

# Transforming Education in Sonora

## Transformar la Educación en Sonora

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### Abstract

The objectives of this article are twofold: to present a general and partial appreciation of education in Sonora, and to propose a set of ideas, also very broad, to guide the transformation of this education. Both objectives are set in relation to the next change of social representation and government in the state of Sonora. It is the responsibility of this representation and government to draw up programs and proposals to lead social directions and to agree with all citizens, in a democratic framework, the definition of social aspirations and the ways to achieve them. Education is central to this orientation: there is no social task more important than the formation and transformation of the members of society; in this the construction of the human, individual and social must be expressed, and around this, the other social processes must revolve to make it possible: the economic, the political, the cultural. The ideas presented here about education have the particularity of not referring only to school education and the so-called educational system; It is intended to cover the education that takes place in other institutions and social organizations, which we call social education. We will start with our appreciation of the school system.

**Keywords:** Social education, educational system, Human development, Sonora

**JEL Codes:** I2, I21

### Resumen

Los objetivos de este artículo son dos: exponer una apreciación general y parcial de la educación en Sonora, y plantear un conjunto de ideas, también muy amplias, para guiar la transformación de esta educación. Ambos objetivos se plantan en relación con el próximo cambio de representación social y de gobierno en el estado de Sonora. Corresponde a esta representación y gobierno elaborar programas y propuestas para conducir los rumbos sociales y acordar con todos los ciudadanos, en un marco democrático, la definición de los anhelos sociales y las maneras de lograrlos. La educación es central en esta orientación: no hay tarea social más importante que la formación y transformación de los integrantes de la sociedad; en esta se debe expresar la construcción de lo humano, individual y social, y en torno a ello, han de girar los demás procesos sociales para hacerla posible: lo económico, lo político, lo cultural. Las ideas aquí expuestas acerca de la educación tienen la particularidad de no referirse solo a la educación escolar y el llamado sistema educativo; se pretende abarcar a la educación acontecida en otras instituciones y organizaciones sociales, a la cual denominamos educación social. Iniciaremos con nuestra apreciación del sistema escolar.

**Palabras clave:** Educación social, sistema educativo, Desarrollo humano, Sonora

**Código JEL:** I2, I21



## About the formal education system

In 2018, shortly before the elections that year, Casanova (2018) published the result of a reflective and propositional effort by a group of researchers regarding the formal education field, based on a forum held at UNAM the previous year. This work summarizes proposals from researchers for the national education agenda and presents chapters on the challenges facing the education system. Casanova identifies five crucial problems in education: quantitative deficit, recognition of quality, infrastructure and equipment, the link between education, politics, and the role of actors in educational processes in the construction of decisions within the field, and finally, the link between education and society regarding topics such as citizenship, democracy, and security. We adopt this author's perspective, although not strictly, to present our views on formal education in Sonora.

**Quantitative deficit.** Regarding the quantitative deficit, Mexico has undertaken actions in the last two decades to reform the education system at different school levels. First, in terms of coverage, preschool education was made mandatory in 2002, although in 2020 it only covered 72.3% of the respective population nationwide and 62.6% in Sonora (ranked 28th among the 32 federal entities). Primary

education has a national coverage of 104.7%, with Sonora ranked 28th at 97.3%. Secondary education was made compulsory in 1993 and reached 96.1% nationwide and 92% in Sonora (rank 22) in 2020. Nearly ten years later, in 2012, upper secondary education was established as mandatory, aiming for universality, although in 2020 it reached only 78.9% nationally and 70.8% in Sonora, ranking 27th among the states. At the higher education level, excluding postgraduate studies and considering both formal and non-formal modalities, national coverage is 40.9%, with Sonora at 44.8%, ranked 6th (see Table 1).

Thus, different coverage levels can be observed in Sonora across the various educational levels: concerning at the basic level, acceptable at postgraduate, and good at higher education.

On the other hand, according to the indicators, student retention remains a concern, especially at the upper secondary and higher education levels. In 2020, the national dropout rates were 13% and 8.5%, and in Sonora, they were 14.1% and 14.3%, respectively (see table 2).

Some effects of changes in education in recent decades show achievements, such as the increase in mandatory basic schooling, from preschool to secondary school, which in the country reached

**Table 1.** Coverage indicators in Sonora, school year 2019-2020

Educational level and age range	Total enrollment	Population <sup>1/</sup>	% National	% Sonora	Sonora rank	Traffic light
Basic (3 to 14 years old)	551 199	630 536	94.5	87.4	30	Red
Preschool (3 to 5 years old)	96 857	154 747	72.3	62.6	28	
Primary (6 to 11 years old)	306 958	315 600	104.7	97.3	28	
Secondary (12 to 14 years old)	147 384	160 189	96.1	92.0	22	
Upper Secondary (15 to 17 years old)	113 274	160 030	78.9	70.8	27	
Technical Professional (15 to 17 years old)	112	160 030	1.0	0.1	29	
High School (15 to 17 years old)	113 162	160 030	77.9	70.7	27	
Higher Education (Including Postgrad) (18 to 23)	116 220	314 201	31.0	37.0	04	Green
Higher Education (Excluding Postgrad) (18 to 22)	112 548	262 289	34.9	42.9	04	
Higher Education (Excluding Postgrad) (18 to 22) <sup>2/</sup>	117 455	262 289	40.9	44.8	06	
Bachelor's degree (18 to 22 years old)	110 717	262 289	34.0	42.2	04	Red
Normal/ Teacher Training (18 to 22 years old)	1 831	262 289	0.9	0.7	24	
Postgraduate (23 years old)	3 672	51 912	11.2	7.1	20	Yellow

**Note:** 1/ Mid-year population projections, CONAPO 2018; 2/ Includes the non-formal education system. In the Traffic Light column: red indicates ranks between 22 and 32, yellow between 11 and 22, and green between 1 and 10. Red indicates low coverage, yellow average coverage, and green high coverage relative to the ranks among federal entities.

**Source:** Own elaboration based on data from the Reporte de Indicadores Educativos <http://snie.sep.gob.mx/indicadores.html>

**Table 2.** Dropout indicators in Sonora, 2019-2020 school year

School Dropout	Total Enrollment Following Cycle <sup>3/</sup>	Graduates Current Cycle	New Enrollment to 1st grade Following Cycle	Total Enrollment Current Cycle <sup>3/</sup>	% National	% Sonora	Sonora Position	Traffic Light
Primary	304 290	51 034	50 951	306 958	0.5	0.8	24	
Secondary	146 950	44 584	50 524	147 384	4.3	4.3	17	
Upper Secondary	111 448	30 721	44 832	113 274	13.0	14.1	24	
Technical Professional	110	30	70	112	26.6	37.5	27	
High School	111 338	30 691	44 762	113 162	12.8	14.0	25	
Higher Education	111 393	16 781	31 739	112 548	8.2	14.3	32	
Normal School	1 715	631	510	1 831	5.9	-0.3	04	
Bachelor's degree	109 678	16 150	31 229	110 717	8.3	14.6	32	

**Note:** 3/ for the calculation of Normal school dropout, enrollment from 1st to 5th grade is used instead of total enrollment. In the Traffic Light column: red indicates a position between 22nd and 32nd place, yellow between 11th and 22nd, and green between 1st and 10th. Red indicates low coverage, yellow average coverage, and green high coverage; all in relation to the position occupied according to the rates of the federal entities

**Source:** Own elaboration based on data from Reporte indicadores educativos <http://snie.sep.gob.mx/indicadores.html>

94.5% in 2020, although in Sonora it reached 87.4% of the respective population, in the third-to-last place by states. In contrast, the average schooling of the national population was 9.6 years in 2020 and 10.5 years in Sonora, ranking 3rd among federal entities; in 20 years, the growth rate of average education was 57.4 in Mexico and 67.44 in Sonora.

Another important reform, that of upper secondary education, has been progressively developed since 2008, starting with the Reforma Integral de la Educación Media Superior (RIEMS), which promoted the competency-based model and the organization of the various subsystems under a Marco Curricular Común (MCC), and the Sistema Nacional de Bachillerato (SNB). Also, in 2013, with the mandate of its compulsory nature, the Sistema Nacional de Educación Media Superior was created with several objectives, among which stands out the promotion of quality (DOF, 2018).

In Mexico, even with official support, the competency-based educational model has encountered serious difficulties at all levels. Thus, a pending issue is to evaluate its application, both in relation to academic achievements of students and teachers, and in its effects on job performance and, even more, on human development and the well-being of society members.

A broad and exhaustive diagnosis of quantitative achievements and deficits of the educational system is very necessary. Here we have just pointed out a couple, but it is necessary to consider performance,

the teacher-student ratio, attention to the demand of excluded social groups, incorporation into employment, among many others.

**The recognition of quality.** One of the most important challenges facing the school system is the increase in educational quality, at all its levels, for which the recent Ley Reglamentaria del Artículo 3º Constitucional was issued, whose objective is the continuous improvement of education (DOF, 2019b), through the establishment of the Comisión Nacional de Mejora Continua de la Educación, as well as the Sistema Integral de Formación, Actualización y Capacitación, which will be fed back by diagnostic evaluations.

In our country, significant efforts have been made to evaluate the learning achieved by students. In this sense, the Secretaría de Educación Pública (SEP) and the Instituto Nacional de Evaluación de la Educación (INEE) designed the Plan Nacional para la Evaluación de los Aprendizajes (PLANEA) to evaluate the learning of students in basic and upper secondary education, with the purpose of continuing with the strengths and overcoming the weaknesses of the Exámenes Nacionales del Logro Académico en Centros Escolares (ENLACE) and the Exámenes de la Calidad y el Logro Educativo (EXCALE). This Plan is made up of learning tests distributed in three different evaluation modalities: Evaluación del Logro referida al Sistema Educativo Nacional (ELSEN), Evaluación del Logro referida a los Centros Escolares (ELCE), and Evaluación

The evidence from the data collected in these 18 years shows that, in general, the degree of development of the country matters, since developed countries obtain the best results. In the case of Mexico, they reveal that students in private schools obtain the best performance, and in public schools, those with more favorable socioeconomic conditions also achieve higher learning outcomes. As a novelty, this last report includes a section dedicated to well-being: when considering socio-emotional aspects, the results of Mexican students show that their degree of life satisfaction was one of the highest, at 83%, compared to the 67% OCDE average. Likewise,

96% stated that they sometimes or always feel happy, in contrast, only 6% said they always feel sad, and 17% agree or strongly agree that they feel lonely at school, very close to the 16% OCDE average; 23% of students said they had been subjected to bullying a few times a month, and finally, 85% indicated that they agree or strongly agree that their teacher shows enjoyment when teaching classes, above the 74% OCDE average (2019b).

In parallel and expanding on what is assessed by PISA, the OCDE launched in 2008 the Programa para la Evaluación Internacional de las Competencias de los Adultos (PIAAC), which monitors, analyzes, and evaluates the level of reading and numerical competence, the use of information and communication technologies in work and everyday life of the adult population aged 16 to 65. In the third round published in 2019, which spanned 5 years, Mexico was included for the first time as one of the 39 participating countries. The results show the great lag in competencies that the Mexican population continues to have throughout life, ranking well below average: in reading and numerical areas, it ranks third to last, and in problem-solving in computerized environments, in position 35 (OCDE, 2019c). As with the results obtained in PISA, sociodemographic characteristics such as age, level of education, and social background are related to the mastery of competencies. But not only has it not been possible to raise the quality of the educational system in general, it is also reflected in the level of productivity, the lowest among OCDE countries. Mexico is the OCDE country with the highest unemployment rate for people with higher education studies, which could be partially explained by the quality of training and the productivity of the workforce. Likewise, it is possible that it has not been possible to modify low labor productivity, something accompanied by low wage levels, as well as the limited growth in the generation of quality jobs, which require a higher school and educational level (see Table 4).

**Table 3.** Sonora Educational System Indicators 2018, Basic education

EO	Educational outcomes			Entity	National	Minimum	Maximum
To what extent do basic education students achieve the key learning objectives intended in the national curriculum?							
Percentage of 6th grade primary students according to the level of educational achievement reached in the domains evaluated in the PLANEA-SEN tests (2018)	Language and Communication	Insufficient	%	43.8	49.1	33.7	68.6
			(ee)	(1.6)	(0.6)	(1.7)	(1.9)
	Mathematics	Satisfactory and outstanding	%	21.0	17.9	8.9	29.4
			(ee)	(1.4)	(0.3)	(0.9)	(1.5)
		Insufficient	%	55.2	59.1	47.4	78.2
			(ee)	(1.7)	(0.5)	(1.8)	(1.6)
	Satisfactory and outstanding	%	25.6	23.0	10.9	33.2	
		(ee)	(1.6)	(0.4)	(1.2)	(1.7)	

**Source:** INEE (2018) [https://www.inee.edu.mx/wp-content/uploads/2019/09/2018\\_EF\\_Son.pdf](https://www.inee.edu.mx/wp-content/uploads/2019/09/2018_EF_Son.pdf)



**Table 4.** Sonora Educational System Indicators 2018

What are the benefits of education in labor participation?		Entity	National	Minimum	Maximum
Employment rate according to education level. Population aged 25 to 64 (2018)	Without basic education	65.7	62.1	53.0	70.5
	Basic education	70.0	67.9	60.3	75.2
	Upper Secondary education	74.2	71.0	63.4	78.4
	Higher education	80.6	80.3	72.0	86.8
Percentage of workers with stable employment according to education level. Population aged 25 to 64 (2018)	Without basic education	34.8	20.7	5.6	46.9
	Basic education	55.8	43.4	16.5	73.6
	Upper Secondary education	71.2	60.1	42.0	79.0
	Higher education	79.5	74.6	61.5	84.9
Relative hourly wage of workers according to education level. Population aged 25 to 64 (2018)	Without basic education	0.70	0.72	0.57	0.80
	Basic education	0.72	0.81	0.72	0.88
	Upper Secondary education	1.00	1.00	1.00	1.00
	Higher education	1.69	1.78	1.56	2.23

Source: INEE (2018) [https://www.inee.edu.mx/wp-content/uploads/2019/09/2018\\_EF\\_Son.pdf](https://www.inee.edu.mx/wp-content/uploads/2019/09/2018_EF_Son.pdf)

The issue of quality does not stop at these appreciations since the concept itself, the policy, and the associated programs have been under debate since their adoption. As already mentioned, although it has been given maximum relevance, along with its companions, quantitative evaluation through evidence and the large number of regulations and evaluating, accrediting, and certifying bodies, school education has not improved even in the terms of that perspective; what has indeed increased is the respective rhetoric and bureaucratization (Casanova 2018). In this way, an informed, critical, and honest dialogue about quality and evaluation is urgently needed, whether to reinforce it or to discard it and adopt another perspective, according to the formative purpose of education in pursuit of human development and well-being.

**Infrastructure and equipment.** Casanova (2018) points out that, although in primary education in the country the coverage indicators are very high, the conditions of schools are deplorable: just over a quarter (total number of schools: 152 000) of the buildings require improvements, there are problems with drinking water supply in around 28 000, in 14 680 there are no sanitary services and 91 672 operate without drainage. More: 10% lack electricity, 82% have no telephone connection, 50% have no computers or they do not work, and 20% have internet access. Significant shortages of basic teaching supplies are also reported.

The example of deficiencies in primary schools in this area illustrates the need to address and study it in depth. In Sonora, studies in this regard are scarce or refer to the issue as part of other problems, for example, in a study by Vera, Luque, and Bautista (2016: 3) about Infraestructura y calidad educativa entre los pueblos indígenas originarios sonorenses, it is mentioned that “the results indicate the

prevalence of a perception of lack of infrastructure to improve the educational quality of indigenous children and youth”. We do not have, of course, clear and sufficient indicators of infrastructure and equipment for training in other areas; the absence of equipment to support schoolwork at home became evident during the pandemic: many homes without internet and without computer equipment. If it is desired that, in addition to the school, other social environments participate in training in a defined and effective way, their conditions as educational environments must be studied and diagnosed.

### ***The link between education and politics and the agents in the construction of decisions.***

One of the main aspects to address in the broader and deeper diagnosis will be the evaluation and objective, and therefore critical, analysis of the situation and effects of the educational policy of the current government of Sonora. Future lines cannot be drawn if the present conditions are ignored. The current government set itself challenges related to infrastructure and equipment, raising quality, social participation, cultural promotion, sports development, improvement of administrative management, social responsibility, sustainability, equality and inclusion in educational institutions, and linkage and knowledge transfer. Each of these challenges must be thoroughly reviewed to establish their level of achievement, not only based on official documents, but also according to reports of the experiences of school process actors and research products.

For example, regarding “Objetivo 19. Dar cumplimiento a las políticas y programas de igualdad e inclusión en todos los organismos, niveles y modalidades del sector educativo” of the government program ([http://www.sec.gob.mx/portal/modules/informe/docs/informe\\_ejecutivo\\_v1.1.pdf](http://www.sec.gob.mx/portal/modules/informe/docs/informe_ejecutivo_v1.1.pdf)), a study on exclusion in upper secondary education schools



(Castellanos & Zayas, 2019) reports the need to address the micro characteristics of interactions between students due to their importance for the effective achievement of curricular knowledge and the development of the students themselves. Thus, it is urgent to look at interactive and affective aspects of school agents to advance in all types of inclusion.

Analysis and diagnosis are indispensable requirements to aspire to the construction of a state policy in educational matters, one that provides continuity, to a greater or lesser extent, to governmental efforts. In other words, it is not only about making prospective government plans with political will, but also necessary to start from a historical perspective. Of course, this implies certain situations of conflict due to ideological distances between successive governments, but “the specific attribute of a state policy is some level of conjunction between conflict, continuity, and consensus” (Guardamagna & Cueto, 2013: 78).

The previous issue has to do, like all political matters, with who decides and how decisions are made, in this case regarding education in Sonora. Of course, it is the responsibility of the government to guide and lead social efforts and aspirations, based on and in the direction of these efforts and aspirations. In the case of education, decisions must be made not only based on the needs of the productive apparatus or the economic sector, but above all from a humanistic orientation, with the broadest informed participation of the different levels of government, educational agents, and society as a whole. Highly relevant in this aspect is the role of those holding positions in the government sector. This area should be carefully reviewed and addressed. It is important to examine and modify the job profiles to ensure that the holders of the positions are not accommodating politicians but professionals with the highest academic and educational authority. Political skills without substance or having held a government or union office in the field of school education is insufficient; a broad theoretical knowledge of education as a social phenomenon and as a formative and pedagogical process is required to responsibly take charge of education in the state of Sonora; experience is also required, not in the number of years worked in the sector, but in reflective experience, even written, about educational tasks. It is also about limiting the power of these decision-making bodies and transferring it to others to advance towards an increasingly democratic orientation.

To get an idea of the current academic and pedagogical preparation of officials and staff of the SEC, a brief review of their curricula included in the Transparency portal, Sonora (2020), was conducted. In these, with incomplete and confusing data, very few people are shown with an academic degree in education granted by prestigious universities. Data on experience in years in the school system as well as previous job positions are reported: the positions are held by politicians or members of the SNTE, by people coming from other government secretariats and even by former workers from the private sector, without previous links to the educational system.

What has been said in the previous lines is extremely important due to its relation to the possibility of constructing governance processes increasingly removed from grandiloquent, deceptive discourses, and ritualistic and merely bureaucratic practices, to approach training in and for human development and the well-being of social agents as educators and educated.

Another relevant aspect regarding decision-making in education is the participation of the central agents of this process: school officials, teachers, students, parents, as well as other collective actors in education: teachers' unions, civil society organizations, and companies interested in education. The issue of social participation gained relevance since the end of the last century, but it has not achieved due prominence in the management of education; even in some educational levels, setbacks have been observed.

In the state of Sonora, the involvement of parents, both at home and at school, for the performance and training of students at all educational levels, including higher education, was studied (Zayas, 2010). It was concluded that their participation is a very relevant factor for the comprehensive training of students at all educational levels. Regarding the related policy, it was observed that, although at its broadest and most discursive levels it promoted fostering social participation and parental involvement, as it approached the operational level, it imposed restrictions on this participation.

It seems that the situation has not changed much, as regarding the Consejos de Participación Social, Sánchez Parra (2016) notes, citing various authors, that their installation “has responded more to administrative matters, where simulation prevails (Martínez, Bracho y Martínez, 2007), without

effective social participation work (...)” with very irregular operation and many existing only on paper (Vélez et al. 2008), with signs of “failure of the organizational structure (Canales, 2006), from a state policy that shows little progress (Latapí, 2004)”.

The same author, focusing on Sonora, notes that the regulatory framework of Participación Social en Educación (PES), although it grants some autonomy to agents in the school space, for example, to raise funds, limits them in achieving more important goals, such as pedagogical ones. He also notes that participation is scarce, so the state of things is not changed. Even poorer is participation in municipal and state councils and therefore the articulation between these and the school councils. Sánchez Parra (2016) concludes by saying that the obstacles to social participation are: “the design and implementation of PES policy, which must therefore be modified (...); the role of school administrators and teachers in not allowing “parents to have greater weight in decision-making”, (...) and family and household factors that limit parental participation.

Another way to gauge the development of social participation in education and its role in decision-making are the virtual portals of the respective organizations. The search for the Consejo Estatal de Participación Social en Educación in Sonora yields no results; the SEC page regarding this (<http://www.participemos.gob.mx/avance-de-integracion-de-consejos-escolares.html>, consulte don September 13, 2020) shows that no preschool, primary, and secondary school work center “has formed its Consejo Escolar de Participación Social en la educación en el Estado de Sonora.” On the side of parent associations, the website of the Asociación Estatal de Padres de Familia (<http://www.aepafsonora.com/>) shows little information and the “Noticias” section is in English.

We consider that narrowing the gap between education-school and the rest of society is achieved by making all of society assume itself as an educator, as a trainer. In this way, for example, the home or the community are not collaborators of the school, but they also have specific educational tasks and collaborate with each other; also, the training agents are not only teachers but also parents, all family members, and society as a whole; as collaborating environments, all participate in decision-making.

***The link between education and society, between education and the development of***

***citizenship, democracy, security.*** Article 3º establishes that the school education system must “develop harmoniously all the faculties of the human being and foster in him, at the same time, love for the Homeland, respect for all rights, freedoms, and the culture of peace...” (DOF, 2019a). Also, that the education provided by institutions must contribute to healthy coexistence, where cultural diversity is embraced, the dignity of the human being with equal rights is upheld, and, in addition, the guiding criteria will be national, democratic, equitable, inclusive, intercultural, comprehensive, and of excellence. Meeting such demands poses great challenges. Achieving the comprehensive training of society members throughout their lives, developing their cognitive, socio-emotional, and physical capacities, enabling them to achieve well-being (DOF, 2019a), requires special attention and a profound change in perspective, since currently, education is more focused on preparing students for the labor market -under this approach, the constitutional objective remains only as a wish-Fulfilling it requires a great social effort and another political, theoretical, content, and procedural orientation. Education in the school system is undoubtedly one of the fundamental pillars for human development, international evidence indicates that a more educated population is prone to greater citizen and political participation, shows less involvement in criminality and violence, is healthier and happier; in turn, it is more productive, with access to better jobs and wages, and therefore, to better economic, social, and emotional growth, development, and well-being.

What has been mentioned about social participation in education and its meager achievements shows the difficulty of linking school processes with the whole of other social processes. This difficulty runs counter to the great value attributed to education, which is usually linked almost naturally to solving huge social problems regarding citizenship development, democracy, security, and now, more acutely, health.

Casanova (2018, pp. 19) asks in this regard and in relation to the educational challenges for the current six-year term of the federal government: “How much of the educational is being used to strengthen society and to generate a more democratic culture? How much of the educational is being used to strengthen the common good? Is it possible to address the major problems of insecurity and violence through education?” It is well worth





asking the same questions about the challenges in education for the next government of Sonora and to these questions, others should be added, such as the issue of health and that of economic and financial education.

From our perspective, it is possible to strengthen the ties between education and society according to the proposal of thinking of education as a phenomenon not only school-based, but as something present in all social environments, and linked not only to the productive apparatus but to human development and well-being. It is thought this way because that is how it actually happens: the training built at home is present in the workplace, in school, and in other social environments and vice versa, except that so far there have not been broad and consistent efforts to engage in dialogue about this intimate relationship to agree on purposes, contents, training practices, and necessary resources in these training environments. Of course, this would imply recognizing and preserving the diversity of environments and their agents.

An effort of this kind would allow agreements and common actions in all educational environments and would prevent overloading schools with tasks, which has happened frequently. It would also make us aware that we are all, in one way or another and at the same time, training agents and agents in training, and that, to build an educating and educated society, it is necessary to take that awareness into our own hands and translate it into actions.

In Sonora, there are incipient efforts to account for the level and characteristics of the relationship between school education and society around the questions posed by Casanova and the others we added. In universities, mainly public ones, the issues of education and democracy have been studied and actions have been carried out on inclusion, gender inequality, participation, and against violence, regarding which a distinction is worth noting: this relationship is studied with two approaches: first, when the phenomenon occurs in schools, and because it occurs in them, it is considered as an educational matter; and second, when education is about these issues. The second, more of our interest, is less frequent.

On the side of non-school education, in the area of civic culture, the Junta Local Ejecutiva del Instituto Nacional Electoral (INE) in Sonora (<https://centralectoral.ine.mx/2020/05/14/>

[ine-sonora-invita-conocer-faro-democratico/](https://centralectoral.ine.mx/2020/05/14/ine-sonora-invita-conocer-faro-democratico/)), invites secondary school students to visit the digital platform “Faro Democrático” of UNAM (<https://farodemocratico.juridicas.unam.mx/>), to learn about democracy, citizenship, and political participation, to understand and form an opinion on these topics. It also invites teachers of Civil and Ethical Training obtain digital tools to strengthen their teaching.

The Instituto Estatal Electoral de Sonora offers social organizations and high school and higher education students the Foros Democráticos de la Estrategia Nacional de Cultura Cívica (ENCCÍVICA) of the INE ([http://www.ieesonora.org.mx/educacion\\_civica/programas/foros\\_democraticos\\_enccivica](http://www.ieesonora.org.mx/educacion_civica/programas/foros_democraticos_enccivica)) with topics on civic and political-electoral culture to achieve participation and interest in these matters.

Regarding the contributions of education to solving major problems of insecurity and violence, its approach is also initial, as the respective research refers not so much to the educational or formative phenomenon, but to insecurity and violence occurring in schools. In other words, it is not studied how to train agents for the practice of peace and security and against violence and insecurity, but rather reports on insecurity and violence in schools and the role of school agents or social conditions in this process. Something similar happens in the area of education in and for health. Despite advances in the knowledge of dietary processes and the serious risks in the consumption of foods promoted in the current economic model, there is usually more interest in the economic dimension of this phenomenon and not so much in the health of the population, and there are almost no educational studies or proposals for health; what is possible is merely disseminating information about the nutritional values of food products.

Economic and financial education is also urgently needed. Despite the relevance of economic and financial aspects, this has been a little-addressed area in training. It will be necessary to address it in school and outside of it, for teachers, students, and all types of populations, to study topics such as market, production, work; consumption decisions and personal and family economy; banking and financial products; social and civic responsibility in the economy; advertising, critical media awareness; budgeting, consumption, saving, personal finances (Denegri et al., 2014) and taxation. The axis of these





topics would be dialogue about the human value of the economy, finance, and money: it is time to stop considering these topics only in terms of ambition and the excessive wealth of a few and to give them a human dimension.

In Sonora, regarding this, a study on tax culture and education in students of a degree program at a public university (Mendoza et al., 2016) shows the “non-existence of tax culture in more than half of the university population” and the lack of knowledge on tax issues. If this ignorance is similar in other degree programs of that and other universities and in the general population, the adverse consequences for the state’s and the country’s finances can be imagined.

## About social education

Now then, although the school system and schools are a basic component for educating the members of society, without the educational participation of other social institutions, education in our country and state will always lag behind. So obvious a fact has been neglected: education takes place in the family, in the workplace, through the media, in religious institutions, among other settings. This omission has prevented us from attempting to integrate these various forms of education. However, the seriousness of the problems in our society requires this integration. Health problems, violence, exclusion, injustice, and low sustainability cannot be solved solely by the organizations responsible for these issues. The seriousness of these topics demands a comprehensive approach. For example, health difficulties cannot be resolved solely by the organizations in charge of that task, under exclusive health-disease parameters. Collaboration from the family, school, and other economic and political organizations is required, each contributing according to its parameters: educational, economic, political, communicative, within their respective spaces.

Something similar happens with education: it cannot be resolved solely by the school. To have an educated society, society as a whole must be an educator, under the coordination of the institution responsible for this task, embodied in the school education system. Attempts have already been made to integrate these institutions in some way; this has happened with the attempted collaboration

between family and school, and with the poorly achieved creation and operation of national, state, and municipal social participation councils. More consistent activities have been schools for parents, although their greatest limitation has been the privilege granted to the school; parents collaborate with the school for its objectives, but the family’s educational capacity is not developed, with its respective contents, procedures, training of its members, and definition of purposes. In higher education, efforts have been varied: University-business partnerships, university social service, business incubators, and that perspective presented as innovative, although already practiced since the last century: dual education at the university.

We insist, education is not only a school phenomenon, since the integral formation of individuals, which affects all dimensions of the human, has always been present in all social settings; what is now required is to give it a clear intentionality, an orientation not left to common sense or private interest, but aimed at achieving human development and well-being, as a social and community agreement.

The urgency is greater if the goal is the development not only of intellect or skills, but also of the formation of emotions, affections, and intuitions. It is necessary to educate cognitive and behavioral aspects, but also other dimensions, to address other contents that the school cannot include and to reframe those it neglects, and to do so throughout the life cycle. Too much is already asked of schools and it is time to discuss, specify, and direct that other education always ongoing in other institutions. Continuing with the health example, it is advisable to engage in dialogue about the education provided to children by the media regarding the consumption of so-called junk food or about the role of the family in early childhood regarding eating habits. Thus, it is no longer just about forming human resources or human capital, but full individuals, in all areas of human life.

Diagnoses of the situation in this area are already numerous, as well as the search for alternatives: social education, an attempt to take the school beyond its current walls; educational perspectives for well-being; the approach between the perspective of human development and education; the consideration of the socio-emotional dimension as both a perspective and an object of education; as well



as the relevance of including issues such as gender, disability, diversity, sustainability, and others, have forced the broadening of education's horizons.

If the above are the tasks, what are the perspectives that should guide their realization? We propose the following.

## Guiding ideas for the transformation of education

The transformation of education in Sonora requires profound changes that include both the modification of the very idea of education and the clarification of its purpose, the places where it takes place, its contents, what constitutes the core of its activity, and its actors and authors.

**A. Education in and for human development and well-being.** Education's main purpose is not the formation of human resources for the productive apparatus but the integral formation of the members of society, in and for human development and personal and community well-being. Thus, the goodness of education should not be evaluated solely or mainly by the quality of performance in tests applied to teachers and students or by the achievement of competency indicators, but by its contribution to human development and individual and social well-being.

**B. Education in and for the whole of society.** For training for and in human development and well-being, education in school is indispensable, although to achieve it, it must also take place in the spaces of all institutions and social organizations, mainly in the home, in the media, in digital social networks, in the community, and in health and work centers, among others. It is about conducting education in a broad sense, in all contexts where people live and develop. Therefore, it is necessary that in these environments and contexts, the aforementioned purpose is considered, and the necessary and sufficient conditions, resources, and training tools are available.

**C. Training contents with instrumental and social value.** Training contents, in addition to instrumental ones necessary to meet the needs of economic production, should be those to achieve human development and well-being. It is necessary to train in knowledge contents, both scientific and common sense, actions and behaviors, as well

as feelings and emotions, to understand and give meaning to individual and social life and achieve strong and supportive social and individual identities. General scientific contents about nature and society, yes, but also those derived from ancestral and non-Western knowledge and feelings. Contents focused on promoting well-being, in fields such as health education, inclusion and equity, sustainability, democracy, citizenship and peace, leisure, and entertainment. These should be incorporated into the school curriculum and developed through social education.

**D. Education based on experience and formative relationships of trust and good treatment.** Training and being trained in and for human development and well-being requires certain practices and modes of relationship between subjects. Practices are those of teaching and learning, based on conventional pedagogies and didactics; also, and centrally, formative experiences based on the activities of the trained and the trainers, activities linked to systematic reflections and the refinement of emotions and feelings, carried out personally and through collective dialogues, to bring about changes in individual and social subjects around:

- particular and community life projects, linked to the meaning of individual and social life,
- different ways of signifying society, nature, and one's own and others' spirit,
- the construction of solid and supportive individual, community, and social identities.

On the other hand, the relationships and interactions between educational subjects cannot be vertical and authoritarian between trainer and trainee and among education agents: administrators, officials, students, teachers, organization leaders, parents. Social relationships and interactions must be horizontal and based on cordiality, trust, and good treatment.

**E. Participatory education of all authors and actors involved in training.** Education in and for human development and well-being in school takes place according to the characteristics and practices of teachers, administrators, and officials, all of them focused both on teaching, learning, reporting, and performance indicators and, above all, on the formative experiences of themselves



and those around them. This entails constant training of these actors to act as agents in practice, through systematic reflection and the refinement of feelings and daily dialogue with peers, and through the confrontation and complementation between scientific and traditional knowledge, intuitive action, ethical commitment, and emotional and sentimental impulse. It also necessarily requires the informed and committed involvement of other educational agents, in their respective formative environments and with their participation in other spaces and with other educators: mothers and fathers, leaders and members of health institutions and media organizations, social digital networks, workplaces, sports, leisure, and entertainment centers.

A relevant clarification: “in and for” has been repeatedly used. This is to indicate that the intended transformations must operate from and not be left for the future. For example, if it is a health promotion program, changes should not wait until the end of the program to begin: they must start even when the program is being developed, continue during its implementation, and go beyond its completion; carry out the program in health conditions, promote the health of participants at the moment of its application, and prepare them to continue their healthy practices and relationships in the future.

These guiding ideas will orient not only the future formulation of policies, plans, and programs but even the situation diagnosis of education in the state of Sonora.

## Conclusions

In education, the challenges for the new government and social representation in Sonora imply: dialogue and reaching conclusions for a state educational project, not only school-based but also social, based on a state project for Sonora; expanding the coverage of the school system, from early childhood to higher education, and doing so with a solid perspective of justice and social inclusion; discussing the relevance and advisability of maintaining, modifying, or discarding the current criterion of quality as a central element of school educational processes; strengthening strategies not only to improve student performance and the continuous and permanent learning of teachers but also the integral training of students, teachers, and officials

for and in human development and well-being; impacting and improving, with criteria of justice and social inclusion, the infrastructure and equipment of schools and the conditions and resources of other social institutions for the proper performance of their educational task; fostering a link between education and politics in favor of training in and for human development and well-being and not in favor of the demands or interests of unions, political parties, or other economic power groups; improving the link between education and society by increasing social participation in schools and developing other educational forms in society to address problems, as far as education is concerned, of democracy, security, health, and sustainability. It is also imperative to face the challenge posed by educational digitalization, which will undoubtedly be the arena where the future of society will be decided.

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