Reflexiones sobre la vocación profesional para avanzar hacia la cobertura nacional de una educación permanente

Reflections on Professional Vocation to Move Towards National Coverage of Lifelong Learning

Reflexões sobre a vocação profissional para avançar na cobertura nacional da educação continuada

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Resumen

Actualmente, debido a la brecha curricular que existe entre la educación básica y la superior, el rol que desempeña la educación media superior (EMS) es de vínculo entre estas dos. En este trabajo se considera que, al no romper esta condición de falta de metas compartidas entre los currículos de la educación básica y la superior y seguir trabajando de forma aislada, el Estado mexicano queda sometido a un reduccionismo educativo que impacta de manera negativa en el desarrollo sostenible del pueblo. Por ello, el objetivo es generar condiciones de equidad educativa entre organismos públicos y privados que imparten la EMS de manera que permitan fomentar e integrar la vocación de los individuos en su desarrollo profesional o laboral. Este documento de reflexión gira en torno a la oportunidad que tiene la EMS para ser un medio que les permita a los mexicanos convertirse en personas soberanas y autónomas a través del seguimiento y atención de su vocación profesional o laboral por parte de los sistemas educativos. Solo así será posible generar una alta satisfacción profesional y laboral que permita a la población económicamente activa ser consciente de su entorno y de su ecosistema y que motive a cada individuo a evolucionar como una persona que vive en armonía con sus semejantes
y procurar el bien común entre entidades productivas y sociales. Entre las conclusiones se encuentra que la concurrencia de metas en el currículo de la educación básica, la EMS y la superior, motivada por la orientación vocacional, genera acciones concretas a favor de la cobertura formativa por medio de la educación permanente, la cual permitirá recobrar las condiciones y características del bien común, como la dignidad de los docentes y la atención individualizada a los estudiantes.

**Palabras clave:** calidad educativa, cobertura educativa, educación permanente, reducción educativa, reforma educativa, vocación profesional.

**Abstract**

Currently, due to the curriculum gap that exists between basic education and higher education, the role played by the higher secondary education (EMS) is a link between these two. In this work, it is considered that, by not breaking this condition of lack of shared goals between the curricula of basic and higher education and continuing to work in isolation, the Mexican State is subjected to an educational reductionism that negatively impacts the sustainable development of the people. Therefore, the objective is to create conditions of educational equity between public and private organizations that teach EMS in a way that allows to encourage and integrate the vocation of individuals with their professional or work development. This paper revolves around the opportunity that EMS has to be a means that allows Mexicans to become sovereign and autonomous people through the monitoring and attention of their professional or work vocation by the systems educational. Only in this way will it be possible to generate high professional and work satisfaction that allows the economically active population to be aware of their environment and their ecosystem and that motivates each individual to evolve as a person who lives in harmony with their peers and seek the common good. between productive and social entities. It has been concluded that the concurrence of goals in the curriculum of the basic education, EMS and higher education, motivated by the vocational orientation, generates concrete actions in favor of the educational coverage through the permanent education, which will allow to recover the conditions and characteristics of the common good, as the dignity of teachers and individualized attention to students.

**Keywords:** educational quality, educational coverage, lifelong learning, educational reduction, educational reform, vocation professional.
Resumo
Atualmente, devido à lacuna curricular existente entre o ensino básico e o superior, o papel desempenhado pelo ensino médio (EMS) é um elo entre esses dois. Neste trabalho, considera-se que, ao não quebrar essa condição de falta de objetivos compartilhados entre os currículos do ensino básico e superior e continuar trabalhando isoladamente, o Estado mexicano está sujeito a um reducionismo educacional que afeta negativamente a desenvolvimento sustentável do povo. Portanto, o objetivo é gerar condições de equidade educacional entre organizações públicas e privadas que transmitem o SGA de forma a incentivar e integrar a vocação dos indivíduos em seu desenvolvimento profissional ou profissional. Este documento de reflexão gira em torno da oportunidade de que o EMS deve ser um meio que permita que os mexicanos se tornem pessoas soberanas e autônomas através do monitoramento e atenção de sua vocação profissional ou profissional pelos sistemas educacionais. Somente assim será possível gerar alta satisfação profissional e profissional que permita à população economicamente ativa conhecer seu ambiente e seu ecossistema e que motive cada indivíduo a evoluir como uma pessoa que vive em harmonia com seus pares e busca o bem comum, entre entidades produtivas e sociais. Entre as conclusões, destaca-se que a concorrência de objetivos no currículo do ensino básico, EMS e superior, motivada pela orientação profissional, gera ações concretas em favor da cobertura da formação por meio do ensino permanente, o que permitirá recuperar as condições e características do bem comum, como a dignidade dos professores e a atenção individualizada aos alunos.

Palavras-chave: qualidade educacional, cobertura educacional, educação continuada, redução educacional, reforma educacional, vocação profissional.

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Introduction

Proposing alternatives to determine and increase the satisfaction that graduates have about their employability is a challenge that demands to observe in detail the problem of the low level of quality of life of professionals from different perspectives. Therefore, this work is developed from the point of view of vocational guidance and its adequate attention from the educational level of upper secondary education (EMS). The foregoing was determined because it was considered that the contents taught in the EMS have sufficient curricular integration to consider teaching this educational level as an element that reaffirms or redirects professional or work vocations.

Consider that the human being is an entity capable of transiting an earthly stay (Morín, 1999) in which his spirit (concept understood from the vision of Vasconcelos in 1920 and exposed in the motto of the National Autonomous University of Mexico [UNAM], “For my race the spirit will speak”) is forced to transform from the initial stage of his life to his final productive stage, it implies the explicit vision of learning that is not limited to a period of life, that is, a permanent learning, which must be oriented in a clear way from the beginning of its capacity for decision-making (in Mexico it is considered to be at the age of 18 and is legitimized with the issuance of a voter credential) until its last influence in death.

However, in the period before their civil independence, the person in training relies on the educational process, which can be public or private. Figure 1 shows the transformation suffered by the individual when facing a society from which he receives or not support for his emancipation.

The society, being a community sectorized by social classes, is able to condition their actions in a virtuous or vicious manner - a human condition that will make them subject to judgments and prejudices by the labor and family sector. In both cases, the spiritual condition that the student forms in the face of the educational transformation in which he is immersed will make him a participant of a vulnerable group (if he is weak in spirit and shows low job satisfaction) or of a power group (if he is strong spirit and shows high job satisfaction).

The reflection of this document revolves around the deductive approach that assumes that a low quality of life is derived from low job satisfaction and a high quality of life is the result of high job satisfaction.
The hypothesis that was raised is the following: if the student receives adequate vocational guidance, depending on the degree of participation of basic education and higher education in the formation of the EMS curriculum, then they will be able to select an occupation that allow you to enjoy a high quality of life, visible through a high dignity as a person and national identity.

**Figura 1.** Alternativas de participación social que de un individuo puede manifestar durante el transcurso de su vida

The variables of this reflection are the educational reductionism generated by a centralized national curriculum and the educational coverage provided by continuing education. The scenario established as a proactive environment is the search for a solid sustainable development that meets the needs of regional ecosystems through actions that respect both economic and cultural endogenous diversity (Figure 2). Currently, as noted by the United Nations Educational, Scientific and Cultural Organization [Unesco] (2005), it is essential to invest all possible resources to provide citizens of the present and
tomorrow with new skills and attitudes relevant to sustainable development that is based on the new knowledge society for the economic and civic success of its community.

It is considered, then, that the money spent wisely in education is worth not only for workers, but also for communities and businesses. Higher education increases income and increases productivity; less education, higher levels of crime and decline of well-being. With the expansion of low-paying jobs, the social contract that generated security and commitment to most workers is broken: “If I work hard, I will be able to keep my job, support my family and enjoy salary increases” (Bartlett y Benavides, 2016, p. 36).

The ideals of educational coverage and continuing education

For Bartlett and Benavides (2016), education is a life-long process. This is consistent with the vision of Unesco (2005). Epistemologically, the concept of permanent education forces us to recognize a variety of agents, spaces, time and circumstances that educate. It also requires accepting that no one can be educated by another. In addition, the person responsible for their own education is the student, so it is personal responsibility and individual right to select their own professional and productive vocation (figure 1).

The right of identification and vocational selection, from the point of view of Bartlett and Benavides (2016), is based on constitutional articles 1, 3, 39 and 123. So, it is also an obligation of the State to ensure the best instrumentation between the educational subsystems to provide a dynamic interrelation that allows the student to be in contact with the advances of science and technology, and thus avoid curricular gaps.

With much anticipation of the concept in question, the Mexican Constitution clearly outlines the rights and obligations of a human being who lives in Mexico (Bartlett and Benavides, 2016). As already mentioned, particularly this is expressed in the following articles:

- Article 1: Human beings in Mexico are not slaves of anything or anyone.
- Article 3: We have an education guaranteed by the State and focused on getting individuals and the whole society to learn to live and enjoy constituting ourselves as people.
- Article 39: The inhabitants of this nation constitute a sovereign people in which all power resides.
- Together with articles 3 and 39, constitutional article 123 models a social integration in favor of sustainable development that goes beyond the economic
relationship between individuals and promotes sustainable development (see figure 2), provided they are under the guarantee of constitutional article 1.

This description allows to configure a forced relationship between constitutional articles 3, 39 and 123 to model an endogenous social integration that goes beyond the economic benefit between individuals and sees for the common good. In addition, to promote the exclusion of poverty and separation of social classes (see figure 3).

The interrelation for sustainable endogenous development (figures 2 and 3) allows to identify historical, current and future needs, which, therefore, demand immediate solutions from the State to the people and were declared as priorities since the time of Independence (Morelos, 2017), the Mexican Revolution (Bolaños, 2016) and that are still valid today. This shows that the education system has been reduced in its intention to provide education to the people due to the lack of attention to the regions and to pursue a centralized system that orders from the state capital. It is necessary to clarify that article 3 should not be translated into ideals and emerging philosophies proposing a pedagogy and didactic of their own, but in management, resources and priority attention to curricular changes; fact that the administration of the sexennial governments is accused and its lack of planning towards long-term sustainable development programs.

Through a documentary deduction based on the scientific method, it was possible to identify the most vulnerable people and communities in a regional ecosystem as a figure of social integration (figure 3), an identification that guarantees that the exercise of sovereignty is carried out in the most participatory way possible. This was able to meet the needs of differentiated regional ecosystems from a federal perspective with a high commitment to attention to diversity and a long-term vision.

The vocation

The Dictionary of the Royal Spanish Academy [RAE] (2019) defines the term vocation as an inclination to a state, a profession or a career. Therefore, the vocation will be understood in this document as follows:

The noble aspiration of an individual in professional training to become a virtuous person who lives in harmony with his ecosystem and through his actions is constantly improving his own being and that of others, favoring the common good, characteristics that They show their evidence in a high dignity and quality of life.
**Figura 2.** Interrelación constitucional para el desarrollo sostenible

Fuente: Candia, Carmona y Domínguez (2017)

**Figura 3.** Modelo endógeno de integración social para el desarrollo sostenible

Fuente: Candia (2014)
New element generating the curriculum

As an integration to the vindication of the professional or labor vocation as a generating axis of the curriculum, reference is made to the post-revolutionary intention where the State proposes to form a new curriculum of secondary and high school (Bolaños, 2016) and improve the contents that are they teach at this level of public education, recognizing through community inclusion all those who demonstrate their academic capacity. The educational system must be adapted to the widest freedom of all kinds of studies, as well as the professions that are formed in them, so that all individuals, national or foreign, once they demonstrate by means of a respective exam aptitude and knowledge necessary, without investigating the time and place where you have acquired them, you can dedicate yourself to the scientific or literary profession for which you are suitable (Juárez, 1859, p. 3).

This conception allows us to understand that, since the post-revolutionary times of Juárez, Vasconcellos and Bodet, there have been proposals to implement school revalidations, lateral exits and curricular flexibility, characteristics that model a proposal for broad educational coverage through permanent education. So why is it now spoken until the fatigue of an educational reform (Government of Mexico, 2017) that seeks to maintain the federalization and centralization of education with a clear intention of educational reductionism? This educational reductionism is characterized by minimizing the knowledge of sustainable tribal communities based on their traditions, which are not supported by a sequence of official documents (issuance of certificates and certificates of study), prioritizing and violently introducing elements outside the culture and community under the justification of a search for educational internationalization and globalization, with all of which, consequently, a high degree of social instability is generated.

To reduce social gaps, it is essential that teachers from indigenous communities (considered in a state of high marginalization), in communion with the National Union of Education Workers (SNTE) - which currently has an editorial in its organizational structure— and with the Secretariat of Public Education (SEP) - although already immersed in the educational reform -, make efforts to carry out national competitions for the writing of textbooks that rescue the knowledge of the education of the indigenous communities. These should be free distribution (especially to urban areas) and disseminated at the levels of basic education, EMS and higher.

Its writing will be based on cross-cutting themes such as history, storytelling and craft manuals, among others. The guiding axis of any publication will be the recognition and development of the arts and crafts that lead to a virtuous state of knowledge. The
contents will also be reviewed by Mexican scientists, an activity that is necessary for science to act for the benefit of the education of the people and cover the methodological gaps between empirical pedagogical knowledge and scientific technological developments.

Methodology

The methodology used is compared. The design is non-experimental and based on the deduction of an inclusive relationship of documentary character, which guides the identification of findings to a depth of knowledge of a descriptive-correlational-conceptual type of constitutional articles 3, 39 and 123, sovereignty, autonomy and technological development, framed from a perspective of free men.

For the preparation of the document, a three-phase procedure was carried out: planning, execution and reports. For the planning stage, prior to the start of a review of the literature, a panel was created with the authors of the project to include the individual findings. In the execution stage a comprehensive and thorough investigation of the literature was carried out. For this, an identification of keywords taken from the purpose study was carried out. The information collected not only included articles published in scientific journals, but also books, conference proceedings, unpublished studies were taken into account. The last stage is based on the creation of a report. Within the elaboration of the project a report was made whose content contemplates the descriptive analysis answering key questions derived from the hypothesis itself.

Developing

In The fraud of the educational reform (Bartlett and Benavides, 2016) it is considered that the concept of reform is not equal or homologous to creation or generation. The reform, from its main meaning, requires the existence of a prior, which must be improved from the allocation or improvement of resources, never at the expense of existing ones.

For our national education system that previous one, that accumulation of experience and proposals for improvement - that have crossed national borders - lies in teachers (especially in rural and indigenous areas), men and women capable of creating pedagogy and didactics under the most diverse and adverse conditions, who with justified right omit the follow-up of the centralized curriculum when its implementation is
difficult, not relevant or obsolete. Therefore, parallel educational alternatives are necessary - training for work (Candia, Flores, Carmona and Domínguez, 2017) - to vocational training (higher education) that complements and facilitates labor insertion avoiding academic reductionism.

Figure 4 shows the need that, during professional-productive training, the individual is not educated in series as an automaton, since the follow-up of his ideals through the consolidation of his professional vocation allows professionals to be different and unrepeatable, for the right to freedom and free will (Candia, Carmona et al., 2017) both in acts and thoughts, a virtue that leads us to educate ourselves in the conception of complexity (Arroyave, 2003).

**Public policies to avoid reductionism**

An educational reform, which is seen from complexity, must be addressed from a complex model of social integration (see figure 3), which allows generating endogenous public policies for sustainable regional development. The absence of public policies that address regional ecosystems in a differentiated manner leads to the personal conjecture that social programs and government agencies do not articulate future citizens with their responsibilities, so they limit them in their actions as human beings, and reduce the participation of their actions to promote the common good towards society.

Abusing solidarity to face public problems generates a low participation of the local community and graduates of institutions of higher education for the attention of social problems such as unemployment, migration, violence, drug trafficking, epidemics, inflation, malnutrition, marginalization belts, lack of technology transfer, etc. (Candia, Domínguez and Lazcano, 2016, p. 332).

The permanence of relevant public policies to avoid educational reductionism translates into an inadequate integration between school and society due to the absence of government management mechanisms, especially in the integration of lower and higher education levels.

So, if the ultimate goal of any educational reform is the improvement of the dignity and quality of life of citizens through job satisfaction, it is necessary that these conditions be embodied in a cross-cutting manner in all curricula of the education system, excluding centralization, and advance from equal education to equitable education.

This especially from the point of view of sociopolitical theory, which considers that cross-cutting issues are articulated with the problems of the individual, the environment, health and society. Its objective is located as the axis of analysis, research
and intervention of emerging processes related to environmental conservation; the consolidation of organized groups of society that have the ability to politically mobilize governments (nongovernmental organizations, self-management groups for employment and neighborhood organizations stand out); the promotion of culture for peace; the decrease in violence; urban development; the critical use of technologies; the use of mass media in human formation; the promotion of generic health; the reduction of poverty, hunger and malnutrition; the rational use of energy, and social planning, among others.

For the development of an innovative and flexible curriculum in the EMS, this should be directed to the mastery of competencies that will be evaluated based on the ability to cope with the unforeseen, control, anticipate and prevent them (Herrera y Didriksson, 1999, p. 37).

**The path of reductionism**

The road to reductionism, at least in Mexico, is invariable and with high institutional and organizational synergy, which is generated by the educational reform that derives from the sectorized National Development Plan (2013-2018), considering that said educational reform implies an affectation to all the tendencies of improvement in all the levels of the educational system.

It is also difficult to believe that the transversal proposal of the term educational quality (ambiguous in its implementation from the fact that it promotes equality and not equity) and a competency curriculum - still incomplete -, together with temporary (sexennial) and non-concurrent programs - like the tablet program for primary education and the commercialization of education through the private sector - they are incorporated into the common goal of strengthening national sovereignty and autonomy.

**Educational quality**

For Bartlett and Benavides (2016), conceptually quality is not a being-in-itself, but a being in another, which, being an abstract term, has no existence, but is a subjective indicator of a situation or characteristics of being to which it applies.

The word quality or quality comes from a word that Plato invented to name the characteristics of something, and which responds to the term which ... So who defines what is a quality education or what is educational quality? What does it support that the tests (called evaluation) ensure a quality education? What is the reason for trusting that
these evaluations will give "quality"? What are the features of that expected quality? (Bartlett and Benavides, 2016, p. 168).

These questions are widely valid, especially if the evidence obtained on the implementation of educational quality and curricular updating are not aimed at being compared through indicators such as the increase in the dignity and quality of life of people. Who does a poor people with a low level of education serve? To nobody. Not even to those who have tried to use poverty or ignorance for strategies of political benefit, since the electorate based on these conditions is volatile and does not show firm sympathies or conform to real militancies, but prebendarial and accommodative adhesions: it will vote for who gives it more (Soto, 2016, p. 74).

To meet the demand of the EMS on a relevant vocational or professional vocational orientation of the enrolled students it is necessary the participation of all - understood as a social participation with self-management and acquisition of power (Benavides 1988) -, as required by article 39 constitutional. Therefore, it is clear that if an educational reform is not conceived as a social transformation, it directs its actions towards educational reductionism. So, if the effectiveness of the Mexican education system is reduced to the presentation of an exam, it is even clearer that there is a deficient educational policy, and that it is attentive to the "free, sovereign and autonomous State of the Mexican people."

Towards an educational model with broad educational coverage

Morín (1999) and Arroyave (2003) coincide that every educational model by nature and interrelation must be complex, and currently, due to the tendency of the use of educational technology and the creation of knowledge societies (Unesco, 2005), it must be marked by three major global scientific revolutions:

- The relativity of time and space.
- The existence of probabilities.
- Non-experimental contrasted epistemology.

In the absence of these elements in the Mexican educational system for educational reform, Bartlett and Benavides (2016) express questions in favor of identifying the approaches that lead to reductionism, among them are the following: 1) how is it possible to idealize a teaching profile based on a reductionist criterion (entrance exam to the teaching staff of the National Institute for the Evaluation of Education
(INEE)) and 2) how can you define the suitability of a teacher (INEE teacher evaluation test)?

**How to reduce reductionism?**

When talking about regional public policies for the sustainable development of ecosystems (figure 3) there is no reference to the fracture of the country in five demographic regions, since the maximum divide and conquer as the political strategy of power is well known, particularly not to lose it (Bartlett and Benavides, 2016).

However, in this work, when talking about regionalizing education, we aim to provide the same knowledge, technology management and productive skills in an equitable way for each system that can be differentiated from another. For example, all states in the coastal zone must formulate a relevant curriculum including states such as Yucatán and Baja California (who, despite the distance, share the same labor and productive activity: fishing), being the duty of the municipalities specifying the best exploitation technology for each location (intensive fishing is not the same as extensive fishing).

**Another vision to avoid reductionism**

Professional vocation and economic development must go hand in hand in any sustainable development process. When addressing reductionism or educational coverage from the perspective of the business sector, it is important to review the shared value proposal (Porter and Kramer, 2011). This point of view of productive societies allows us to know the concept of shared value, which is defined as the policies and operational practices that improve the competitiveness of a company while helping to improve economic and social conditions in the communities where they operate. The creation of shared value focuses on identifying and expanding the connections between economic and social progress. Addressing from a current business vision the need for a teaching of professions is a work defined as pertinent when it is necessary to avoid reductionism and increase the coverage of resources (this being the unacceptable term to define the professional training of an individual).

For companies it is possible to create economic value by creating social value. In fact, there are three different ways of doing so: 1) by recognizing products and markets, 2) by redefining productivity in the value chain and 3) by building support clusters for the sector around the company's facilities.
As in the conceptual definition of the term reform, common elements (history and improvement) are present in shared value, where the lack of one of them represents reductionism and the presence and sum of these represents coverage. Likewise, social enterprises that create shared value can scale faster than purely social programs, when public policies are not able to evolve and become self-sustainable. Therefore, true social entrepreneurship must be measured by its ability to create shared value, not only by the benefits for private initiative. For an educational reform to be functional, there must first be common interests, factors in favor of the common benefit.

How to create shared value? For-profit companies that have a social purpose represent a higher form of capitalism, which allows society to move faster while companies grow even more.

The result of the creation of a shared value is a positive cycle of prosperity for the company and the community, which will lead to lasting profits. In order not to make education lucrative and not to confuse it with the privatization of education, intellectual capital must be understood differently from economic, but with the same monetary value. In that sense, social responsibility certificates are an element of social integration capable of generating shared value (Candia et al., 2016).

The creation of shared value represents a new management approach that crosses several disciplines. As a result, there are few executives who understand social and environmental problems well enough to go beyond current corporate social responsibility approaches and few social sector leaders have the management capacity and business mentality necessary to design and implement shared value models (Porter and Kramer, 2011). The previous situation allows to legitimize, from a different perspective, the need to form beneficial actions that impact on the revaluation of vocational or professional guidance as the axis of the new EMS curriculum.
Discussion

Permanent education in learning communities as elements that trigger educational coverage

As a historical experience, one can talk about cultural missions during the post-revolutionary era in Mexico as creators of educational communities, where new educators emerged, particularly in the rural and indigenous areas (Bolaños, 2016).

A priority of educational coverage with the support of continuing education requires that, through social participation, the current school will one day become the beginning of a shared school community: that graduates are forgers of educational communities and can do that evolve dynamically or generate authentic learning communities that favor interaction between ecosystems.

Creating learning communities from the public school even in its simplest sense requires as a beginning to collect the educational contributions (pedagogical and didactic) of retired teachers and active teachers who have substantive experience. In this way it is possible to discover the future burden of the Mexican educational system, with a cultural historical background, which is the basis of a solid proposal of contents for the update of free textbooks.

So, why not incite the Mexican people to express in writing reviews of their experiences (which are otherwise regionalized) with teachers who have positively influenced the lives of virtuous citizens, instead of disqualifying the teachers, terrorizing it, distressing it and chase him? (Bartlett & Benavides, 2016). Especially since in the instruments, practices and methods proposed by globalizing instances, the tendency and recommendations (when they are not requirements) tend towards homologation through “standardized” procedures, which pretend that the different processes converge towards a single style that It seeks to establish a single and competency curriculum, which undermines the ultimate aims of education (Benavides, 1998).

In an international philosophical context, Chomsky (2014) emphasizes that any form of domination, oppression or coercion must be justified, and yet it rarely is. Thus, the role of academics is to take relevant actions deconstructing the justifications of a bad government and raising the alert flag through citizen social participation, provided that the fundamental principles of our magna Carta are omitted or mocked. Therefore, those who have the opportunity and time to read and write should realize that they have a duty to help the voiceless and helpless. In this perspective, academics should see their role as facilitators of the emergency, development and persistence of true democracy.
(Bidadanure, 2017, p. 176). In their own words, teachers must be dignified again in their profession and performance.

**Concurrent goals**

Articulating social integration with job satisfaction through the exaltation of professional vocation and job satisfaction from the EMS as the axis of a new curriculum design allows, at different levels of depth, to provide greater educational coverage in any direction and social stratum with a greater focus on aligned and concurrent goals for the evaluation of public policies.

This reflection work supports and considers the training modality for work and learning arts and crafts (Candia, Flores et al., 2017) as indispensable elements in the professional and labor training of each individual who shares the ideal of transcend postgenerationally and not only be a reference within the family nucleus (with limited time), fostered educational coverage through public and private institutions that provide the individual's formative education (figure 4).

Figure 4 shows very marked features regarding the diversity that is generated when education is privatized, since the State will never enjoy so immediate, direct and explicit - such as the private sector - high flexibility in its processes, if these they are not productive, which allows to attend the minimum changes in the productive and social sectors. In addition to this limitation of management (educational reductionism), there is the inadequate decision making when approving non-functional public policies (for example, Enciclomedia 2006-2012), in terms of the actions that accompany the educational reform. Also the lack of relevance can be explicitly exemplified by resorting to the following example:

In the proposal of the educational reform (Government of Mexico, 2017), in addition to an inadequate teacher evaluation, it has not been taken into account that the relevance of the curriculum revolves around the attention of the vocational aspirations of the individuals in training that lead to high satisfaction and fulfillment of their expectations and of the labor sector, regardless of whether the education received is public or private (Figure 5).

For the relevance of content it is necessary that the valuable information that is in the hands of the teachers who for years and generations have provided this bond of social integration be rescued, without having been recognized, through the collection of pedagogy books and didactic Likewise, the wide scope of the relevance of regional pedagogy and didactics means that the methodology, procedures and routines are
constantly updated in their examples and content through reviews carried out by Mexican scientists. In both cases with the inclusion of an economic remuneration through the SEP and the National Council of Science and Technology (Conacyt), as the case may be.

Beyond the political component, from a personal perspective and consideration, an educational reform must be carried out with the priority of updating global teaching methods (competences) by endogenous teaching methods (arts and crafts), as well as adapting subjects to current times, including teaching materials and educational infrastructure. Thus, it is possible for reductionism to collapse and give way to educational coverage, as was the 11-year plan that marked an international precedent, a success that allowed Mexico to be recognized as the generator of the first great distance school. The professors did not arrive with a curriculum developed in accordance with the pedagogical canons, nor did they require entry requirements, enrollments or rigid schedules, that is, they already presented a really open and situated education model, such as the one theoretically posed in the modern pedagogy; in its approach are present elements that are identified with the methodology of distance education (Bosco, 2008, p. 26).

**Figura 4.** Ciclo formativo de un individuo y sus interacciones con los ciclos educativos cursados

![Diagram](image)

Fuente: Candia, Yañez et al. (2017)
Figure 6 shows that, in advancing the current educational reform and implementing the skills-based curriculum suggested by the Organization for Economic Cooperation and Development (OECD) as recommended by the World Bank (WB) and the International Monetary Fund (IMF), students are condemned to a new form of slavery that is fostered by capitalism and where the educational system lacks a total moral or legal figure.

**Figura 5.** Satisfacción de los estudiantes a partir de la atención de sus aspiraciones vocacionales

![Diagram](image)

Fuente: Candia, Yañez et al. (2017)

The story reveals a great pedagogical productivity (Bosco, 2008) by teachers and leaders who are convinced that respect and tolerance to the ideals of the Magna Carta are essential elements for sustainable development and broad educational coverage (Candia, Carmona et al., 2017). It was also identified that the validity of revolutionary ideals are still valid. Although it is not necessary to start an armed struggle again, it is essential to begin a social struggle to recover the autonomy and sovereignty that allows improving the quality of life, considered a unique and unrepeatable indicator for each citizen and will reflect their commitment to sustainable development of the nation.
Figura 6. Modelos esclavistas que propician el reduccionismo educativo

Fuente: Candia, Yañez et al. (2017)

**Dimensions of complexity**

To philosophically support the current proposal on strengthening EMS as an entity that prioritizes the professional or labor vocation as an integrating axis of educational and public policies, the assumptions and reflections of Morín (1999) are used - associated with the proposal of Arroyabe (2003) -, expressed as seven knowledge necessary for the education of the future and still valid:

1) In the interpretation of the error and referring to the educational reform and the illusion of a wide educational coverage. The projection of our desires or our fears, coupled with the mental disturbances that our emotions bring, multiply the risks of error and illusion, limiting the participation of society in citizen consultations.

2) In the knowledge of pertinent knowledge, consultation with society will allow knowledge to be relevant, since an educational reform must demonstrate the context, the global, the multidimensional and the complex, as is the case of continuing education. The more planetary the problems become, the more unthinkable they are, being unable as individuals to project the context and the planetary complex, blind intelligence becomes unconscious and irresponsible (Morín, 1999, p. 18).

3) Teach the human condition, respect and evolution of the philosophical principles of constitutional articles 1 and 3 and the aims of education.

4) Teach the earthly identity, self-recognition of history before initiating reforms. Learning to be-there means learning to live, to share, to communicate, to commune; it is what we only learn in and by singular cultures (Morín, 1999, p. 36). We must dedicate ourselves not only to dominate, but to condition, improve, understand and inscribe in us:
the anthropological, ecological, civic awareness of responsibility and solidarity and spiritual of the human condition.

5) Face uncertainties, design long-term education systems independent of sexennial governments, autonomy to educational institutions. There are two ways to face the uncertainty of the action. The first is full awareness of the commitment that comes with the decision. The second, the recourse to strategy. In both cases, the principles of uncertainty must be covered: brain-mental, logical, rational and psychological (Morín, 1999, p. 42).

6) Teach understanding, all in favor of the vocational decision. In the beginning, communication does not entail understanding, thus, also information, if it is well transmitted and understood, entails intelligibility, the first necessary condition for understanding, but not sufficient. There are then two understandings: intellectual or objective understanding and intersubjective human understanding, in order to advance to an education that avoids the obstacles of understanding, such as egocentrism, ethnocentrism and sociocentrism and reducing spirit (Morín, 1999, p. 48).

7) The ethics of the human race, abandon the idea of profit with the education of the human being and his ability to survive. Life stories should be collected with conscience and transcendence for textbooks and, giving humanity the opportunity to learn through mistakes, to understand by children to parents (when they cannot express their feelings) . The contents that will foster the vocation of the students will be guided by the recommendations of the international plural society through the integration of knowledge societies by configuring the following loops:

- Individual ---> Society: Teach democracy.
- Individual <-> Species: Teach terrestrial citizenship.

In short, there can be no consistency if when you write you configure a reductionist contribution. Also, when creating a world of its own, this argues reductionism, as is the formation of groups of intellectuals, which allows us to see, in addition to reductionism, exclusivity (Unesco, 2005), another great challenge to face. However, turning my feelings and experiences into words concurs and reflects the complexity of the system and its impact on the dignity and quality of life (Morín, 1999, p. 9).
Knowledge societies as pillars of vocational guidance

Every individual has the right to freedom of opinion and expression. This right includes not being disturbed because of their opinions, to investigate and receive information and opinions, and to disseminate them, without limitation of borders, by any means of expression.

The following elements: multiform digital divide, economic resources, geography, age, sex, language, education, employment and physical integrity, are a clear example of reductionism to freedom of expression, and which are product not only of the Government, but also of human evolution; deprivations that cannot be awarded to an institution or entity and that are part of the internal struggle of every individual (when their occupational demands are exceeded by technology) that becomes a person and a citizen.

The limitation of freedom of expression intensifies the detriment of the formation of citizens when they are limited to evolve with their ecosystem due to the rapid technological advance. The emergence of new knowledge, as well as its organization in increasingly specific disciplines and in increasingly complex and less hierarchical “knowledge networks”, calls into question the viability of the operation of “universities” (Unesco, 2005, p. 99).

The objectives emanating from the will to build knowledge societies are ambitious. Achieve basic education for all, promote education for all throughout life, stimulate the generalization of research and development in all countries of the world through the transfer of technologies, the regulation of the global circulation of competences and the promotion of digital solidarity: these efforts to achieve the participation of all in the shared use of knowledge and constitution - even in the most disadvantaged countries - accumulating genuine cognitive potential.
Conclusions

Moving towards the implementation of the educational reform as proposed by the Government of Mexico and implementing a proposed curriculum based on competencies leads students to a new form of slavery (see figure 6) that is encouraged by capitalism and neoliberalism, which causes the education system to lack a total moral or legal figure instead of being an entity of social change.

To reduce reductionism, and move towards educational coverage, requires a new conception of social participation that integrates self-management and the acquisition of power, as established in article 39 of the Mexican Constitution. While civilizations are not ready to address complexity at large scales, it is necessary to be pioneers in their implementation in regional ecosystems through social integration models.

The proposal of this work, by paying attention to regional ecosystems through triple helix models with a Big Bang approach, where the attention of vocational aspirations of EMS students is integrated and are revolutionized in their scope by reviewing the names and achievements of nationals that reflect a great scientific capacity, will prevent the brain drain and the location of research and technology transfer centers that will not be the result of chance, but not the unequal tax policies. The ability to move from creative thinking to critical thinking that evolves into analytical thinking allows the Mexican community to maintain indicators of high productivity and scientific effectiveness that are not reflected in the national gross domestic product (GDP), but in foreign GDP (public policies disguised as foreign investments).

As a future work, it is recommended to structure and describe the process by which the formal and informal educational elements are incorporated into a complex relationship that allows a high robustness of the EMS system, which promotes activities of a pedagogy and informal teaching so relevant, that it achieves overcome the instruction of the structured basic science of the formal curriculum, but for the benefit of applied science and technology transfer, as well as the formation of a creative and critical thinking in the student to present a broad panorama of job opportunities to future.
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