Tutorial Factors Associated With Dropout and Failure in Higher Education

Luz Alondra Katt Morales, Universidad Autónoma de Querétaro, Mexico

The Paris Conference on Education 2023
Official Conference Proceedings

Abstract

The purpose of this work is to present the tutorial factors associated with desertion and failure identified in higher education, at the Technological University of the Southeast of Veracruz (TUSV), a non-experimental design is suggested, based on a quantitative, analytical and descriptive approach. It addresses two of the five phases proposed in the methodology for the implementation of information technologies in the academic tutorial field. The population includes male and female university students over 18 years of age, the sample is random with 375 students who answered two questionnaires. Two questionnaire-type instruments were applied, one on risk factors, which includes socioeconomic aspects, health considering the instrument validated by Campo (2014), to which aspects on drug use and experienced emotions are added, personal aspects that refer to self-regulation of learning proposed by Lenniaz Matos Fernández (2009), which has been validated and academic environment, another to know the performance of the tutor, taking into account aspects of the national model of technological tutoring. universities and polytechnics, the work of Navarro (2014) is addressed in the same way, in which three dimensions are identified: tutor tasks, methodological mastery/attitudinal aspect, and interpersonal/communicative relational skills. Data from school services on failure are analyzed, together with the data collected, elements are obtained to identify endogenous and exogenous factors associated with dropout due to failure.

Keywords: Terminal Efficiency, Risk Factors, Information Technologies

Introduction

Higher Education Institutions (HEI) have the main function of training capable professionals, seeking effective processes to increase retention and regularity rates, which have been affected over time by factors such as desertion, failure and condition of irregularity, the efficiency of the institutions is measured by the trajectory of the formative process, the number of students who complete their studies with respect to those who enter, it is known as terminal efficiency (ET); It is a crucial measure of the ability to use the resources that society provides them, it is also a measure of their ability to train the highly qualified citizens that the nation requires for its development (López et al., 2008).

Providing quality education is a constant requirement in all countries, it is imperative to attend to the indicators, since society demands the preparation of qualified labor, for this reason the HEI have implemented tutorial programs, which constitute strategies for comprehensive training. of the student, being a guide in the university environment and for academic follow-up, which will allow taking actions to improve academic performance and attention to risk factors (Rodríguez, 2017).

The Technological University of the Southeast of Veracruz (TUSV) in accordance with the creation decree, began operations in 2003 in accordance with the national development plan, which seeks to train the individual, transmit culture contributing to a social transformation for the benefit to the community. Throughout these almost 20 years, since its creation, the TUSV has the mission of training University Senior Technicians (UST) and engineers that respond to the needs of the productive and social sector (Universidad Tecnológica del Sureste de Veracruz [UTSV], 2022). At TUSV, tutoring has been carried out based on the experience that teachers have acquired throughout their academic work. In 2017, they began to organize elements that allow control of the number of tutoring sessions, the incursion of formats in the quality management system, without major impact on student training, rather on statistical numerical compliance. It is until 2019 when work begins with the institutional tutoring plan (UTSV, 2019), whose objective is to "promote the integral formation of the student, accompaniment in the university environment that allows the development of skills, aptitudes and attitudes through of academic support and strengthening of values, as well as the decrease in dropout and failure rates through a trained group of tutors" (p.3), in this plan the types of tutoring, actors and roles, profile of the tutor, the functions of the tutor, the tutorial process and support areas involved to contribute to the student's training, such as: Scholarships, medical service, consultancies, tutorials and psychological support, and a training plan for tutors is established, however; progress has been minimal, since the scope of the plan has not been evaluated, despite the fact that there is a weekly tutorial session, the tutorial actions have not been implemented.

It is until 2019 when work begins with the institutional tutoring plan (UTSV, 2019), whose objective is to "promote the integral formation of the student, accompaniment in the university environment that allows the development of skills, aptitudes and attitudes through of academic support and strengthening of values, as well as the decrease in dropout and failure rates through a trained group of tutors" (p.3), in this plan the types of tutoring, actors and roles, profile of the tutor, the functions of the tutor, the tutorial process and support areas involved to contribute to the student's training, such as: Scholarships, medical service, consultancies, tutorials and psychological support, and a training plan for tutors is established, however; progress has been minimal, since the scope of the plan has not been

evaluated, despite the fact that there is a weekly tutorial session, the tutorial actions have not been implemented.

The ANUIES, define tutorials as a process of accompaniment during the training of students, which is specified through personalized attention to a student or a small group of students, the role of the tutor is important, since he must be a participant in the detection, orientation, channeling and monitoring of the tutorship, according to the tutorial model of the Technological and Polytechnic Universities (Coordinación de General de Universidades Tecnológicas y Politécnicas, 2017).

At TUSV there are three forms of tutoring: group, individual and in pairs. The first is that the tutor assigned to the group goes to the classroom, in the first instance to introduce himself if it is the first time that he has served as a tutor and to carry out the initial interview to collect data from the tutors (Detect); The initial interview used to be carried out in a printed document that served as a record for the quality management system; during the pandemic it was carried out in an Excel document. If the tutor repeats, the tutored group appears to interact with the students. In these subsequent sessions (Guide), general situations are addressed with the group, at the tutor's initiative, the academic situation is inquired about, or general doubts of the students are resolved, if the tutor detects a situation of conflict or a risk, he must channel it (Canalize) to the areas for support to provide advice, medical, psychological service, or scholarships.

This research is carried out to meet the need to improve the terminal efficiency index at the TUSV through a methodological design that allows determining the factors that affect dropout and failure, considering four tutorial areas: personal, health, socioeconomic and academic. Previous investigations referring to desertion, failure and their influence on terminal efficiency are analyzed, to have an overview of the explanatory studies of the causes in the institutions. The knowledge of the causes of desertion and failure of the institution itself and in its specific context, will allow modeling the endogenous or exogenous factors; to translate them into strategies that generate tutorial actions that contribute to developing policies that contribute to increasing terminal efficiency. It is important to consider what was described by Arnaud (2022), since the TUSV does not address lag and dropout factors, no dropout factors related to the vocational profile, personality, skills, economic, family, or social factors have been identified. and personal, during the pandemic health factors are added. (Katt et al., 2021), it would be useful to identify the relationship between dropout and inequality to identify factors that trigger school dropout in higher education and support from tutors.

Theoretical References

The efficiency of an educational system has been defined succinctly by the United Nations Educational, Scientific and Cultural Organization: "Degree to which educational systems manage to optimize the input/output relationship in education" (UNESCO, 2019).

In the same vein, quality in education is a matter of priority (European Union), being essential for educational training, where the process of counseling and tutorial accompaniment participate as key tools, contributing to the change of the teaching culture towards personal attention. , comprehensive multicultural and diverse (Lledó et al., 2018). The tutorials come from time immemorial, it is mentioned in Homer's Odyssey written in the

seventh century BC. since a character named as a mentor intervenes, who was the educator and advisor of Telemachus, the son of Odysseus (González, 2015).

Luna drafts the guide as the person whose mission is to teach the other the correct path to reach the goal, quoting Luis Vives 1942-1540 "that the teacher is not limited to teaching, and to fulfill his main function of educating he has to become a guide…" (Luna et al., 2015).

Tutoring at the National Autonomous University of Mexico dates back to the year 1553 as the Royal and Pontifical University of Mexico, where a tutor was in charge of teaching with religious foundations and cementing the faith of the tutored. By 1941, in the PhD in Chemistry at the Faculty of Chemistry, tutors were assigned to support their training as a researcher (Olvera, 2015).

Rodríguez (2021) shows a non-experimental work, where students who completed their study plan, degree of progress, school dropout, failure, type of exam were evaluated, it is concluded that progress decreases in the second and third quarters, they are recommended Strategies that include consultancies, tutorials, psychological channeling for Computer Engineering students at the UAEM Valle de México university center.

Niurys focuses on the identification of factors that determine student desertion in the computer science career in Cuba, proposes structural and content elements for IT tutorial actions that address the detected factors. It uses a mixed, non-experimental methodology with a rigorous systematization of the bibliography to obtain a theoretical model of dropout (Lázaro, 2020). For its part, the National Polytechnic Institute, as in other institutions, has identified problems of educational use, mentioning endogenous and exogenous factors, one of them; unprofessional teaching performance, distant planning and curricula (Trejo et al., 2005). From the use of Information Technology (IT) in the tutorials, the development of the tutorial action was proposed with a system of strategic actions, with organizational levels in the short, medium or long term and functions in each of the areas of the institution, development of IT mediated tutorial actions to address predictive factors of student dropout to promote retention (Lazarus, 2020).

Methodology

To identify student accompaniment by tutors, the management of the tutoring, follow-up and monitoring process is evaluated, to address personal, health, socioeconomic and academic risk factors. Two instruments are applied and analyzed; the evaluation of the performance of the tutor and tutorial areas, a methodology based on synthetic analysis is proposed, not experimental by simple sampling, with a quantitative, analytical and descriptive study to evaluate the support provided, the tasks of the tutor, the methodological domain and the Interpersonal/communication skills of the tutor to address the identified dropout factors.

The project consists of five phases (Figure 1), data collection, analysis, design, implementation and evaluation. For the data collection phase, 2 instruments are designed.
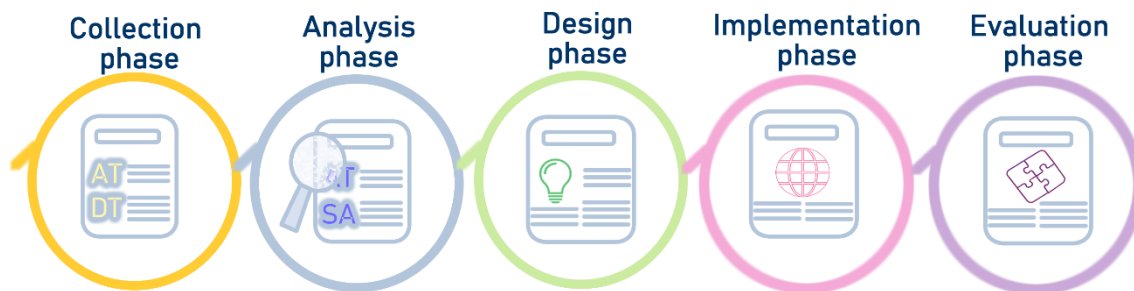
Figure 1. *Phases of the methodology. (Own elaboration)*

Methodological Characteristics

The tutor performance evaluation instrument adapts aspects of the national tutoring model of technological and polytechnic universities, as well as the instrument described by Navarro (2014), which consists of 23 questions and three dimensions are identified: Tutor tasks, which It consists of the ability to lead students through the learning process, it includes questions 4-7,10,12-14,20-23, the methodological domain/attitudinal aspect refers to the specific knowledge of the tutor, it is evaluated with the questions 1-3,8,9,18 and 19; interpersonal/communicative relational skills address the tutor's commitment to group learning and the associated questions are 11, 15-17. For this work, not all the questions were included given the current institutional considerations, questions 5,6,10 and 23 are discarded for the tutor's tasks, 5 and 23 are associated with IT and the institution does not have tutorial follow-up by IT, 6 and 10 are study techniques and work in pairs, programs not yet started at the TUSV, the methodological domain includes 6 of the 7 questions, discarding 9 that is related to the use of IT, relational skills include all the questions, the resulting instrument includes 18 questions on a Likert scale that are adapted to the university situation, one of the main ones lies in the incorporation of factors associated with doing, knowing and being, essential pillars in learning (Delors cited by Navarro, 2014).

The survey designed to identify dropout factors is made up of questions from the National Institute of Statistics and Geography, self-regulation of learning proposed and validated by Matos (2009), to find out stress factors, the validated field instrument is adapted. (2014) and questions on alcoholism, tobacco and drugs are added, the data is complemented with the analysis of failures and withdrawals.

A population of 1459 young university students, men and women of legal age, enrolled in the four-month period September - December 2022, in the educational programs (EP) that are offered at the TUSV, two for bachelor's degrees, five for engineering and nine for UST. A simple random sample is considered by means of their registrations; using a finite sample formula; Both instruments are applied at the end of the September - December 2022 semester with the authorization of the TUSV student services department.

Analysis Phase- the degree of validity and reliability of the instruments is considered, when collecting the data obtained through the Google forms platform, it allows a descriptive analysis to be carried out, to measure variables considering interval and quotient data, the descriptive analysis is selected since it will allow a quantitative analysis, where the researcher has a high degree of objectivity and neutrality.

Results

In the teaching performance evaluation instrument, 56% of men and 44% women responded, of which correspond to the EP of engineering/undergraduate: 14 participants from Maintenance, 59 from Chemistry, 26 from IT, 38 from mechatronics, 28 of Accounting, 9 of Human Capital, for UST four correspond to Automotive Mechanics, 18 administration, 49 of Accounting, 36 of maintenance, 34 of mechatronics, 42 of chemistry, 18 of IT, of the schooled, discontinuous or depressurized modality.

From the tutor performance evaluation instrument, 29 tutors of the 47 assigned tutors were evaluated, corresponding to 62%; of which 14 are men and 15 women. When evaluating the tutoring sessions, 18 questions classified into three categories are considered: tutor tasks, methodological mastery and relational skills.

The tutor's tasks are related to doing, they include questions four, six, seven, nine, 10,11,17,18, students answer that they always or almost always comply with the associated actions (Table 1).

Question description	Porcentage Always / almost always
Tutors collaborate with the identification of learning resources.	86.40%
Provide constructive criticism.	87.20%
They guide the student to assume their own learning.	87.73%
Contribuye en el valor del aprendizaje colaborativo	87.73%
Stimulates critical reasoning in the tutorial process.	87.20%
Helps develop individual communication skills in students.	85.87%
Stimulates the participation of all members.	88%

Table 1. *Identification of learning resources and response rate.*

Methodological domain, knowledge activities, students consider that the items are always or almost always fulfilled (Table 2).

Question description	Porcentage Always / almost always
Mastery of the academic model during the development of the tutorials.	87.20%
Preparation to face the tutorials and organizes the activities and times of each tutorial.	86.67%
Guides students in identifying learning needs.	86.40%
Make referrals to student services according to the needs of the tutors.	85.60%
Is objective in monitoring student evaluations.	86.13%
Demonstrates commitment to their role as tutor.	87.73%
Demonstrates responsibility in the tutorial process in schedules and punctuality.	88.53%

Table 2. *Methodological domain and response rate.*

Interpersonal/communicative relational skills, elements associated with being (Table 3).

Question description	Porcentage Always / almost always
Manages to create an environment of trust and respect in tutoring.	88.00%
Establishes harmonious relationships with students.	87.27%
Demonstrates enthusiasm in their role as facilitator of learning.	87.47%
Encourages good relationships among students.	88.53%

Table 3. *Interpersonal / communicative relational skills and response rate.*

In all the questions asked, the answers are positive since tutors always or almost always comply with a minimum of 85.60% of their activities and with a maximum value of 88.53%.

- When asked if they would like to continue with their tutor, 95.2% said yes.
- In the requests for comments, only 0.8% give suggestions for improving the tutorials, the rest believe that the tutor's performance has been favourable.

Regarding the survey of tutorial areas; the socioeconomic factor is a trigger for dropouts (Balleza, 2020), accordingly, in the TUSV it is an important factor to consider given that: the ages of the students range from 18 to 45 years, whose largest population is 18-22 years, the 49% of the students live with a single person and the family income depends on a single person (father 52% and mother 30%), the monthly family income of 70% of the students is less than or equal to $6000.00 Mexican pesos, 53.33 % of students come from localities that have a high and very high degree of backwardness and 9.7% are parents.

The personal factor is related to aspects of intrinsic and extrinsic motivation to continue campus (Otero, 2022), in this aspect, more than 45% of students participate because it improves skills and understanding of courses and for intellectual growth (48.24%). More than 50% follow the teachers' suggestions to get good grades and because they think it will help them achieve better learning. Between 53% and 61% indicate that the reason for expanding their knowledge is because they want to learn more and because of the challenge of learning what is done in the courses.

In the wellness aspect there are physical and psychological limitations that prevent academic continuity, some that cannot be mitigated and others that can be contained, 27.75% present alcohol consumption, 20.8% consume tobacco, 13.3% consume or have consumed drugs and 75% have presented stress.

8.4% are reinstated students, in the semesters September - December 2021, January -April 2022, May - August 2022 and September -December 2022 there have been more than 51% of failed subjects, being from the area of languages and methods followed by the area of applied basic sciences for UST whose terminal efficiency is 55.4%, with 68% of graduates being men and 32% women; for engineering, the terminal efficiency is 84.95%, data from the generational cohort of 2001-2022, relevant data from the academic field.

Discussion

This work intends that its impact be from the three axes:

Social: Comprehensive training of human resources generating quality graduates to develop activities in their field of action.

Institutional: Encourage higher level educational institutions to develop research activities, technological development that help generate innovative proposals by promoting the linkage of institutional actors, teachers, tutors, students, support areas.

Academic: With IT you can monitor the academic situation of students to generate strategies aimed at the university student permanence.

With the above, it is expected to contribute at the institutional, state and national level, addressing the problems detected with the terminal efficiency indices, identifying institutional factors that allow generating strategies to address dropouts and adequate monitoring by tutors.

Conclusions

It is important to consider the various risk factors presented and recommendations that contribute to university retention. The performance of the tutor is fundamental for the accompaniment of the students, to generate empathy, to create the communicative process to achieve the links that allow the participation between the tutor and the mentee, to guide and make decisions for the benefit of their academic work.

With the application of the evaluation instrument to the performance of the tutor, the work that has been carried out throughout the almost 20 years in the institution is evident. From the student's perspective, the role of the tutor is performed satisfactorily with 99% approval. The

data collected focuses on the knowledge, doing and being of the tutor, aspects that are in accordance with the educational model of the UT (Table 4).

Factor	Conclusions
Tutor task Know to do	The students consider that the tutor has served as a guide in the university environment, promoting collaborative learning, interest and willingness to solve problems, they consider that they have the ability to identify learning resources, provide constructive criticism, stimulate participation for development of individual skills.
Methodological domain Know	The students point out that the tutor has the skills to conduct himself as a guide in the methodological environment, knowing the academic model and therefore identifying learning needs, channeling it to the indicated areas and following up on student evaluations as far as possible. possible, is responsible and committed to the welfare of students.
Interpersonal/communicative relational skills. Know how to be	It is stated that the tutor creates an environment of trust, respect and encourages good relations by being enthusiastic in the tutorial actions.

Table 4. *Conclusions of knowing, doing and being of the tutor´s performance.*

The tutor is the focus of attention of the project to be developed, he is the one who will execute the strategies that are implemented and therefore the strengths must be identified to make use of them in the implementation. Of the 47 tutors, 28 of them were satisfactorily evaluated, however, there is a low percentage of teachers who do not attend the tutorial sessions, so joint work is imperative to close the tutorial cycle to implement follow-up actions.

There are variables that influence the factors, in this idea:

Wellness issues; physical and mental, is the factor with the lowest level of influence, whose variables such as: academic stress, anxiety, which usually occur due to work overload and demand; the consumption of legal and non-legal drugs should be targeted, since they affect school performance.

The personal factor has the third place in the level of influence, the variable of self-regulation of learning is important for the student; denotes an opportunity for motivation to continue their studies, even when some elements depend on the teacher, in the respondents it is of interest to strengthen the motivation to maintain a positive attitude and commitment to their learning.

The socioeconomic factor occupies the second highest place in the level of influence, with variables such as age, where 21.6% who are over 22 years of age, whose age does not allow them to be candidates for the main Mexican federal scholarship, students who have age over 30 years and are usually workers and/or parents, family income, where the income reported by students is the lowest in households according to INEGI (2020), is said to be considered relevant.

The academic factor has the highest level of influence on dropout in higher education. The variables of failure, areas of knowledge, and academic level (UST) have a strong relationship with withdrawals, therefore it is necessary to take timely monitoring actions of subjects at risk and implement tutorial activities for regularization and address the main reason for withdrawal.

The factors that are most influential are: academic with more than 78% and socioeconomic with 20%, with this identification it is possible to work with focused strategies that contribute to the reduction of university dropouts.

The factors that are most influential are: academic with more than 78% and socioeconomic with 20%, for this it is necessary to generate strategies that allow addressing the dropout problem, emphasis is placed on the work of the tutor and its satisfactory evaluation, for what is necessary to take advantage of the profile to carry out the tutorial tasks as a guide in the university environment, the methodological domain, the identification of needs, as well as the relational skills to interact with the tutor. By creating an environment of trust, it contributes to the personal interaction tutor – tutored student, to open up to situations of vulnerability that trigger into school dropout, such as socioeconomic, personal, wellness or academic factors, and before that, take actions to channel to the corresponding areas. Tutoring as strategies against desertion is, without a doubt, a topic of interest is to provide support that allows dealing with university dropout rates.

References

Arnaud Bobadilla, A.J., Sánchez Villareal, F., Galindo Miranda, N. E., Franco Bodek, D. y Ruiz Gutiérrez, R. (2022). *Revista Iberoamericana para la investigación y el desarrollo educativo,* 12(24). https://doi.org/10.23913/ride.v12i24.1181

Balleza Varela, A., Cruz Zavala, J., González Morales, P., Sánchez Barraza, A. y Sánchez Flores, M. (2020). Factores personales que influyen en el abandono escolar en universitarios. *PsicoEducativa; reflexiones propuestas*, 6(11). https://psicoeducativa.iztacala.unam.mx/revista/index.php/rpsicoedu/article/view/126/321

Campo Arias, A., Celina Oviedo, H. y Herazo E. (2014). Escala de estrés percibido – 10: desempeño psicométrico en estudiantes de medicina de Bucaramanga, Colombia. Revista de la Facultad de Medicina, 62(3). http://dx.doi.org/10.15446/revfacmed.v62n3.43735

Coordinación de General de Universidades Tecnológicas y Politécnicas [CGUTyP]. (2017). *Modelo Nacional de Tutorías Comisión de Rectores del Tema 21: Programa de tutorías y Servicios de Apoyo al Estudiante.*

González,A. M. (2015). *Antecedentes y evolución Histórica de la acción tutorial: Apuesta por una educación integral y de calidad*. Tercer congreso Internacional Multidisciplinar de Investigación Educativa. Segovia, España. http://amieedu.org/actascimie14/wp-content/uploads/2015/02/gonzalez_ana.pdf

Instituto Nacional de Estadística y Geografía [INEGI]. (2020). Cuéntame de México. Recuperado de la base de datos de información.

Katt Morales, L., Domínguez Campomanes, M., Gómez Manuel, E. y Morales Reyes, E. (2021). Estrategias para propiciar la permanencia universitaria en tiempos de la COVID-19. *Journal of University Policies,* 5 (14) DOI: 10.35429/JUP.2021.14.5.28.36

Lázaro Álvarez N. (2020). *Acciones tutoriales con TIC atendimiento a factores predictivos de la deserción estudiantil en carreras de ingeniería informática* [Doctorado en Ciencias de la educación]. Universidad de Granada.

Lledó Carreras, A., Lorenzo Lledó, G. y Gómez Puerta, M. (2018). Variables determinantes para una cultura tutorial desde el PAT. *Revista de Psicologías INFAD*, 3(1). http://dx.doi.org/10.17060/ijodaep.2018.n1.v3.1294

López Suárez, A., Albíter Rodríguez, A. y Ramírez Revueltas, L. (2008). Eficiencia terminal en la educación superior, la necesidad de un nuevo paradigma. *Revista de la Educación Superior. Vol. XXXVII (2),* 146, pp. 135-151. http://publicaciones.anuies.mx/pdfs/revista/Revista146_S5A1ES.pdf

Luna Pérez, G., Manchado Durán, M. y Colunga Santos, S. (2015). Análisis histórico del proceso de acción tutorial en el ámbito educativo. *Transformación, ISSn:2077-2955, rnps: 2098*, 11(1), pp.103-112.

Matos Fernández, L. (2009). Adaptación de dos cuestionarios de motivación: Autorregulación del Aprendizaje y clima de aprendizaje. *Persona, 12, pp. 167-185.*

Navarro H. N., Zamora S. J. y Bustos M. L. (2014). Desempeño del tutor/a en el aprendizaje basado en problemas: Validación de un instrumento de evaluación en la facultad de medicina de la Universidad de La frontera. *Revista Educativa Ciencias de la salud,* 11 (2):137-142. http://www2.udec.cl/ofem/recs/anteriores/vol1122014/artinv11214d.pdf

Olvera Coronilla, G. (2015). *Breve historia del surgimiento de la tutoría en la UNAM.* DGOSE-UNAM.

Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura [UNESCO]. (2019). *Thesaurus, United Nations Education, Science and Culture Organization.* Recuperado el 19 de septiembre de 2022, de https://vocabularies.unesco.org/browser/thesaurus/en/page/concept6707

Otero Escobar, A. (2022). Deserción escolar en estudiantes universitarios: Estudio de caso del área económico-administrativa. *Revista Iberoamericana para la investigación y el Desarrollo Educativo*, 12(23). https://doi.org/10.23913/ride.v12i23.1084

Rodríguez Pérez, I. (2017). La calidad de la educación superior y la reestructuración del programa de tutoría. *Revista Iberoamericana para la investigación y el desarrollo educativo,* 8(15). https://doi.org/10.23913/ride.v8i15.294

Rodríguez Pérez, I., Pérez Ramírez, R. y Flores Albino, J. M. (2021). Estrategias para mejor la calidad educativa con base en el análisis de la trayectoria académica en el área de ingeniería. *Revista Iberoamericana para la investigación y el desarrollo educativo,* 11(22). https://doi.org/10.23913/ride.v11i22.858

Trejo García, M. y García Córdoba, F. (2005). Algunas reflexiones sobre el sistema tutorial en el Instituto politécnico Nacional. *Innovación educativa*, 5(26). http://docplayer.es/111171075-Innovacion-educativa-issn-instituto-politecnico-nacional-mexico.html

Universidad Tecnológica del Sureste de Veracruz [UTSV]. (2019). *Programa Institucional de Tutorías.*

Universidad Tecnológica del Sureste de Veracruz [UTSV]. (2022). *Misión, Visión y valores.* Recuperado en mayo de 2022, de http://www.utsv.com.mx/wp/conoce-la-utsv/mision-vision-valores/

Contact email: alondrakatt@gmail.com