

TEACHER LEADERSHIP AND ITS IMPACT ON ACADEMIC PERFORMANCE AMONG BUSINESS MANAGEMENT ENGINEERING STUDENTS AT ITZACATEPEC

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Abstract -- This article takes a qualitative methodological approach, using different measurement tools such as surveys, interviews, and observation to identify the factors that influence the impact of teaching leadership on the academic performance of Business Management Engineering students at the Zacatepec Institute of Technology. Based on an in-depth analysis of each participant's responses, leadership is seen to be highly relevant to the academic development of most students, as demonstrated by the comments made by students and teachers, who affirm that knowledge must always be accompanied by the motivation of those who impart it; otherwise, it loses value and is therefore fractured before it can be satisfactorily obtained by the recipients. Likewise, it is concluded that teaching practices are fundamental to achieving the competencies and, therefore, the general and specific objectives of the students, who seek, through constant guidance, not only meaningful learning but also "tools" that allow them to face their diverse contexts. For this reason, it should be noted that it is essential for any professor to have knowledge of this dominant term called leadership, and not only that, but also to have the ability to recognize what type of leader they are and whether this is appropriate for their students. In this way, and through introspection, areas of opportunity can be evaluated in depth, and thus, continuous improvement in daily teaching practice can be achieved.

Keywords: Empathy, Students, Teaching leadership, Motivation, Academic performance.

Abstract -- This article is addressed, from a qualitative methodological approach, through the implementation of different measurement instruments such as surveys, interviews, and observation to understand the factors that influence the impact of teaching leadership on the school performance of Business Management Engineering students at the Technological Institute of Zacatepec. Derived from the in-depth analysis of the responses of each participant, a great relevance of leadership is observed in the academic development of most of the students, which is demonstrated in the approaches made by the students and teachers, who affirm that knowledge must always be accompanied by the motivation of whoever imports it, otherwise, it loses value, and therefore, it is fractured before reaching its satisfactory obtaining by the recipients. Likewise, it is concluded that teaching action is essential to be able to achieve the competencies, and, therefore, the general and specific objectives of the students, who seek through constant guidance, obtaining not only significant learning, but also "tools" that allow them to face their various contexts. Therefore, it should be noted that it is essential that any professor has knowledge about this dominant term called leadership, and not only that, but that they also have the ability to recognize what type of leader they are and if this is beneficial. For students, in this way, and through introspection, areas of opportunity can be evaluated in depth, and therefore, continuous improvement can be made in daily teaching practice.

Key words – Empathy, Students, Teacher leadership, Motivation, School performance.

INTRODUCTION

From ancient times to the present day, academic performance has been a topic of utmost importance, especially when it comes to investigating the factors that influence whether it is satisfactory or, on the contrary, unfavorable. Currently, this term is approached from different fields and perspectives, with one in particular standing out: **teacher leadership**, on which this research is based. Through daily classroom practice, it has been demonstrated on more than one occasion that if the sender is not prepared to send a coded message based on knowledge, timely guidance, responsibility, and respect for those who receive it, it will be difficult for the decoders, in this case, the students, to decipher it, and therefore, the communication process that seeks to achieve the acquisition of knowledge will fail. Therefore, this paper seeks to demonstrate the importance of teacher leadership in school performance, with the aim of ensuring that this term is considered in future studies, which can assert more broadly and on a larger scale the impact that the teaching profession can have on current and future generations, establishing strategies that not only focus on solving problems of failure based on absenteeism, irresponsibility, lack of economic resources, or the family contexts of students, but can go further, offering not only strategies, but techniques and tools that lead each teacher to perform satisfactorily as leaders, this being a fundamental necessity for the educational, academic, and, consequently, professional fields.

THEORETICAL FRAMEWORK

Academic education is a term that has a significant impact in any context, as it lays the foundations for individuals' personal, cultural, social, occupational, or professional development [1]; therefore, it is important to understand the meaning of the concepts "teacher" and "student," as they are key to understanding the bond of knowledge that exists between them; According to the Royal Spanish Academy, the first term is defined as: "an individual who promotes learning and shares knowledge with students"; and the second as: "a person who studies at an educational institution" [2]. Both share communication processes that lead to a clear objective, which is to impart and acquire meaningful knowledge. To achieve this goal, different variables are required, including teaching ethics, which is reflected in the way a teacher teaches. An ethical teacher applies fair and inclusive methods, creating an environment where all students have the same opportunities to learn and grow in a safe and respectful setting. This not only encourages

learning, but also contributes to shaping citizens committed to social welfare.

The academic sphere is not only a teaching-learning process; it goes beyond that. Over time, academic performance has been an important factor in understanding the different elements that are related and are fundamental for teachers. Academic performance is the level of knowledge and academic abilities demonstrated by students in a given area or subject, expressed through an evaluation procedure. This evaluation can be quantitative or qualitative [3]. On the other hand, Edén [4] mentions that different variables help strengthen student performance, such as the skills, knowledge, attitudes, and values developed during the teaching and learning process.

However, other fundamental indicators for student performance are commitment and empathy. Without empathy, it is difficult to have a culture of belonging. It is worth mentioning that when students do not have a sense of belonging to their institution, it can negatively affect their performance, causing them to isolate themselves, not ask for support, and, in the worst cases, decide to drop out [5]. An example of this is the completion rate of bachelor's and engineering degrees in the country's population, which is very low. Statistics show that out of every 100 people who enter basic education, only 28 graduate from higher education. There are many reasons for this, but among them, the lack of leadership stands out, a term that has been very dominant since ancient times and has gained strength in recent decades in different areas, such as the workplace, business, society, and academia. This term is defined by the International Business School [6] as: "a set of skills used to lead and accompany a group of people," which has an impact in any context in which certain individuals are interrelated and seek, in one way or another, a common goal [7].

Being a leader is more complex than it seems, as it is not only about directing others, but also being aware of how it is done. For this reason, there are different aspects that allow individuals to be classified, not only by their skills, but also by their personality, way of thinking, and manner of executing their actions. Among the most prominent are the following: bureaucratic, authoritarian, charismatic, democratic, task-oriented, transactional, and, finally, transformational [8].

Leadership impacts the daily lives of all human beings, but there is one context in which it has become fundamental, and that is teaching leadership. For many years, teaching has been framed by traditional organizational management, which focuses directly on routine teaching, a climate of subordination, a lack of continuous improvement, and little or no leadership, which

triggers problems in the direct learning of each student [9].

Nowadays, teachers are not only part of the teaching-learning process, but also of the methods and processes that lead to the achievement of the expected learning outcomes. Teachers must not only possess the relevant pedagogical skills to impart knowledge, but also those that enable them to guide in a timely, satisfactory, and positive manner all students who place their trust, dedication, and effort in obtaining everything that will shape them academically and, therefore, personally and professionally [10]. Derived from the above, another leadership style can be included which, although not so widely mentioned, is supported by theories indicating that situational leadership adapts to different types of leadership, arguing that, depending on the context, attitudes, and traits, leaders can adapt a leadership style without maintaining a static model of it.

The origin of situational leadership begins with the model developed by Paul Hersey and Ken Blanchard. These authors are recognized as the fathers of the 1967 situational leadership theory.

According to this theory, leaders must focus on one of the different leadership styles that exist. In turn, situational leadership theory asserts that no one leadership style is better than another, but rather that the success of each leadership style will depend on the circumstances to which it adapts. This choice will depend on the degree of maturity or disposition of the students, that is, their desire to excel and their skills in performing tasks. Therefore, the leadership model will differ depending on their attitude, disposition, work processes, classroom environment, communication channels, and all the circumstantial factors that come into play on a daily basis.

Thus, this theory does not argue that a static leadership model should be maintained, but rather that the leadership style should be flexible and choose the one that best suits the situation of each work team [11].

DEVELOPMENT

Methodology

This research was conducted at the Zacatepec Institute of Technology (ITZ) with the aim of

identify and analyze the impact of teacher leadership on school performance in order to create teaching-learning strategies, strengthening the knowledge acquired by students, as well as promoting motivation and a good atmosphere within the classroom in the teacher-student relationship.

Type and approach of the research

The research was descriptive, as this allowed for a more in-depth analysis of the responses and a better understanding of the context in which the phenomenon occurs, in order to determine the factors that impact the influence of teacher leadership on school performance. The approach was qualitative, as different instruments such as surveys, interviews, and observation were designed, developed, and applied [12].

Population and sample

The total population was **68 students enrolled in Business Management Engineering in the first semester of the August-December 2024 period at the Zacatepec Institute of Technology**. To determine the sample, a confidence level of **95%** and a margin of error of **5%** were considered [13]. Applying the corresponding formula, a sample size of **58 students** was obtained, to whom the respective surveys were administered.

On the other hand, to analyze the opinion of the **teachers** who taught these groups, a confidence level of **90%** and a margin of error of **10%** were taken into account. Given that the total population is **12 teachers**, calculations indicated that the sample should consist of **10 teachers**, who were interviewed.

Data collection

Information was collected as follows:

1. **Online forms:** The forms were administered to the two groups of first-semester Business Management engineering students during tutoring classes through the Microsoft Forms digital platform.
2. **Interviews:** Interviews were conducted with teachers of different subjects (Fundamentals of Chemistry, Fundamentals of Business Management, Differential Calculus, Fundamentals of Research, Fundamentals of Physics, Human Development).

DISCUSSION AND ANALYSIS OF RESULTS

According to the results obtained, the impact of leadership, the image of the teacher, and the way in which each professor conducts their class is fundamental to fostering a good learning environment, which directly impacts the acquisition of skills, knowledge, and even values that will be put into practice in the future, in the professional field of each of the students. A lack of empathy, professionalism, or leadership is a barrier that often leads a student, or well, groups entire to fall into

demotivation, which is reflected in absenteeism or lack of effort in each of the subjects.

On the other hand, other factors were found to influence students' academic performance, such as family background, economic status, and each student's outlook. However, it is important to highlight that one of the main aspects that lead students to learn satisfactorily is the teacher who teaches the corresponding subject, since if they do not have knowledge in the area, responsibility, effective communication, and empathy, the scope of the competencies of each educational program will not have the expected results. Related to this, students value teachers who demonstrate the aforementioned skills, as these factors contribute significantly to a positive and motivating learning environment.

The above analysis was the result of applying the instruments used with the different individuals who participated and were the subject of the study. Each of the processes is detailed below:

-The form administered to students consisted of 13 mixed-type questions, i.e., 9 were closed-ended in order to obtain measurable results and accurate information [14], and the rest were open-ended to delve a little deeper into their answers. Question 1 was diagnostic to find out which subject they liked the most during the semester, with 33% choosing "Human Development" and 31% choosing "Fundamentals of Business Management" (Figure 1).



Figure 1. Most attractive subject for students.
Source: Own elaboration.

Questions 2, 3, and 4 ask about academic performance. Most students rate their academic performance as "Excellent" (53%) or "Good" (41%), indicating a positive perception of their own performance. The main reasons include "Personal commitment and responsibility" (42%) and "Motivation from teachers" (25%) (Figure 2). This highlights the importance of interpersonal relationships and self-motivation in academic performance. On the other hand, 3% consider their performance to have been poor, and 67% consider this to be due to a lack of motivation on the part of teachers (Figure 3).

3. ¿Cuál considera que es la razón principal de su rendimiento escolar?



Figure 2. Main reason for *high* academic performance.
Source: Own elaboration.

4. ¿Cuál cree que es el motivo principal de su rendimiento escolar?

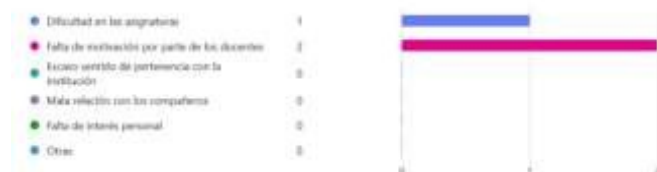


Figure 3. Main reason for *low* academic performance.
Source: Own elaboration.

Questions 5, 6, and 7 relate to learning, with the majority responding affirmatively, showing a high level of commitment to their learning. The reasons vary, but include the search for self-fulfillment, interest in the subjects, and the quality of the teachers. Ninety-seven percent of students say that their attitude in the classroom contributes positively to their learning (Figure 4).

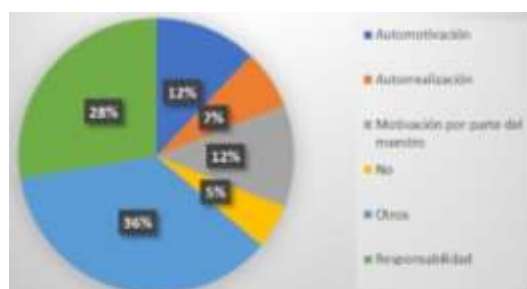


Figure 4. Reasons for student learning.
Source: Own elaboration.

In the next question, 8, 91% of students responded affirmatively, indicating a strong motivation to contribute to achieving a better working environment with their peers and teachers.

-The other questions from 9 to 13 are about teachers and leadership, starting with the importance of leadership in teachers. The responses highlight that 55% believe that a teacher leader motivates and guides students, while 36% consider that the authority of the teacher is important, which improves their performance and attitude toward learning (Figure 5).

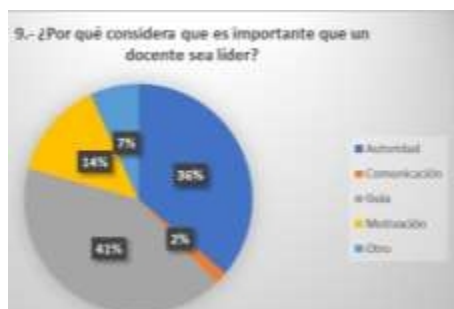


Figure 5. Importance of teacher leadership.
Source: Own elaboration.

Subsequently, the type of leadership that predominates among teachers (bureaucratic, authoritarian, democratic, or charismatic) is charismatic leadership with 57%, democratic with 22%, authoritarian with 16%, and bureaucratic leadership with 5% (Figure 6).



Figure 6. Predominant type of leadership among teachers.
Source: Own elaboration.

Figure 7. Reasons influencing teacher leadership.



Figure 7. Reasons that influence teacher leadership.
Source: Own elaboration.

Finally, questions are asked about situations in which the teacher has shown empathy toward students. Some of these scenarios include allowing late assignments to be turned in for health reasons, showing understanding for personal problems, showing love and passion for teaching students regardless of how many times the topic needs to be explained, helping students with questions, and building trust, among others.

These actions have a positive impact on the learning environment, reducing stress and increasing student confidence [15].

With regard to the interviews conducted with teachers, 11 open-ended questions were asked. It should be noted that the interview was guided, however, exploratory dialogue was opened with some questions in order to deepen their experience and learn about relevant aspects related to their teaching-learning methodology [16].

The questions were designed with regard to the overall performance of students, indicating that they consider it high, since most students show various skills, including leadership, although this performance is often fragmented by excess energy, that is, by not regulating or focusing it based on objectives.

Teachers mention that students who achieve learning objectives have positive attitudes, including commitment, responsibility, motivation, discipline, and proactivity, among many others, which allow them to satisfactorily fulfill the relevant requirements. However, some students fail to achieve learning objectives because they display mostly negative attitudes such as tardiness, irresponsibility, rebelliousness, demotivation, and apathy. It should be noted that it is not only negative attitudes that impact learning, but also, in some cases, economic and family contexts, which are reflected in their absences and, therefore, on their daily academic development.

Empathy in the classroom is essential for knowledge sharing, as students need to feel heard, which gives them a sense of self-worth and builds a bond of trust that directly impacts their motivation. Each student is different and has different problems, so their needs must be recognized and, based on this, strategies must be implemented to ensure that everyone acquires knowledge in a relevant way. Teachers comment that empathy is handled in the classroom primarily on the basis of attendance or punctuality, since a large part of the student community is from outside the area, which has a direct impact on their commutes. Therefore, flexibility is sought in this area, without losing discipline in the classroom, setting limits on such permissions. In addition to the above, identifying emotions is a way of showing empathy, since when an unusual case is detected, an activity can be put into practice, or comments that hurt sensitivities can be omitted.

The strategies and techniques used to promote a good learning environment depend directly on each teacher's particular "style," so they vary, although the most notable ones are: encouraging daily participation, assessments, games and activities appropriate to each subject and group, assertive communication, and the use of ICT. It is worth mentioning that these techniques and strategies are modified according to the behavior of the group, their attitudes, and their way of working. It is important to make time during classes to listen to students, as teachers consider it extremely important for students to feel heard. but, above all, that there is feedback. Therefore, most teachers open these spaces at the beginning, a couple of times during the semester, and at the end of the semester, which allows them to obtain valuable information not only for the students but also for the teachers, as they can implement improvements in their work methods and daily practice.

With regard to leadership, the characteristics that a teacher must have to be a good leader depend directly on the type of leadership style they intend to adopt. Some of the most prevalent characteristics are innovation, empathy, effective communication, knowledge, courage, creativity, and continuous training, with an emphasis on a combination of the above to forge a leader who "resonates" significantly with the student community.

The group of teachers interviewed responded that their leadership style does contribute to fostering a good learning environment for their students, supporting this response with their experiences in the classroom and asserting that if a teacher does not provide clear leadership in the classroom, students lose motivation and interest in acquiring knowledge. Establishing a solid connection, but above all, inspiring others, is essential for a group of people to follow another person, in this case, the teacher. Therefore, being a leader and acting as such allows them to motivate a group, not only to learn, but also to grow in different areas of their lives.

Each teacher has a different leadership style, depending on their personality, training, and working methods, but among the most notable are democratic leadership, which seeks to encourage students to participate actively and contribute ideas to the class; transactional leadership, which involves giving "rewards" (as determined by the teacher) in order to receive responsibility, quality work, honesty in exams, among other things; and transformational, based on the idea that you need to have a little bit of "everything" to maintain constant guidance with students, that is, sometimes you need to be democratic with some groups, while others require transactions or authority.

The most difficult decisions that professors have had to make are based on failing students who did not meet attendance or assignment requirements and failed to demonstrate their skills on second attempts, as well as failing residents or students in "special" programs, since the completion of their professional careers depends on it. The above was expressed by the teachers interviewed as something regrettable, since they often have a person's future in their hands, and although they have the precise argument of non-accreditation, it is the moral aspect that leads the group of teachers to question the decision to be made [17].

CONCLUSIONS

The results of this research confirm that teaching leadership is a determining factor in the academic performance of Business Management Engineering students at the Zacatepec Institute of Technology.

It was identified that effective communication, empathy, motivation, the ability to inspire students, and mastery of their subject significantly influence their attitude and academic performance, contributing to a positive learning environment. On the other hand, although there are other factors that affect academic performance, such as family and economic context, the figure of the teacher remains key in the development and commitment to learning of the student body.

The research also highlights the need for teachers to recognize the type of leadership that predominates in each of them and, consequently, to work on their professional development to optimize their impact in the classroom.

The data collected from this research highlights the importance of integrating teaching strategies based on teacher leadership to improve student learning and comprehensive training. In other words, this leadership must be based on **situational leadership**, as outlined in Hersey and Blanchard's Theory [18]. Teachers must adapt to the current context according to different learning and thinking styles. In addition, it should not be forgotten that generations are constantly changing and, as a result, teaching-learning models and methods must be appropriate for each of them.

It is recommended to continue exploring this topic in future research, promoting teacher training in leadership and innovative teaching methodologies that contribute to the academic and professional success of students, since, as Yenni Maritza Rodríguez Pico [19] states in her research, pedagogical leadership is key to the educational quality that

all academic institutions aim to achieve.

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Research	Rocío Ponce Chávez <<main>>, Michelle Chanes Martini <<equal>>, Diana Mayra Chavarria Estudillo <<supporting>>
Resources	Michelle Chanes Martini
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Writing (original draft)	Rocío Alejandra Aranda Hernández <<main>>, Michelle Chanes Martini <<supporting>>
Writing (revision and editing)	Rocío Alejandra Aranda Hernández <<main>>; Miriam Antonia Chavarria Santibañez <<equal>>; Diana Mayra Chavarria Estudillo, Michelle Chanes Martini, Rocío Ponce Chávez <<supports>>



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