes and qualities that characterize a good teacher from the perception of the students of the last training cycle of a polytechnic university in Mexico. In this way, we try to find areas of opportunity to raise their potential and quality in the teaching-learning process.

The hypothesis put forward was that professional characteristics are those that students consider to be of greatest importance, since the competence of the teacher depends on them to effectively teach their chair and to generate meaningful learning. To test the hypothesis, the survey method was applied, through a structured questionnaire, with a Likert-type scale, as detailed below.

Methodology

Description of the unit of analysis

The Polytechnic University of Victoria (UPV) has an educational offer focused on five specialties: Mechatronics Engineering, Information Technology Engineering, Manufacturing Technology Engineering, Automotive Systems Engineering and the Bachelor's Degree in Administration and Management of Small and Medium Enterprises . It also offers master's degree programs in Engineering and master's degree in Renewable Energies, which allows meeting the demand of the industrial, commercial and service sectors.

The role of the professor in the university is decisive for the fulfillment of the study plans and programs; This forces them to reflect on their own professional competencies and their teaching abilities to carry out the teaching-learning process. The educational model of the university conceives the professor as an agent of renewal and change, as a facilitator and mediator between the student's knowledge and learning. Through their teaching work, teachers help students learn to learn.

The teacher's profile considers four dimensions necessary to comply with the development of the competencies established in the professional profiles: domain of their discipline (work experience, research and technological development, and preservation and

dissemination of culture), personal characteristics (skills such as knowing hear and accept suggestions, know how to clearly determine the capacities associated with each learning unit, establish commitments and fulfill them, and promote environments that facilitate learning and the appropriation of competences), teaching competences (competences for the management of learning techniques that motivate to students so that, based on their experience, they print a different meaning to teaching, that is, that they have a vocation to teach and to learn from students, in a process of mutual enrichment) and technological competences (related to the use of of educational software, electronic presentations and layout for to apply the various educational technologies).

Instrumento para recabar la información

Through the survey method, a questionnaire was applied as an instrument for obtaining information to students of the five careers offered and who were in the last cycle of training at a polytechnic university. Polytechnic universities in Mexico have a divided study plan of ten semesters. The population under study corresponds to the last training cycle, that is, students from seventh to tenth semester. Students from the first semesters were omitted from the study universe because a large number of them come from the traditional educational model, and not from the competency-based model; Therefore, the implicit objective was to identify the perception of the students immersed in this educational model.

646 students were available, and a test population of 241 students was selected through stratified probability sampling; the strata were defined by the careers to which the students belong (table 1). A margin of error of 5% and a confidence level of 95% are assumed. The reliability analysis of the instrument resulted in a Cronbach's alpha value of 0.923.

Tabla 1. Muestra estratificada por carrera

Especialidad	Frecuencia	Porcentaje	Porcentaje válido	Porcentaje acumulado
Pymes	65	27.0	27.0	27.0
ITI	60	24.9	24.9	51.9
ITM	37	15.4	15.4	67.2
IM	58	24.1	24.1	91.3
ISA	21	8.7	8.7	100.0
Total	241	100.0	100.0	

Fuente: Elaboración propia

The questionnaire was made up of a section to identify the respondent (five items) and eight dimensions (Table 2) on the qualities of a good teacher (91 items), according to Hamer-Flores (2015), being structured with 91 items, integrated by dimension with the number of items indicated in Table 2. The scale used in the instrument was a five-point Likert type (1 = very little important and 5 = very important). The survey was applied in the classrooms of the students, with the prior authorization of the teachers.

Tabla 2. Dimensiones de las características y cualidades de un buen profesor

Dimensión	Cantidad de reactivos
Cualidades personales del profesor	14
Cualidades profesionales del profesor	9
Características de la metodología de enseñanza del buen profesor	8
Características de las explicaciones del buen profesor	14
Los métodos que debería utilizar el buen profesor	15
Materiales y recursos que debería utilizar el buen profesor	9
Métodos de evaluaciones que debería utilizar el buen profesor	13
Características de la evaluación que debería utilizar el buen profesor	9
Total	91

Fuente: Elaboración propia

The information was processed and analyzed with the IBM Statistical Package for Social Science (SPSS) software, version 20. The data analysis techniques consisted of frequency analysis, bar diagram and one-way analysis of variance (Anova).

Results

The gender of the students in the last training cycle was 60.2% male and 38.2% female (1.6% of the population did not answer). As shown in table 3, of the five educational programs, in four of them male students prevail, and only in the bachelor's degree in Administration and Management of SMEs the female predominates, probably due to cultural stereotypes that establish that there are professions exclusively for women and men, although this should be deepened in future research.

Tabla 3. Género de los estudiantes por carrera

		Carrera					Total
		Pymes	ITI	ITM	IM	ISA	
Género	Masculino	22	35	21	48	19	145
	Femenino	43	23	15	9	2	92
Total		65	58	36	57	21	237

Fuente: Elaboración propia

The surveyed students consider that the most important personal qualities that a good teacher possesses are respect for students, honesty and the ability to listen; on the contrary, sympathy and being funny are less important (table 4).

Tabla 4. Grado promedio de importancia que otorgan los estudiantes a las cualidades personales del buen profesor

Cualidades personales del buen profesor	Media
1. Simpatía	3.8
2. Buen humor	4.0
3. Carácter agradable	4.2
4. Divertido	3.4
5. Abierto a los alumnos	4.6
6. Comprensivo	4.4
7. Honesto	4.7
8. Buena persona	4.3
9. Que respete a los alumnos	4.8
10. Con buen trato	4.6
11. Con empatía	4.3

12. Con capacidad de escucha	4.7
13. Que dé confianza	4.5
14. Atento	4.4
Media global	4.3

Fuente: Elaboración propia

Professional qualities were rated with the highest scores by students. Competence in their subject is perceived as very important, followed by responsibility and good communication (table 5).

Tabla 5. Grado promedio de importancia que otorgan los estudiantes a las cualidades profesionales del buen profesor

Cualidades profesionales del buen profesor	Media
1. Competencia. Sabe su materia	4.9
2. Responsabilidad	4.8
3. Seriedad	4.0
4. Inteligencia	4.6
5. Buena comunicación	4.7
6. Puntualidad	4.3
7. Experiencia profesional	4.4
8. Prepara las clases	4.5
9. Respeta los horarios de tutoría y asesoría	4.3
Media global	4.5

Fuente: Elaboración propia

Regarding the teaching methodology, the characteristics that were classified as most important for the students were to establish relationships between the concepts and topics of the subject (table 6).

Tabla 6. Grado promedio de importancia que otorgan los estudiantes a la metodología de enseñanza del buen profesor

Metodología de enseñanza	Media
1. Parte de lo aprendido en cursos anteriores	4.2
2. Establece relaciones entre los conceptos y temas de la asignatura	4.7
3. Enseña estrategias para trabajar la asignatura y aprender (técnicas de estudio, preparación de exámenes, hablar en público...)	4.4
4. Fomenta la participación e implicación de los alumnos	4.3
5. Promueve el trabajo individual del alumno	4.0
6. Utiliza una metodología diversa y adapta a las características de los alumnos	4.3
7. Reduce la clase magistral a lo estrictamente necesario	3.9
8. Utiliza los recursos de apoyo necesarios (Power Point, videos...)	4.3
Media global	4.3

Fuente: Elaboración propia

The quality of the explanations is one of the characteristics that students consider to be of greatest importance in a good teacher, since it depends on whether their learning is significant and that they understand the topics addressed in class (table 7).

Tabla 7. Grado promedio de importancia que otorgan los estudiantes a la calidad de la explicación del buen profesor

Calidad de la explicación	Media
1. Claras	4.9
2. Sencillas y con vocabulario comprensible	4.6
3. Precisas	4.6
4. Amenas	4.3
5. Divertidas	3.8
6. Motivadoras	4.3
7. Interesantes	4.7
8. Haciendo uso de ejemplos prácticos y reales	4.7
9. Destacando los conceptos básicos	4.4
10. Con buen orden	4.4
11. Adecuadas a un ritmo, dando tiempo para el aprendizaje	4.5
12. Con volumen y tono de voz adecuado	4.5

13. Dedicar un tiempo breve a recordar aprendizajes de las clases anteriores	4.3
14. Relacionar teoría y práctica	4.6
Media global	4.5

Fuente: Elaboración propia

The various teaching methods used by teachers in the classroom are decisive in the acquisition of knowledge by students. The resolution of doubts is a factor of great importance and, consequently, one of the characteristics that every teacher must work best with (Table 8).

Tabla 8. Grado promedio de importancia que otorgan los estudiantes a los métodos didácticos empleados por el buen profesor

Métodos didácticos	Media
1. Método socrático-mayéutico	4.4
2. Análisis de casos	4.1
3. Aprendizaje por descubrimiento	3.9
4. Aprendizaje significativo (no memorístico, estableciendo relaciones entre lo nuevo y lo viejo)	4.3
5. Uso de esquemas y resúmenes en la pizarra que son explicados luego	3.9
6. Uso de preguntas referidas a los contenidos para que el alumno participe	4.1
7. Lección magistral	3.6
8. Seminarios	3.5
9. Explicación de un contenido de diversas maneras	4.2
10. Resolución de dudas en clase	4.9
11. Resolución de dudas en tutoría y asesoría	4.5
12. Método tradicional	4.3
13. Trabajo sobre temas de actualidad	4.5
14. Exigencia de lecturas previas de los alumnos	3.9
15. Exigencia de exposiciones orales de los alumnos	3.7
Media global	4.1

Fuente: Elaboración propia

Clear and simple study materials are of greater importance for students, followed by notes that are adjusted to the learning that the student must obtain (Table 9).

Tabla 9. Grado promedio de importancia que otorgan los estudiantes a los materiales y recursos didácticos utilizados por el buen profesor

Materiales y recursos didácticos	Media
1. Material de estudio claro y sencillo	4.6
2. Referencias bibliográficas precisas	4.1
3. Apuntes de calidad ajustados a lo que hay que aprender	4.4
4. Apuntes en la Web para no tener que copiar todo el tiempo	4.0
5. Modelos de exámenes	4.0
6. Ejercicios resueltos	4.0
7. Medios audiovisuales (videos, gráficos, diapositivas tradicionales, multimedia, pizarra, etc.)	4.3
8. Medios escritos (artículos de periódicos, guiones, lecturas relacionadas, etc.)	3.7
9. Uso de material complementario para el aprendizaje (esquemas, resúmenes, fotocopias)	3.9
Media global	4.1

Fuente: Elaboración propia

For the surveyed students, the assessment that the teacher gives to the practical work and the student's effort is essential. The application of a single final exam was less important within the evaluation methods (Table 10). The assessment of attendance both to class and to tutorials and advice for the resolution of doubts are aspects little valued.

Tabla 10. Grado promedio de importancia que otorgan los estudiantes a los métodos de evaluación aplicados por el buen profesor

Métodos de evaluación	Media
1. Solo examen final	2.5
2. Exámenes parciales	3.9
3. Valoración de trabajos	4.3
4. Valoración de la asistencia a clase	3.4
5. Valoración de la asistencia a las tutorías y asesorías	3.0
6. Valoración de las actividades diarias de clase	4.0
7. Valoración del esfuerzo del alumno	4.3
8. Valoración del interés del alumno	4.3
9. Valoración de la realización de prácticas	4.4
10. Valoración de un portafolios	3.4
11. Valoración de resúmenes	3.4
12. Ausencia de exámenes y sustituciones por otros métodos	3.7
13. Realizar un proyecto y defenderlo al final del curso	4.3
Media global	3.8

Fuente: Elaboración propia

Making the evaluation criteria and procedures known is highly valued by students (table 11). In this regard, Nowakowski (2007) and Abadía-Valle et al. (2015) highlight the importance of qualities such as professionalism, conscientiousness and objectivity, as well as the use of evaluation procedures consistent with the objectives of the subject. In other words, if students are informed about what is expected of them, they can also define their individual study strategies.

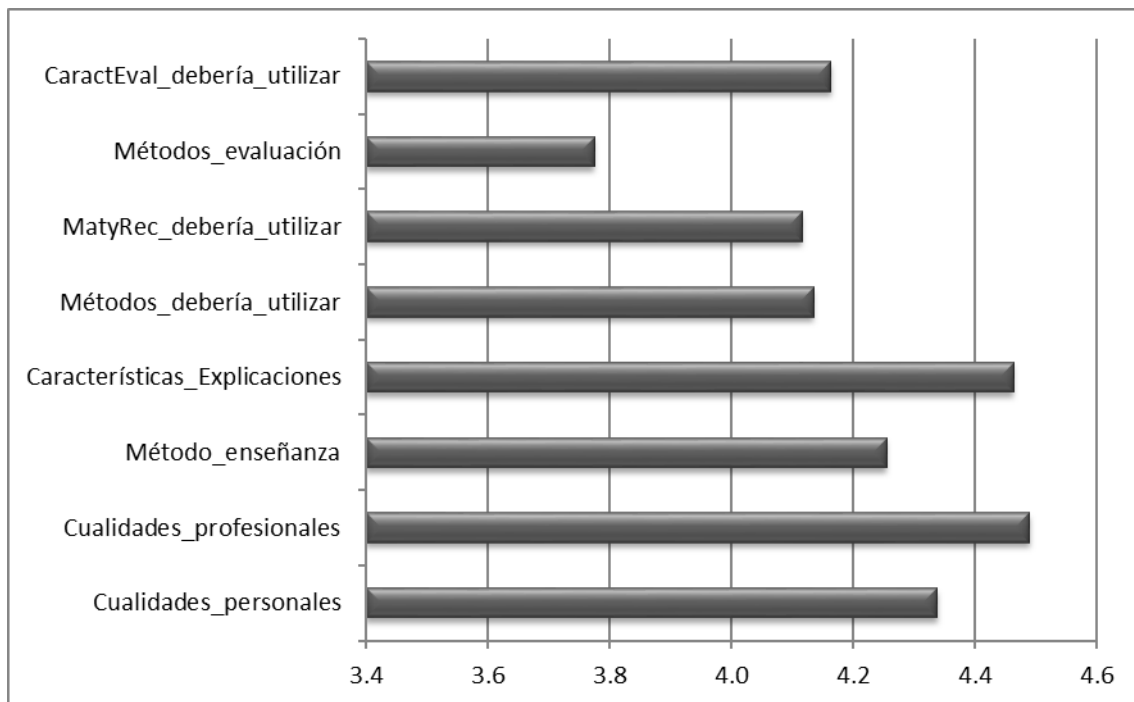
Tabla 11. Grado promedio de importancia que otorgan los estudiantes a las características de la evaluación realizada por el buen profesor

Características de la evaluación	Media
1. Continua (no un único examen final)	4.2
2. Formativa	4.5
3. Justa, adecuada a lo trabajado en la asignatura	4.5
4. Flexible, que ofrezca opciones diversas para aprobar	4.3
5. Que exija lo básico, que no exija demasiado	3.7
6. Con elevada exigencia para el alumno	3.6
7. Negociando entre los alumnos y el profesor	3.5
8. Valorando no solo la memorización, sino el razonamiento y el aprendizaje significativo	4.5
9. Que los alumnos conozcan los criterios y procedimientos de evaluación	4.6
Media global	4.2

Fuente: Elaboración propia

So far, the results obtained for each of the dimensions of the competencies and qualities that characterize a good teacher are analyzed. Figure 1 shows the average degree of importance that students perceive that each of the dimensions has and that a good teacher should have. The professional qualities and the characteristics of the explanations are perceived as the most important to define a good teacher. The profile of a good teacher is based on the professional skills they have, on how good they are at teaching their subject, how much they know and know about the topics they address and on having the ability to transmit knowledge optimally in such a way that the student acquires meaningful learning.

Figura 1. Grado promedio de importancia de las dimensiones sobre las características de un buen profesor



Fuente: Elaboración propia

Table 12 shows whether there are significant differences or not, with a significance level of 95%, according to the gender of the respondent. The previous results coincide with Villalobos-Clavería, Melo-Hermosilla and Perez-Villalobos (2010), who show in their study significant differences in that women have higher expectations than men regarding the educational process.

Tabla 12. Grado de importancia promedio de las características que definen al buen profesor según el género del estudiante

Dimensión	Media		
	Femenino	Masculino	Global
Cualidades profesionales	4.54	4.45	4.48
Métodos que debería utilizar	4.16	4.11	4.13
Materiales y recursos didácticos que debería utilizar	4.12	4.11	4.11
Métodos de evaluación	3.81	3.75	3.77
Características de la evaluación que debería utilizar	4.20	4.14	4.16
Cualidades personales del profesor	4.48	4.24	4.33

Características de la metodología de enseñanza del buen profesor	4.36	4.19	4.25
Características de las explicaciones del buen profesor	4.56	4.39	4.46

No existen diferencias estadísticamente significativas ($p < 0.05$)

Fuente: Elaboración propia

No significant differences were found, with a confidence level of 95%, by specialty of the respondent in any of the dimensions, as shown in Table 13.

Tabla 13. Grado de importancia promedio de las características que definen al buen profesor según la especialidad del estudiante

	Pymes	ITI	ITM	IM	ISA	Global
Cualidades_personales	4.4	4.6	4.3	4.2	3.8	4.3
Cualidades_profesionales	4.6	4.6	4.3	4.4	4.4	4.5
Método_enseñanza	4.4	4.4	4.0	4.1	4.2	4.3
Características_explicaciones	4.5	4.6	4.5	4.4	4.1	4.5
Métodos_debería_utilizar	4.2	4.2	3.9	4.1	4.1	4.1
MatyRec_debería_utilizar	4.1	4.3	4.0	4.0	4.1	4.1
Métodos_evaluación	3.7	3.8	3.8	3.8	3.8	3.8
CaractEval_debería_utilizar	4.2	4.3	4.1	4.1	4.1	4.2

No existen diferencias estadísticamente significativas ($p < 0.05$)

Fuente: Elaboración propia

The absence of differences between academic programs is related to the fact that the perception depends on the personality of the students, that since their ages are concentrated in a limited range, their expectations of academic and professional training are similar, so the The importance they attach to the characteristics of the good teacher do not differ from each other.

Discussion

In this study, the professional qualities and the characteristics of the explanations were identified as the most important to define a good teacher, results that coincide with those presented by San Martín, Santamaría, Hoyuelos, Ibáñez and Jerónimo (2014), although they differ from the presented by Osuna and Luna (2008), who point out that students value technical competence (cognitive and technical skills) less or the findings of Cabalín-Silva et al. (2010), who indicate empathy, responsibility and respect as primary characteristics.

On the other hand, regarding personal qualities, the results coincide with those obtained by Gallardo-López, Sánchez-Peris, Ros-Ros and Ferreras-Remesal (2010), for whom respect and the ability to listen are fundamental characteristics of the good teacher personality, and with Luna-Serrano, Valle-Espinosa and Osuna-Lever (2010), who point out that the least important are social skills. Likewise, it differs with Cabalín-Silva et al. (2010) in which empathy is a main attribute, while in professional qualities the results are equated with those obtained by Santos-Guerra (1991) as well as Hamer-Flores (2015), Tarabay-Yunes (2009) and Merellano- Navarro et al. (2016), who coincide in emphasizing that the teacher must be a connoisseur of the discipline that he develops, a specialist in his branch.

Regarding the teaching methodology, the students rated more importantly establishing relationships between the concepts and themes of the subject. This agrees with Gallardo-López et al. (2010) and Cardona-Rodríguez et al. (2009), who explain that meaningful learning should be encouraged. Consequently, the teacher goes from being a transmitter of knowledge to a facilitator who seeks teaching strategies to face the diversity of social and productive requirements of students. The purpose is to reduce the master class (lower score according to the perception of the students) and promote the use of appropriate methodologies to consolidate knowledge (Sayós et al., 2014).

Another aspect rated negatively was promoting individual student work, since a participatory dynamic is preferred in the classroom (Casero-Martínez, 2010). However, it differs with Luna-Serrano et al. (2010), who point out that the least important thing is teamwork.

Like Tarabay-Yunes (2009), Casero-Martínez (2010), Abadía-Valle et al. (2015) and Merellano-Navarro et al. (2016), the results indicate that in order to be a good teacher, the contents of the subject must be explained in a clear and orderly way. In fact, the student must conceive learning as something emotional, and not just cognitive, using motivating explanations (Gallardo-López et al., 2010). In addition, the good teacher must advise, guide (Ruiz-Bueno et al. 2008) and define the intervention strategies and timely support according to each context (Santos-Guerra, 1991).

On the other hand, it is imperative to include in the exercise of teaching a professional didactics designed for the student and according to the requirements of the subject, with sufficient didactic tools and technologies (Núñez-Rodríguez, Fajardo-Ramos and Químbayo-Díaz, 2010; Rocha -Chávez, 2012). In the analysis carried out in this investigation, clear and simple study materials are of greatest importance to students.

Regarding the evaluation methods, for the students surveyed, the assessment that the teacher gives to the practice and the student's effort is essential, which is consistent with what was indicated by Hamer-Flores (2015) and Gallardo-López et al. . (2010). In fact, the application of a single final exam was of less importance within the evaluation methods, which also coincides with what was stated by San-Martín et al. (2014). The assessment of attendance both to class and to tutorials and advice for the resolution of doubts are aspects little valued. In other words, if the student learns in the classroom, no counseling is required and attendance is not a determining factor in the student's level of learning. This means that justice and coherence must be shown when designing the evaluation and review criteria (Casero-Martínez, 2010).

In the evaluation, the teacher plays the role of directive leader of each subject, since he is the one who assumes the leadership and clarity of the criteria valued for the achievement of the goals and objectives, which would avoid conflicts caused by the omission of information to the students. students (Cardona-Rodríguez et al., 2009).

Finally, one of the main limitations of the present study was that it was carried out only with students from the last school year; therefore, a comparative investigation can be carried out between the other cycles to detect differences and similarities in terms of the criteria valued by students regarding the profile of a good teacher.

Conclusions

The objective of this study was achieved by identifying the characteristics and qualities that characterize a good teacher according to the perception of the student in the last training cycle of the polytechnic university under analysis. Likewise, the areas of opportunity detected were multiple, so that each teacher will have the possibility of contrasting the results taught here with her own pedagogical practice. If he has some of the characteristics that make the teacher a good teacher, he should continue working and promoting those strengths through training courses and workshops, which will result in the optimization of his teaching-learning process. In fact, the confirmation of the hypothesis raised indicates the importance of promoting the professional competence of the teacher, a key factor to successfully carry out the educational task.

Future Research Lines

Finally, the following lines of research are suggested: an analysis (this time from the teacher's perspective) of the qualities that define a good teacher. Likewise, a comparative study of the impact, from the perspective of the student, of the basic functions of the university and the participation of the professor in them: teaching, social projection and research; The purpose of this analysis would be to identify how important students consider that the university professor develops these functions, especially research and social projection as a means of updating and improving their teaching practice.

References

- Abadía-Valle, A. R., Bueno-García, C., Ubieto-Artur, M. I., Márquez-Cebrián, M. D., Sabaté-Díaz, S., Jorba-Noruega, H. y Pagés-Costa, T. (2015). Competencias del buen docente universitario: opinión de los estudiantes. *Revista de Docencia Universitaria*, 13(2), 363-390. Doi: <http://dx.doi.org/10.4995/redu.2015.5453>
- Cabalín-Silva, D., Navarro-Hernández, N. y Zamora-Silva, J. (2010). Concepción de estudiantes y docentes del buen profesor universitario: Facultad de Medicina de la Universidad de la Frontera. *International Journal of Morphology*, 28(1), 283-290. Doi: <http://dx.doi.org/10.4067/S0717-95022010000100042>
- Cardona-Rodríguez, A., Barrenetxea-Ayesta, M., Mijangos-del-Campo, J. J. y Olaskoaga-Larrauri, J. (2009). Concepto y determinantes de la calidad de la educación superior. Un sondeo de opinión entre profesores de universidades españolas. *Archivos Analíticos de Políticas Educativas*, 17(10). Recuperado de <http://epaa.asu.edu/epaa/>
- Casero-Martínez, A. (2010). ¿Cómo es el buen profesor universitario según el alumnado? *Revista Española de Pedagogía*, 68(246), 223-242. Recuperado de <http://revistadepedagogia.org/index.php/es/ano-2010/61-no-246-mayo-agosto-2010/414-icomo-es-el-buen-profesor-universitario-segun-el-alumnado>
- Diario Oficial de la Federación [DOF] (2021). Ley Federal de Educación. Recuperado de https://www.dof.gob.mx/nota_detalle.php?codigo=5573858&fecha=30/09/2019
- Gallardo-López, B., Sánchez-Peris, F., Ros-Ros, C. y Ferreras-Remesal, A. (2010). Estilos docentes de los profesores universitarios: la percepción de los buenos profesores - Facultad de Filosofía y Ciencia de la Universidad de Valencia, España. *Revista Iberoamericana de Educación*, 51(4). Recuperado de <http://rieoei.org/3236.htm>
- Gutiérrez, D. (2017). Buenas prácticas desde la percepción de los estudiantes de la licenciatura en educación para el medio indígena. *Educación y Humanismo*, 20(34), 258-270. Doi: <https://doi.org/10.17081/eduhum.20.34.2869>
- Hamer-Flores, A. (2015). La percepción del buen profesor en alumnos de nuevo ingreso a la enseñanza universitaria: el caso de ETEA (Córdoba). *Revista Complutense de Educación*, 26(2), 227-240. Recuperado de <http://revistas.ucm.es/index.php/RCED/article/view/41534>
- Hickman, H., Alarcón, M., Cepeda, M., Cabrera, R. y Torres, X. (2016). Significado de buen profesor y de evaluación docente por estudiantes y maestros universitarios. La técnica de redes semánticas. *Sinéctica*, (47). Recuperado de <https://sinectica.iteso.mx/index.php/SINECTICA/article/view/636>

- Luna-Serrano, E., Valle-Espinosa, M. C. y Osuna-Lever, C. (2010). Los rasgos de un “buen profesional”, según la opinión de estudiantes universitarios en México. *Revista Electrónica de Investigación Educativa*, 12. Recuperado de <http://redie.uabc.mx/redie/article/view/254>
- Merellano-Navarro, E., Almonacid-Fierro, A., Moreno-Doña, A. y Casto-Jaque, C. (2016). Buenos docentes universitarios. ¿Qué dicen los estudiantes? *Educação e Pesquisa*, 42(4), 937-952. Doi: <http://dx.doi.org/10.1590/S1517-9702201612152689>
- Miranda, C. (2007). Educación superior, mecanismos de aseguramiento de la calidad y formación docente: un debate pendiente en Chile. *Estudios Pedagógicos* 33(1), 95-108. Recuperado de http://mingaonline.uach.cl/scielo.php?script=sci_abstract&pid=S0718-07052007000100006&lng=es&nrm=iso&tlng=es
- Nowakowski, P. (2007). Trabajo del profesorado universitario según lo evalúan los estudiantes. *Educação*, 30(63), 547-556. Recuperado de <http://revistaseletronicas.pucrs.br/ojs/index.php/faced/article/view/2749>
- Núñez-Rodríguez, M. L., Fajardo-Ramos, E. y Químbayo-Díaz, J. H. (2010). El docente como motivador: percepciones de los estudiantes de la Facultad de Ciencias de la Salud de la Universidad de Tolima (Colombia). *Salud Uninorte*, 26(2), 260-268. Recuperado de <http://rcientificas.uninorte.edu.co/index.php/salud/article/viewArticle/990/5810>
- Organización de las Naciones Unidas [ONU] (2015). *Asamblea General-Transformar nuestro mundo: la Agenda 2030 para el desarrollo sostenible*. Nueva York: ONU. Recuperado de <http://www.un.org/es/comun/docs/?symbol=A>
- Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura [Unesco]. (2015). *Guía para el desarrollo de políticas docentes*. París: Unesco.
- Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura [Unesco] (2020). *La educación transforma vidas*. Recuperado de <https://es.unesco.org/themes/education>
- Osuna, C. y Luna, E. (2008). Características de ser un buen profesional de Ingeniería en la Universidad Autónoma de Baja California, México. *Formación Universitaria*, 1(1), 29-36. Doi: 10.4067/S0718-50062008000100005
- Rocha-Chávez, R. (2012). La docencia universitaria desde la perspectiva de los alumnos frente a la de los profesores. *Innovación Educativa*, 12(58), 91-118. Recuperado de <http://www.innovacion.ipn.mx/Revistas/Paginas/Revista-Innovacion-Educativa-58.aspx>
- Ruiz-Bueno, C., Mas-Torelló, O., Tejeda-Fernández, J. y Navío-Gámez, A. (2008). Funciones y escenarios de actuación del profesor universitario. Apuntes para la definición del perfil basado en competencias. *Revista de la Educación Superior*, 37(2). 115-132. Recuperado

- de <http://publicaciones.anui.es.mx/revista/146/4/2/es/funciones-y-escenarios-de-actuacion-del-profesor-universitario>
- San-Martín, S., Santamaría, M., Hoyuelos, F. J., Ibáñez, J. y Jerónimo, E. (2014). Variables definitorias del perfil del profesor/a universitario/a ideal desde la perspectiva de los estudiantes preuniversitarios/as. *Educación XXI*, 17(2), 193-215. Doi: 10.5944/educxx1.17.1.11486
- Santos-Guerra, M (1991). Criterios de referencia sobre calidad de proceso de enseñanza/aprendizaje en la universidad. *Revista de Enseñanza Universitaria*, 1(1), 25-47. Recuperado de http://institucional.us.es/revistas/universitaria/1/art_3.pdf
- Sayós, R., Pagés, T., Amador, J. A. y Jorba, H (2014). Ser buen docente: ¿qué opinan los estudiantes de la Universidad de Barcelona? *Revista Iberoamericana de Psicología y Salud*, 5(2), 135-149. Recuperado de <https://dialnet.unirioja.es/servlet/articulo?codigo=4762654>
- Secretaría de Educación Pública [SEP] (2011). *Educación por niveles*. http://www.sep.gob.mx/es/sep1/educacion_por_niveles
- Tarabay-Yunes, F. (2009). Cualidades docentes universitarias: de la pedagogía a la relación afectivo-comunicativa. Testimonios de estudiantes universitarios. *Revista de Teoría y Didáctica de las Ciencias Sociales*, 15, 355-377. Recuperado de <http://www.saber.ula.ve/handle/123456789/31190>
- Torres-Rivera, A. D., Badillo-Gaona, M., Valentin-Kajatt, N. O. y Ramírez-Martínez, E. T. (2014). Las competencias docentes: el desafío de la educación superior. *Innovación Educativa*, 14(66), 129-146. Recuperado de <http://www.innovacion.ipn.mx/Revistas/Paginas/revista-innovacion-educativa-no-66.aspx>
- Universidad Politécnica de Victoria [UPV] (2016). Plan de Desarrollo Institucional 2013-2020. Recuperado de <http://www.upvictoria.edu.mx/pdi/>
- Vaillant, D. y Siqueira, V. (2017). Estudiantes de ingeniería y sus percepciones sobre la enseñanza de calidad. *Actualidades Investigativas en Educación*, 17(3), 1-19. Recuperado de <https://www.redalyc.org/articulo.oa?id=447/44758585020>
- Valencia, L. (2019). Los buenos profesores: un ensayo crítico-literario sobre un arte siempre en peligro. *Acta Scientiarum. Education*, 41. Recuperado de <https://www.redalyc.org/articulo.oa?id=3033/303360435008>
- Villalobos-Clavería, A., Melo-Hermosilla, Y. y Perez-Villalobos, C. (2010). Percepción y expectativas de los alumnos universitarios frente al profesor no pedagogo. *Estudios Pedagógicos*, 36(2), 241-249. Recuperado de

http://mingaonline.uach.cl/scielo.php?script=sci_abstract&pid=S0718-07052010000200014&lng=es&nrm=iso&tlng=es

Yurén, T., García-García, F., Escalante Ferrer, A., González-Barrera, Z. y Velázquez Albavera, D. (2020). La representación del buen docente universitario entre dos enfoques: transmisivo y constructivista. *Revista Mexicana de Investigación Educativa*, 25(85), 239-265. Recuperado de <https://www.redalyc.org/articulo.oa?id=140/14064761002>

Rol de Contribución	Autor (es)
Conceptualización	Estela Torres Ramírez, Daniela Cruz Delgado, igual
Metodología	Daniela Cruz Delgado
Software	No aplica
Validación	Juan López Hernández
Análisis Formal	Daniela Cruz Delgado
Investigación	Juan López Hernández (principal), Juan Enrique Lira Uribe (apoya)
Recursos	Estela Torres Ramírez
Curación de datos	Daniela Cruz Delgado
Escritura - Preparación del borrador original	Daniela Cruz Delgado (Resultados y discusión), Estela Torres Ramírez (Marco teórico), Juan López Hernández (Discusión de resultados y conclusiones) , Juan Enrique Lira Uribe (Marco teórico)
Escritura - Revisión y edición	Daniela Cruz Delgado, Juan López Hernández, igual
Visualización	Daniela Cruz Delgado
Supervisión	Daniela Cruz Delgado
Administración de Proyectos	Daniela Cruz Delgado
Adquisición de fondos	Estela Torres Ramírez