

<https://doi.org/10.23913/ride.v15i29.2205>

Scientific articles

Estrategias públicas para la educación media superior. Análisis desde el marco de las Políticas Públicas

Public strategies for high secondary education. Analysis from the framework of Public Policies

Estratégias públicas para o ensino secundário. Análise a partir do marco das Políticas Públicas

Edgar Eloy Torres Orzoco

Universidad de Guadalajara, Centro Universitario de la Ciénega, México

Eloy3@hotmail.com

<https://orcid.org/0009-0000-0416-7172>

Lucio Flores Payan

Universidad de Guadalajara, Centro Universitario de la Ciénega, México

Lucio.flores@cuci.udg.mx

<https://orcid.org/0000-0003-1214-7336>

Resumen

El presente trabajo tiene como objetivo presentar el análisis de la estrategia pública “la escuela al centro” desde el marco de referencia de las políticas públicas, a manera de entender los efectos que estas estrategias alcanzan en la transformación educativa en la búsqueda de maximizar los aprendizajes de los estudiantes del nivel medio superior. Para el logro del objetivo se siguió una metodología bajo el enfoque cualitativo de tipo interpretativo en la medida en la que se busca entender a la estrategia o política públicas como un constructo significativo de los efectos en su implementación. Se toma como caso de estudio la implementación de la estrategia pública en una escuela de nivel medio superior en el estado de Jalisco. Como principales resultados se distinguen algunos elementos relacionados al efecto que la estrategia en estudio logró en la maximización de los aprendizajes. Se plantea como hallazgo relevante, el distanciamiento entre el estado ideal (diseño) y la aplicación

(implementación) de la estrategia pública estudiada. A manera de conclusión se presenta la idea de la percepción limitada en tanto a la aplicación de la estrategia pública estudiada.

Palabras clave: Educación media superior, Maximización de aprendizaje, Políticas públicas

Abstract

The objective of this study is to analyze the public strategy “School at the Center” from a public policy framework to understand its effects on educational transformation, specifically in maximizing learning outcomes for high school students. To achieve this goal, the study employed a qualitative, interpretive methodology aimed at understanding the strategy as a significant construct that reflects its implementation outcomes. A high school in the state of Jalisco was used as a case study to evaluate these dynamics. Key findings reveal the strategy’s impact on maximizing learning while highlighting a notable gap between its ideal design and practical implementation. This disparity is presented as a critical finding, emphasizing the concept of limited perception in the application of the strategy.

Keywords: High school level, Maximization of learning, Public policies.

Resumo

O objetivo deste trabalho é apresentar a análise da estratégia pública “escola no centro” a partir do marco das políticas públicas, a fim de compreender os efeitos que essas estratégias alcançam na transformação educacional na busca pela maximização da aprendizagem do ensino médio. estudantes. Para atingir o objetivo, seguiu-se uma metodologia sob a abordagem qualitativa de tipo interpretativo na medida em que busca compreender a estratégia ou política pública como um construto significativo dos efeitos na sua implementação. A implementação da estratégia pública numa escola secundária do estado de Jalisco é tomada como estudo de caso. Como principais resultados distinguem-se alguns elementos relativos ao efeito que a estratégia em estudo alcançou na maximização da aprendizagem. A distância entre o estado ideal (desenho) e a aplicação (implementação) da estratégia pública estudada é proposta como um achado relevante. Como conclusão, apresenta-se a ideia de percepção limitada em termos de aplicação da estratégia pública estudada.

Palavras-chave: Ensino médio superior, Maximização da aprendizagem, Políticas públicas.

Reception Date: June 2024

Acceptance Date: November 2024

Introduction

The challenges currently faced in Mexico and globally are highly complex, of a totally unknown nature and scope, in which specific demographic scenarios and conditions must be considered, in a technological environment, with ignorance of future demands. labour, with a strong orientation towards sustainable development, among other changes, which will have to be considered as a reference to establish the direction and role that will have to be assumed in schools for the training of young people (Tuirán et al., 2015).

In this sense, with the intention of promoting education at the upper secondary level, important reforms were promoted in Mexico: in 2008 with the Comprehensive Reform of Upper Secondary Education in which the Common Curricular Framework was established, and a reform in 2013 that decreed the Compulsory nature of upper secondary education at the national level. However, these educational policy actions did not have the expected results regarding the improvement of processes and components of the Educational System, which were intended to focus efforts on achieving significant learning in students, as stated by Tuirán and Hernández (2016), student learning continues to be insufficient, unequal and inadequate.

Evidence of the above is provided by the results obtained in standardized tests in recent years. The results of the PLANEA 2017 assessment applied to students in their final year of high school at the national level report that 89.5% of students are in levels I and II (the lowest of four levels) in Mathematics, while in the Language and Communication competencies 62.0% of those evaluated obtain the same level of result (INEE, 2017).

Among Jalisco students, the PLANEA 2017 test shows an improvement in Language and Communication with 48.2% of students obtaining performance level III and IV (the best of four levels), and in the Mathematics competition only 16.2% of students achieved the same levels.

In other words, in terms of student learning or competencies in Mathematics and Language and Communication, about 85% of students can only calculate percentages and a little over 50% can identify the main ideas of a short opinion article. This leaves out the demonstration of skills and knowledge such as mastery of the laws of signs and relationships



between two variables, as well as recognizing the purpose, argumentative connectors and parts of an opinion article.

The Ministry of Public Education (2017) attributes these results to the initial gradualness in which they are presented in accordance with the changes applied in the Educational System. In this sense, the implementation of the Educational Reform is varied based on the diversity of upper secondary education subsystems that exist in the country, as well as the slow modification of the educational practice of teachers and, finally, the low intellectual capital of students who enter this educational level, especially from the lowest income segments.

On this last point, international assessments offer sufficient evidence regarding the deficiency in cognitive and socio-emotional skills of students graduating from secondary school. In the PISA 2012 results for Mexican students aged 15, 95% are in levels 1 to 3 (six being the highest) in Reading. In Science, only 2% are in the highest levels, while the OECD average for students is 29%. In Mathematics, only 4% of students obtain performance levels from 4 to 6.

The relationship between the results of standardized academic performance tests and educational quality, according to Backhoff and Contreras (2014), lies in the fact that these tests are used to evaluate the quality and progress in the educational improvement of a nation, for making educational policy decisions and accountability to society. Thus, the results obtained from these tests and those of the rest of the components of the National Education System provide the objective support necessary to establish educational policy modifications that contribute to making the Educational System in Mexico effective and efficient.

Since the educational reform of 2013, from the official perspective, an Educational Model for Compulsory Education (MEPEO) is presented, based on five axes, in which through a reengineering of the actors and processes of the educational system, it is sought to bring Education in Mexico out of its lethargy.

The above enables us to reflect on how this new reform proposal can energize the Educational System; analyzing the changes in interaction between the factors, actors and educational processes, the intention of change that makes it effective and efficient in such a way that educational quality is guaranteed; how the Mexican state and local educational authorities will intervene to empower the high school communities, and how they will take on the challenge of achieving maximum student learning .

The present work intends to make evident the scope achieved by the public strategy “School at the Center” as part of a public policy of the educational sector. It is based on the research approach structured in two questions: What factors of the strategies derived from the educational policy “SCHOOL AT THE CENTER” affect the educational transformation in the search to maximize student learning in the case study school? And what have been the effects of the strategies derived from the educational policy “SCHOOL AT THE CENTER” for the case study school CBTA 106.

Materials and methods

This work was carried out mainly within the framework of the qualitative paradigm, with an interpretive research design, insofar as it seeks to understand public strategies or policies as a significant construct of the effects of their implementation. In this way, by investigating interpretive elements that enable the assumption of a critical and reflective stance on the phenomenon under study, the perception of the actors who carry out objectives in their practices and their own understanding of the topic of interest is constructed from in-depth interviews.

Two stages were carried out to achieve greater depth in the analysis. The first of these was the application of the documentary review method, to obtain a characterization of the EMS conditions in the implementation of the public strategy studied. The second stage was focused on an empirical case with the intention of practically analyzing the application of the “SCHOOL AT THE CENTER”. For this work, the interview was designed with a semi-structured scheme, since the intention was to provoke the interviewee to talk without limiting the information and the proposals.

According to the proposed analytical model, the visualization of the effects of the public strategy studied was defined as an example case for the study of the CBTA 106 campus, located in the municipality of Tequila, Jalisco. The determination to consider the CBTA as an exploratory entity consisted mainly in that the actors who enabled the interviews had been in the administration of the campus before and after the 2013 reform and the implementation of the Program under study. The director of the campus was interviewed, as well as two managers who were part of the implementation of the strategies following the reform.

CBT 106 is an institution belonging to the Secretariat of Upper Secondary Education (SEMS) and the General Directorate of Agricultural Technology and Marine Sciences

Education (DGETAyCM), which offers the option of studying the Baccalaureate with a Technical Degree and the option of obtaining a Degree and ID that allows the graduate to enter the workforce.

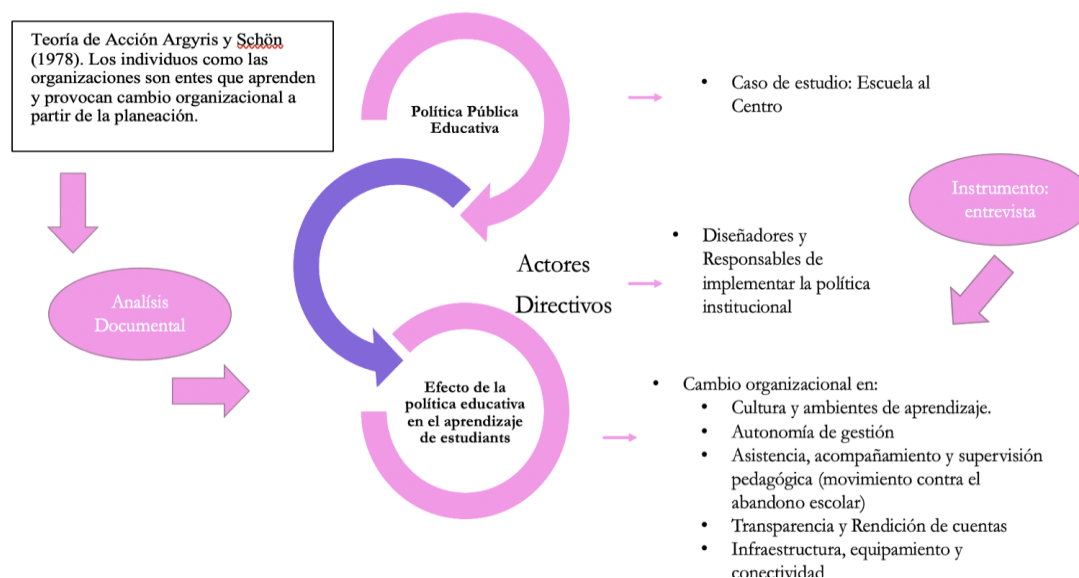
6 technical courses are offered:

- Agricultural Technician
- Technician in Agromatics
- Office Automation Technician
- Technician in Administration for Agricultural Entrepreneurship
- Technician in Agave Production and Industrialization
- Food and Beverage Preparation Technician

Due to the nature of the phenomenon under study and the availability of information, the involvement of key actors who would act as informants on the implementation processes of the public strategy “THE CENTRAL SCHOOL” at the school under study was proposed; in order to obtain information that would enable generalizing findings on the effects on the school, actors were selected from three spheres: teaching staff, management staff, and administrative staff.

In order to have a clear methodological route, an analytical model was designed that enabled the structuring of the path of inquiry, obtaining and analysis of the information required for the analysis of the public policy under study, the above is shown in Figure 1.

Figure 1. Model for the analysis of educational policy: the school at the center



Source: own elaboration.

Results

The documentary review of information resources on the activities developed for the implementation of the public strategy under study and the review process of the example case through interviews with the actors involved in the implementation in CBTa 106, enabled the development of two processes for presenting the information obtained: first, some of the main arguments proposed by the key actors in relation to the 5 axes of study are presented in textual form: 1) Culture and learning environments, 2) Management autonomy, 3) Assistance, accompaniment and pedagogical supervision (movement against school dropouts), 4) Transparency and Accountability, 5) Infrastructure, equipment and connectivity, which are summarized in Table 1.

Table 1. Information presented by key actors around the study axes of the public strategy “THE SCHOOL AT THE CENTER”

STUDY AXES	KEY PLAYERS		REFLECTION
Culture and learning environments	“...Organizationally, the staff has a structure in documents, the practice would require a greater effort, there is work harmony, but more integration is required ...” <i>(Interviewee A)</i>		For other interviewees, the organizational environment and teamwork culture must be motivated by a more solid hierarchical structure. Some of the documents reviewed completed the idea that the lack of integration of the academic community in educational institutions is mostly a reflection of the lack of different resources.
Management autonomy		“...autonomy for decision-making has been heard since the first reforms, but I do not believe that we have reached a degree of full freedom to develop our planning in a way that is specific to the needs of the	Attempts to generate processes that allow schools to have a greater degree of decision-making are due to the limited integration of the different actors in each school to design continuous academic routes, with specific objectives, and that this lack of integration is visibly caused by the verticality in educational legislation, seen in the large bureaucratic burdens, with increasingly greater requirements from the

		school...” (Interviewee B)	different federal and/or state programs, regulations of the Ministry of Public Education (Vázquez, 2018).
Assistance, accompaniment and pedagogical supervision		“...here, students are supported to the extent possible. I think it needs to be done in a more systematic way, since teachers get close to students because we know them all inside and outside the school, but it would be good to have more resources to be able to provide more precise support...” (Interviewee B)	The main feature is the improvement in the use of time during the school day, through the flexibility of the calendar, driven by management autonomy.
Transparency and Accountability	“...everything that is requested from us is recorded in the established formats, but they are not disseminated to the campus community...” (Interviewee A)	“...I have all the reports archived, we upload them to the platform but afterwards we don’t know what purpose they serve...” (Interviewee B)	Transparency and accountability were projected in educational reforms in general and in the particular case of LA ESCUELA AL CENTRO as an element that would allow the systematization of the teaching-learning process. In practice, it became a process of filling out forms according to those interviewed at the study center .
Infrastructure, equipment and connectivity		“...the spaces to improve student learning are always limited, more resources are needed to have continuous supplies for	In this sense, Miranda (2018) proposes, for the improvement and attention of strategies that focus on the educational physical infrastructure, to emphasize factors that are not

		practices, but also to improve what we have not once every 6 years, but continuously...” (Interviewee C).	contemplated in a focused way in educational reforms .
--	--	--	--

Source: own elaboration.

Discussion

According to what was presented in the previous section as part of the findings found, the assimilation with different authors and empirical works is an exercise that allows us to give meaning to said results. On the other hand, the axis of “culture and learning environments” authors such as Fombona et al. (2016), denote this element in a negative sense, that is, a lack of culture of cooperation and organization in educational environments for the upper secondary level. Thus, in the case study, some of the opinions were placed on the side that positions the organizational culture as of great importance and still lacking in its development and are shown in table 1 with interviewee A in this axis of analysis.

For other interviewees, the organizational environment and teamwork culture must be motivated by a more solid hierarchical structure. Some of the documents reviewed completed the idea that the lack of integration of the academic community in educational institutions is mostly a reflection of the lack of different resources.

The collaborative work culture has been addressed by authors such as Fombona et al. (2016), who argue that the lack of responsibility, individual commitment and communication between students and teachers causes ineffective collaborative work, since full coordination and joint task planning involving individual and shared efforts is necessary.

In a research carried out in eleven technological high school campuses belonging to the UEMSTIS in Morelos, an analysis of individualistic and teacher-centered teaching culture was presented. It was observed that in general teachers have a favorable perspective regarding collaborative work. Aspects that they carry out before, during and after the academies were reviewed, where organization and therefore communication are required. However, one of the greatest challenges that teachers face are meetings outside of working hours, or during classroom hours, which makes their attendance difficult. The author points out that one way to counteract this is through communication. In the analysis of the stage of

development of academy meetings, possible conflict situations related to lack of commitment in attendance and punctuality were analyzed (Revelo Sánchez et al., 2018).

The axis of management autonomy, for schools, has been one of the priority axes in the design of the LA ESCUELA AL CENTRO strategy, but it has also been seen with great emphasis in the different academic reforms in the words of Vázquez (2018), one of the pillars of the Educational Reform is to strengthen the management autonomy of public schools, with this it is sought that the decisions taken improve the quality of education. Transparency and accountability were projected in educational reforms in general and for the particular case of LA ESCUELA AL CENTRO as an element that would allow the systematization of the teaching-learning process; in practice, it became a process of filling out forms according to those interviewed at the study site, it was more of a tortuous process since through the filling out of forms they tried to give clarity of what was done or not done with the implementation of academic strategies.

According to Miranda (2018), the analysis of the situation, both of the educational, curricular and non-curricular physical infrastructure, shows the inequity and inequality that characterize the educational offer in Mexico, since the schools located in the poorest contexts are those that present the most precarious school infrastructure conditions, according to those interviewed at the school and which is shown in this axis of Table 1 as a response from those interviewed.

In this sense, the learning environment is as important as the collaboration that is generated within educational spaces, with the objective of improving the teaching-learning processes. The learning environment is a system with a life of its own, which is inserted in a network of supra systems and parallel systems that contribute to its configuration” (Coll and Solé, 2001).

Likewise, there are some contributions such as those of Maldonado (2007), who defines collaborative work in the educational context as an interactive learning model, which encourages students to build together, which encourages combining efforts, skills and talents. This encourages interactions and individual contributions from the members of the group.

Conclusions

The experience of adaptation and implementation of the “SCHOOL AT THE CENTER” strategy, from a general perception, is that some academic conduct and behaviors that had prevented the improvement of certain activities such as planning and accountability were modified; however, a desire for greater support from government agencies is perceptible when allocating this type of strategies; it seems that educational reforms and their strategies often remain incomplete in the implementation process.

The theoretical and conceptual arguments put forward by Pressman and Wildavsk (1973), on the processes of implementing public policies, enabled them to frame what happened in the case study school, in terms of their experience with the public strategy "THE SCHOOL AT THE CENTER", as something that seems to be recurrent in terms of problems, uncertainties, births of positions in relation to what is expected and which are the core of the implementation of public policies for this case, educational.

This research was able to identify, from the documentary review, the ideal of the proposed strategy “THE SCHOOL AT THE CENTER” which consisted of presenting this, –and continues to be–, as the strategy that could change the school dynamics. The opportunity to learn about the state of teaching and learning, how it is created or why it is not achieved, to reflect on what and how to establish a route for continuous improvement, and within this also configure a space for attention to the communications that the hierarchical authority demands to be carried out. Taking the reins in genuine improvement projects characterized by leadership and the involvement of the community for this, including parents. In how to incorporate and align all actions and efforts to achieve learning, to the personal and professional growth of teachers and school workers. However, and in relation to what was found in real practice, this ideal cannot be completed in a flat manner, leaving a gap for analysis in future works, the diffuse process in the implementation of this public strategy.

Future lines of research

To continue this type of work, it is feasible to look for more elements that allow the generalization of the findings. As future lines of work, it is suggested to study the public strategy 'La Escuela al Centro' from other approaches, such as sociology, and through reference frameworks supported by organizational theory. This will allow a triangulation of knowledge to validate the findings of each research carried out in this line.



Likewise, the analysis of more case studies, similar to the one presented in this work, will facilitate enhancing the results and searching for patterns in the analysis of public strategies such as the one analyzed in the present study.

References

- Argyris, C. y Schon, D.A. (1978). *Organizational Learning: A Theory of Action Perspective*, Sn. Francisco, Ca., Addison Wesley.
- Alcántara, A. y Zorrilla, J. F. (2010). Globalización y educación media superior en México: en busca de la pertinencia curricular. *Perfiles educativos*, 32(127), 38-57.
- Backhoff, E. y Contreras, S. (2014). “Corrupción de la medida” e inflación de los resultados de ENLACE. *Revista mexicana de investigación educativa*, 19(63), 1267-1283.
- Carrión, C. (2005). Discusiones necesarias en torno a la evaluación de la educación. *Revista mexicana de investigación educativa*, 10(27), 1259-1263.
<https://www.redalyc.org/pdf/140/14002718.pdf>
- Coll, C. y Solé, I. (2001). Enseñar y aprender en el contexto del aula. En Coll C., Palacios, J. y Marchesi A. *Desarrollo Psicológico y educación*. Madrid: Alianza.
<https://es.scribd.com/document/359227015/Lectura2-Ensenar-y-Aprender-en-El-Contexto-Del-Aula>
- Fombona, C, J., Iglesias, M, M. y Lozano, C, I. (2016). El trabajo colaborativo en la educación superior: una competencia profesional para los futuros docentes. *Educação & Sociedade*, 37(135), 519-538. DOI: 10.1590/ES0101-73302016147914
- Infante, B, A., y Padilla, G, L. (2020). Implicación familiar en el bachillerato: una estrategia para favorecer la permanencia escolar. *Sinéctica*, (54).
[https://doi.org/10.31391/s2007-7033\(2020\)0054-006](https://doi.org/10.31391/s2007-7033(2020)0054-006)
- Instituto Nacional para la Evaluación de la Educación (INEE). (2017). *Evaluación de la Oferta Educativa (EVOE) en Educación Media Superior*.
- Instituto Nacional de Estadística y Geografía. (2011). Presentación de datos estadísticos en cuadros y gráficas. *Centros de consulta y comercialización*.
http://www.snieg.mx/contenidos/espanol/normatividad/doctos_genbasica/cuadros_graficas.pdf
- Johnson, B. y Onwuegbuzie, A. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Research*, 33(7).
<https://journals.sagepub.com/doi/10.3102/0013189X033007014>



- Johnson, G. y Scholes, K. (1989). *Exploring corporate strategy*. Prentice Hall.
- Serna, G. (2008). *Gerencia estratégica*. Planeación estratégica: un marco de referencia. 3R Editores.
- Maldonado, M. (2007). El trabajo colaborativo en el aula universitaria. *Laurus*, 13 (23), 263-278. <https://www.redalyc.org/pdf/761/76102314.pdf>
- Miranda, L. F. (2018). Abandono escolar en educación media superior: conocimiento y aportaciones de política pública. *Sinéctica*, (51). [https://doi.org/10.31391/s2007-7033\(2018\)0051-010](https://doi.org/10.31391/s2007-7033(2018)0051-010).
- Morales, S, R. (2018). La planeación de la enseñanza-aprendizaje, competencia que fortalece el perfil docente. *RIDE. Revista Iberoamericana para la Investigación y el Desarrollo Educativo*, 8(16), 311-334. DOI: <https://doi.org/10.23913/ride.v8i16.343>
- Moreno, O, T. (2010). Lo bueno, lo malo y lo feo: las muchas caras de la evaluación. *Revista iberoamericana de educación superior*, 1(2), 84-97. <https://www.redalyc.org/pdf/2991/299123994006.pdf>
- Ojeda, R, M. (2013). La planificación estratégica en las instituciones de educación superior mexicanas: De la retórica a la práctica. *CPU-e, revista de investigación educativa*, (16), 119-129. <https://www.redalyc.org/pdf/2831/283128328007.pdf>
- Pressman, J., y Wildavsky, A. (1973). *Implementation how great expectations in Washington are dashed in Oakland*. Berkely: University of California Press.
- Revelo, S, O., Collazos, O, C. A. y Jiménez, T, J. (2018). El trabajo colaborativo como estrategia didáctica para la enseñanza/aprendizaje de la programación: una revisión sistemática de literatura. *TecnoLógicas*, 21(41), 115-134. <http://www.scielo.org.co/pdf/teclo/v21n41/v21n41a08.pdf>
- Secretaría de Educación Pública (SEP). (2014). *Lineamientos de operación del Fondo para Fortalecer la Autonomía de Gestión en Planteles de Educación Media Superior*. http://www.sems.gob.mx/work/models/sems/Resource/11586/2/images/Lineamientos_FAG_010214_Final_publicados2.pdf
- Secretaría de Educación Pública (SEP). (2008). *Reforma Integral de la Educación Media Superior en México: la creación de un Sistema Nacional de Bachillerato en un marco de diversidad*. México.
- Secretaría de Educación Pública (SEP). (2015). *Programas de Escuelas de Calidad (PEC)*. <https://www.gob.mx/sep/acciones-y-programas/programas-escuelas-de-calidad>

- Secretaría de Educación Pública (SEP). (2016). *El Modelo Educativo 2016. El planeamiento educativo de la Reforma Educativa*.
https://www.gob.mx/cms/uploads/attachment/file/114501/Modelo_Educativo_2016.pdf
- Secretaría de Educación Pública (SEP). (2017). *Modelo Educativo para la Educación Obligatoria. Educar para la libertad y la creatividad*.
http://www.gob.mx/cms/uploads/attachment/file/207252/Modelo_Educativo_OK.pdf
- Tuirán, R., Frech, S., Ortega, S. y Jasso, D. (2015). Recuento y visión de la educación media superior en México. *Revista electrónica Este País*.
<http://www.estepais.com/articulo.php?id=492&t=recuento-y-vision-de-la-educacion-media-superior-en-mexico->
- Tuirán, R. y Hernández, D. (2016). Desafíos de la educación media superior en México. *Revista electrónica Este País*.
<http://www.estepais.com/articulo.php?id=460&t=desafios-de-la-educacion-media-sup>
- Tuirán, R. y Villaseñor, P. (2016). El desarrollo de habilidades socioemocionales: una apuesta educativa rentable. *Revista electrónica Este País*.
<http://www.estepais.com/articulo.php?id=752&t=el-desarrollo-de-habilidades-socioemocionales-una-apuesta-educativa-rentable>
- Vázquez, V, P. (2018). *Límites y alcances de la Estrategia Escuela al Centro*. [Tesis de Maestría Ciencias Administrativas, Universidad Autónoma Metropolitana]. Ciudad de México. <https://zaloamati.azc.uam.mx/server/api/core/bitstreams/c72341df-97b4-435e-8192-1505f9514734/content>
- Villa, L, L. (2012). Tres problemas prioritarios que urge resolver en la educación media superior. *Perfiles educativos*, 34, 170-175.
https://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S0185-26982012000500017

Contribution Role	Author(s)
Conceptualization	Edgar Eloy Torres Orozco
Methodology	Edgar Eloy Torres Orozco
Software	Not applicable
Validation	Lucio Flores Payan
Formal Analysis	Lucio Flores Payan
Investigation	Edgar Eloy Torres Orozco
Resources	Edgar Eloy Torres Orozco
Data curation	Lucio Flores Payan
Writing - Preparing the original draft	Edgar Eloy Torres Orozco (same), Lucio Flores Payan (same)
Writing - Review and editing	Lucio Flores Payan
Display	Lucio Flores Payan
Supervision	Lucio Flores Payan
Project Management	Not applicable
Acquisition of funds	Not applicable