

## Aspects that Employers Value when Hiring a Graduate of Higher Education

Dalia Lizzett Acosta Cárdenas<sup>\*a</sup>, Juan Carlos Rodríguez Macías<sup>b</sup>, Joaquín Caso Niebla<sup>c</sup>

Universidad Autónoma de Baja California, Unidad de Evaluación Educativa, Ensenada, México.

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**ABSTRACT.** One of the purposes of universities, together with scientific, technical and cultural development, is to train the professionals that society requires. The aim of this study was to identify the aspects that employers value when hiring a graduate of Higher Education. For this, semi-structured interviews were conducted with the heads of the human resources departments of three companies located in Baja California, Mexico. The interview asked questions about the characteristics or their workforce (recruitment and selection process, desirable traits in their future professional co-workers, reasons why they hire or reject a candidate, among others), and the employers' opinion of Higher Education Institutions (HEIs) as trainers of human capital. The study found that in the employers' opinion, the attitude shown by graduates of HEIs in the interview is as important as technical knowledge; they also point out that the proactive attitude was a weakness in the candidates, as well as oral and written communication skills, particularly in English. Furthermore, there was no strong opinion regarding the educational quality of HEIs, but they highlight the benefits of a closer relationship between companies and universities, with the aim of achieving a balance between labor supply and demand.

**KEYWORDS.** Higher education; graduates; competencies; employability; labor market.

## Aspectos que Valoran los Empleadores al Contratar a un Egresado de Educación Superior

**RESUMEN.** Uno de los propósitos de las universidades, junto con el desarrollo científico, técnico y cultural, es formar a los profesionistas que la sociedad requiere. El objetivo de este estudio fue identificar los aspectos que valoran los empleadores al contratar a un egresado de Educación Superior (ES) a través de la opinión de tres jefes de departamento de recursos humanos en tres empresas localizadas en Baja California, México. Para ello, se realizaron entrevistas semiestructuradas. En la entrevista se hicieron preguntas relacionadas con las características de su fuerza de trabajo (proceso de reclutamiento y selección, características deseables en sus futuros colaboradores, razones por las que contratan o rechazan a un candidato, entre otras) y la opinión que tienen los empleadores acerca de las Instituciones de Educación Superior (IES) como formadoras de capital humano. En el estudio se identificó que, en opinión de los empleadores, la actitud que demuestran los egresados de las IES en la entrevista es tan importante como el dominio de los

\*Correspondencia: Dalia Acosta Cárdenas. Dirección: Carretera Tijuana - Ensenada KM 103, Pedregal Playitas, 22860, Ensenada, México. Correos Electrónicos: [dalia.acosta@uabc.edu.mx](mailto:dalia.acosta@uabc.edu.mx)<sup>a</sup>, [juancr\\_mx@uabc.edu.mx](mailto:juancr_mx@uabc.edu.mx)<sup>b</sup>, [jcaso@uabc.edu.mx](mailto:jcaso@uabc.edu.mx)<sup>c</sup>

conocimientos técnicos; también señalaron que la actitud proactiva es una debilidad en los candidatos, así como las habilidades de comunicación oral y escrita, en especial en inglés. Por último, no hubo una opinión contundente respecto a la calidad educativa de las IES de Baja California pero destacaron los beneficios de una vinculación más cercana entre las empresas y las universidades con el fin de lograr equilibrios entre la oferta y demanda laboral.

**PALABRAS CLAVE.** Educación superior; egresados; competencias; mercado laboral.

## **1. INTRODUCTION**

Mexico has suffered the consequences of a worldwide transformation that has occurred as a result of globalization (Santibáñez & Cruz, 2000). As technology advances, the simplest jobs tend to die out, while those requiring more complex functions begin to increase. Consequently, employers increase their standards when it comes to hiring professionals, who are required to become increasingly specialized (Gottfredson, 1997; Zalaquett & Turner, 1997, as cited in Castro, 2004). In light of this situation, higher education in Mexico faces the challenge of providing young people with broader knowledge and skills, allowing them to access, thrive, and keep themselves in labor markets (Estrella & Ponce León, 2006). Employers' opinions can help to define the requirements that come with economic globalization and trade openness, which in turn helps to determine the traits graduates need to tackle this challenge (Crespo, Cuamatzi & González, 2009). Thus, feedback on curriculum relevance and any curricular adaptations should take into account the regional context in higher education programs (Damián, Montes, & Arellano, 2010) and employers' opinions. The idea is not to make sure that professional training enables workers to adapt to the effects of these changes, but rather that training programs anticipate, with proactive measures, the skills that graduates will need (González, 1993).

### **1.1 Approach to the problem**

Attaining a higher level of education is considered by society a determining factor for economic development, as this enables access to jobs with better conditions (Mora & Oliveira, 2012). In developed countries, employability is related to the level of education of the economically active population; that is, employability is higher in the population with the highest level of study (Organization for Economic Co-operation and Development [OECD, 2003]). The rate of graduates of higher education in Mexico increased an average of 40% (OECD, 2019). However, some employers expressed that in the labor market there is a shortage of talent, reflecting the lack of knowledge of the requirements of professionals that the sector has (Márquez, 2011). Four out of five Mexican employers said they have difficulties filling their vacancies because candidates do not have the necessary competencies to perform their duties (OECD, 2019). Also young people perceive that they graduate with little preparation for the demands of the labor market (Corica, 2012).

There is a gap between the demands of companies and the training offered in the education system and employers have low expectations regarding the skills of graduates (Velde, 2009). On the other hand, teachers said that they do not know which transversal skills are relevant to the labor market and also do not know how they could help students to develop these skills. In addition, students are not aware of the importance of transversal skills or how to develop them (OECD, 2019).

The university must consider the needs of employers so that recent graduates acquire the knowledge and skills that enable them to obtain, preserve and create decent jobs (Ramlia, Nawawia &

Poh Pau Chun, 2010). This can be achieved through the opinion of employers since they are the intermediary between academia and society.

## **1.2 Research question and investigation aim**

The research question that guided the study was: What are the aspects that employers value when hiring a graduate of higher education in Baja California? Therefore, the aim was to identify the aspects that enable the employability of graduates of Higher Education Institutions (IES) in Baja California.

## **1.3 Theoretical framework**

There are several theoretical approaches that explain the relationship between young graduates and employment options available to them; in this case, education economics was chosen.

Education economics addresses the economic implications and aspects of educational phenomena (Pineda, 2001). Within this field of knowledge, there are several explanations, but only two theoretical approaches that best fit the reality of Baja California were addressed: the human capital theory and the filter theory. The research was conducted in Baja California because it is where the Educational Development and Research Institute (IIDE) is located. This was facilitates access to local that hire graduates of higher education institutions.

The main representatives of the human capital theory are Theodore Shultz and Gary Becker. The human capital theory argues that education increases individuals' productivity, which consequently enhances job performance (Becker 1964; Schultz 1961). This theory focuses on the importance of education for production and economic growth, and considers education an investment. As such, education provides marketable skills and abilities relevant to job performance, and thus the more highly educated people are, the more successful they will be in labour markets in terms of both incomes and work opportunities.

Later, Becker analyzed that the education sector is the main producer of human capital, but that the time and dedication that the family dedicates to training is also important (Becker, 1964). Jacob Mincer (1958) considered that formal education was not enough to explain economic growth, and based on the analysis of Becker's fundamentals, he explained that workers' incomes increase with their level of education and the work experience acquired by them people.

According to Garrido-Trejo (2011), higher education in Mexico is based on this theory, but results show that it has benefitted only a small group in each sector and branch of the economy and society but, the social benefits of the theory of human capital are reflected in a highly skilled workforce (OECD, 2003). While the human capital theory has become an explanatory tool for the relationship between education attainment and labour market outcomes, there are limitations to this theory's and it has received criticism too. Therefore it is necessary to call upon the contribution made by other emerging perspectives, as they seek to fill this gap (Pineda, 2001).

Given these limitations, the filter or selection theory developed by Kenneth Arrow, Michael Spence, and Joseph Stiglitz in the 1970s suggests that the labor market requires a series of indicators to take recruitment decisions, such as the level of education, skills and academic degrees and grades attained. If that is the case, then companies do use education as a filter to select workers. Job seekers send signals about their ability level to employers by acquiring educational credentials, while employers screen the job applications according to the signals that the educational credentials transmit. Therefore, educational credentials become an indicator of quality or ability (Cai, 2013).

One criticism of this trend is that it is not a case of studying to broaden one's knowledge and acquire skills and abilities, but rather students pursue an education simply to obtain a document proving the individual's capability (Oroval & Escadibul, 1998).

The theories that have emerged from economics encourage us to challenge the role of higher education with reference to graduates' entry into the labor market. Most studies of the relationship between educational achievement and its results in the labor market and international organizations such as the World Bank and the OECD, tend to use the theory of human capital to explain this relationship by establishing knowledge as the center of development economic. This has prompted studies on education programs, training processes, work history, and graduate follow-up, among other aspects.

#### **1.4 Context of the Study**

In Baja California, Mexico, higher education follows a model of competency development. There are in total 73 autonomous, state, federal and private institutions, of which 28 are public and 45 are private. These institutions offer a total of 220 degree programs, but despite the variety of options, students are highly concentrated in just a few. Indeed, 38.5% of students enrolled in Baja California study 10 degree programs, with the bachelor's in law receiving the greatest number of students (State Government, 2016). Lastly, the number of degree candidates having completed programs in the various higher education institutions in the 2014-2015 academic year was 31,850, of which only 22,236 fulfilled the requirements to graduate, meaning that 29% of these students do not have a university degree (State Education System [SEE], 2018).

With regard to youth employment in the state, during the third quarter of 2018, there were 255,589 people in Baja California with higher education who were employed (National Institute of Statistics and Geography [INEGI], 2018a), whereas the number of unemployed with the same profile was 10,040 (INEGI, 2018b). In addition, high levels of production mean that this sector is the highest contributor to national GDP (6.1%) (Banamex, 2016).

Despite the level of unemployment, some employers have reported difficulties in filling vacancies (OECD, 2017). In the National Development Plan 2013-2018, it is said that the shortage of human capital is the result of inadequate liaison between the productive and education sectors, and as a result, higher education should be strongly tied to the country's research and production (Official Gazette of the Federation [DOF], 2013). Other consequences of this lack of communication are: (a) a lack of awareness of present-day professional and labor needs and requirements (Márquez, 2011); (b) an imbalance in the makeup of students enrolled, with an excessive concentration of students in a few select programs with saturated job markets, whereas other programs are in scant demand (Márquez, 2011); and (c) a high proportion of university graduates unable to find their place in the labor market (Vargas, 1998).

## **2. METHOD**

In order to acquire a broader understanding of the phenomenon studied and to investigate which are the qualities that favor the employability of graduates of higher education from the perspective of employers, the research used interviews were conducted with key informants: specifically, three heads of human resources departments. The heads of human resources are responsible for recruiting and coordinating the staff hiring process in their companies.

On other hand, the data to identify the companies was taken from the National Statistical Directory of Economic Units (DENUE) produced by the INEGI. The three companies where the

interviews were conducted belong to the manufacturing sector and are currently experiencing growth. They have been in Baja California for over 20 years and have offices in the United States, China, and Mexico. Organizational structures were divided into departments (purchases, sales, production, quality, human resources, and accounting).

The three informants were women who held managerial positions in the human resources departments and had bachelor's degrees. When they took up the position, they already had experience in human resources. The main activities they carried out were recruitment, hiring, training, promoting a work environment, health and safety, and administrative procedures, such as preparing payroll. The heads of human resources departments were informed that the results would be used to improve the employability of future graduates.

The objective of the interviews was to explore, from their point of view, which characteristics favor employability in higher education graduates. On the other hand, the interviews that were conducted were semi-structured, as this facilitates research when subjects have little time to participate (Bernard, 1988, as cited in Tarrés, 2008), as was the case with the heads of the human resources departments.

To construct the interview guide, two dimensions were selected based on the research question, the objective and the literature reviewed. The first dimension is called characteristics of the workforce and the second dimension is perception about Higher Education Institutions. . The categories of each dimension are mentioned in the results. The guide comprised 14 constructed-response questions (appendix). The questions that the participants were asked were the same as the three interviews.

The research was conducted with the three subjects. Interviews lasted approximately 45 minutes and were audiotaped. Data was later analysed by the researcher. Deductive content analysis was used to process the data from the interviews, considering the categories established. No software was used and the results were not triangulated with other sources.

The data collected from this small sample of heads of the human resources points to different views, but requires further research before they can be demonstrated. However, this study gives us a starting point to understand how the process of the employment of recent graduates is.

### **3. RESULTS**

The results obtained are presented in keeping with the dimensions established in the interview guide addressed. The guide comprised 20 constructed-response questions to the heads of human resources of the selected companies. The dimensions are (a) characteristics of the workforce, including categories relating to filling posts, staff hiring and selection, training and continuing development, and co-workers' skills and attitudes; and (b) the perception of HEIs and their graduates.

#### **3.1 Characteristics of the workforce**

This dimension sought to understand how co-workers are selected and what factors are taken into account when selecting or rejecting a prospect. The categories are: (a) means of recruitment; (b) unfilled vacancies; (c) selection process; (d) characteristics of applicants; (e) reasons why applicants are rejected; (f) desirable attitudes in applicants; (g) skills lacking in applicants; and (h) training.

**Means of recruitment.** The primary means used by the companies to attract staff is the Internet, whether through websites designed specifically for that purpose or through social networks. Secondly, they are in contact with job centers, and sometimes staff are recruited through word-of-mouth.

**Unfilled vacancies.** The participants reported that it is difficult for them to fill positions in the production, quality control and sales departments. Reasons why they are unable to find staff vary, but one major cause is the lack of candidates with the required training.

**Selection process.** The first filter used to select staff is the curriculum vitae, which is reviewed to check that the applicant's work experience fits the profile required. Then, chosen applicants are called to an initial interview with the human resources manager to discuss personal and socio-economic matters and work experience, and answer a few theoretical questions about the position. Applicants who meet these requirements are called to a second interview with their future direct supervisor, who asks questions about specific knowledge relating to the position.

**Characteristics of applicants.** It was stated that the first attribute human resources managers look for is that applicants have the knowledge to carry out the job required, and this is determined by looking at the curriculum vitae. However, the participants stated that often applicants "do not know how to write a CV". Other characteristics they take into account are applicants' performance during the interview, their attitude, and the values they display. Furthermore, their personal appearance "does not have to be the most elegant, but should be presentable".

**Reasons why applicants are rejected.** The primary cause for rejection is that the applicant does not have the profile for the position, "mainly due to lack of knowledge". The participants agreed that "competition for jobs is very tight and a better qualified applicant comes along"; one participant noted that "this is where the applicant's attitude during the interview can make the difference between selection or rejection; although applicants may not have much experience, comments on applicants' proposals and analyses, and the quality of their contributions are all assessed". In this regard, one participant stated that in one case, "Despite the applicant's lack of experience, there were already proposals, analyses, and contributions being offered during the interview".

**Desirable attitudes in applicants.** The participants agreed that they look for a great sense of responsibility, commitment, dedication, flexibility, innovation, initiative, and applicants who are able to "solve problems and work under pressure".

**Skills lacking in applicants.** The participants agreed that attributes that are greatly lacking in employees are a proactive attitude and "proper" communication and analytical skills. Another deficiency is oral and written proficiency in English, as they are required to communicate with clients from abroad.

**Training.** All new employees receive induction courses. Further training is provided for certain positions; for instance, in engineering, certifications are offered by the company so employees may refresh their training. One participant stated that "on occasions, members of staff have been sent to the United States because they need to become certified in the product we make, and they need to receive specific training and knowledge for this". Another commented, "We used to send them to the United States, but now somebody comes here, particularly for new procedures and refresher courses." For export staff, refresher courses and training are also offered due to changes in operating regulations implemented in December 2017. For the accounting and human resources department, training is provided on a local scale by the Association of Accountants (Colegio de Contadores) and the Secretariat of Labor. Other employees have taken the initiative to further

their professional development independently and decided to study a master's degree. In some companies, financial support is given when employees decide to study a graduate degree, depending on their history.

### **3.2 Perception of Higher Education Institutions**

The aim of the dimension was to ascertain employers' opinion on the education received by HEI graduates, including local HEIs. The categories are (a) main institutions from which workers graduate; (b) opinion on the quality of education provided by state HEIs; (c) problems faced by graduates; (d) recommendations for HEIs so graduates are able to access, remain and thrive in the labor market.

**Main Institutions from which Workers Graduate.** Of the 73 HEIs that exist in the state, the three participants only mentioned one private and two public universities. One of the public universities has a technological orientation and the other is the state's autonomous university. The private university mentioned also has a strong technological orientation.

**Opinion on the quality of education provided by state HEIs.** No conclusive opinion was given on state HEIs. One participant commented, "It doesn't depend on the institution, I don't think any one is better than any other, the institutions are the same, it's the person who determines the result."

**Problems faced by graduates.** The participants identified various problems, most frequently the competition in accessing the labor market, as for many graduates there are few opportunities. Another problem is graduates' lack of experience, "there are many degree programs in which it is impossible to work [and study at the same time], meaning that these students have fewer skills than graduates who were able to combine work and study."

**Recommendations for HEIs so graduates are able to access, remain and thrive in the labor market. The participants made two recommendations.** First, HEIs should be "attentive" to new developments, have initiative and think of improvements that can be implemented. The second recommendation was associated with work, "they should allow them to work and study (...) some students do, and they find their place in the labor market more quickly".

## **4. DISCUSSION AND CONCLUSIONS**

The results of this study is limited by the samples used (heads of the human resources departments of three companies). However, with the results that emerged from this study, it was possible to know some characteristics that most value employers when hiring a graduate of higher education. The conclusions and the discussion of the main results are presented below.

In terms of means of recruitment, the role played by digital means of communication, and in particular the Internet, in the recruitment process is crucial. This means that graduates must be excellent users of these technologies, and skilled at retrieving information. Also despite technological advances and developments in testing, interviews remain the preferred technique to select applicants.

The curriculum vitae (CV) is another important variable and essential if applicants are to be selected, as jobseekers unable to produce an appropriate CV specifying the most relevant aspects of their background are ruled out immediately. This coincides with the filter or selection theory, because the CV becomes an indicator to make the decision to hire the most suitable candidate.

Therefore, job seekers who fail to produce a document where they can express what their academic and professional training has been, are immediately excluded. Furthermore, employees seek out the best candidates in order to reduce spending on resources to train and educate them.

The results confirm that as professionals who work in a formal job, a good command of knowledge in the field is the most sought-after trait in job-seeking graduates. However, other variables and skills play a significant role in gaining entry to the labor market; the employers expressed that these variables include attitude, which is more highly valued than the knowledge shown by the applicant, as this is decisive in accessing and remaining in employment. It is worth mentioning that employers have stated that they are satisfied with the technical skills of graduates, but not with their soft skills (Cotton, 2001). It is essential that students acquire specialized knowledge but also develop the soft skills that will be necessary for their professional development because they are essential to increase productivity and improve working conditions for workers (Almanza & Vargas, 2015).

The moment to demonstrate responsibility, commitment, dedication, flexibility, innovation, initiative and problem solving (which are the desirable attitudes in the applicants) is during the interview. Therefore, this technique is still the favorite of employers, despite the rise in the development of psychometric tests and technological advances. The lack of soft skills and attitudes can be a reason for rejection. Also, employers' value people who have undertaken work experience and reflected on it and can articulate and apply what they have learnt, as noted in the theory of human capital (Knight & Yorke, 2001). Lack of professional experience is one of the most cited reasons for Mexican employers not to hire young graduates of higher education but, for Mexican students, it is not easy to combine studies and work (OECD, 2019). However, the work experience can enhance learning and employability. Work experience could mean: summer job, internships, short term project, casual work or volunteer work.

On the other hand, some vacancies go unfilled due to a lack of professionals with the required profile. This statement contrasts with the number of graduates who are not employed in formal employment. In addition, it is related to the high concentration of enrollment and preference for traditional careers in the area of social and administrative sciences that have saturated work destinations. The economy of Baja California is heavily oriented toward the manufacturing industry, but most graduates from HEIs in the state are concentrated across degree programs that have little to do with this sector. This situation seems to suggest that HEIs are forgetting the importance of maintaining a strong link with companies and society and to take into account the characteristics and challenges specific to the region to prepare syllabi and curricula.

It is necessary to promote communication and interaction between institutions, organizations, companies, governments, interest groups and universities, to collaborate, coordinate better and generate information on which they can rely to develop policies and evidence-based planning. Also as to reduce both the imbalance in the makeup of students enrolled in higher education and the number of graduates unable to find their place in the labor market. In turn, decrease the number of graduates who fail to place themselves in the labor market and / or underemployed. It should also encourage entry into careers more related to the productive vocation of Baja California.

Lines of research need to be undertaken on employers' opinions in order to strengthen the relationship between universities and businesses. These opinions may serve to complement the challenges and opportunities in Baja California, and this knowledge may be considered in designing and adapting syllabi so they are in line with the regional context. Furthermore, employers'

opinions uncover areas of opportunity in students' academic training, and members of faculty can revise their teaching methods and techniques to include market.

## REFERENCES

- Almanza, R., & Vargas, J. (2015). Propuesta teórico metodológico para el análisis de las competencias profesionales y su impacto en la empleabilidad. *Revista Gestão Universitária na América Latina - GUAL*, 8(1), 110-131. Doi: <http://dx.doi.org/10.5007/1983-4535.2015v8n1p110>.
- Banamex (2016). Indicadores Regionales de Actividad Económica. *Estudios económicos*. Retrieved from [http://fec-chiapas.com.mx/sistema/noticias\\_files/iraes\\_2016.pdf](http://fec-chiapas.com.mx/sistema/noticias_files/iraes_2016.pdf).
- Becker, G. S. (1964). *Human capital: A theoretical and empirical analysis, with special reference to education*. Chicago: University of Chicago Press.
- Cai, Y. (2013). Graduate employability: a conceptual framework for understanding employers' perceptions. *Higuer Education*, 65(4), 457-469. Retrieved from <https://link.springer.com/article/10.1007/s10734-012-9556-x>.
- Castro, A. (2004). Las competencias profesionales del psicólogo y las necesidades de perfiles profesionales en los diferentes ámbitos laborales. *Interdisciplinaria*, 21(2), 117-152. Retrieved from [http://www.scielo.org.ar/scielo.php?script=sci\\_arttext&pid=S1668-70272004000200001](http://www.scielo.org.ar/scielo.php?script=sci_arttext&pid=S1668-70272004000200001).
- Corica, A. (2012). Las expectativas sobre el futuro educativo y laboral de jóvenes de la escuela secundaria: entre lo posible y lo deseable. *Última década*, 20(36), 71-95. Doi: <https://dx.doi.org/10.4067/S0718-22362012000100004>.
- Cotton, K. (2001). *Developing Employability Skills*. Portland, OR: Northwest Regional Educational Research Laboratory. Retrieved from <https://educationnorthwest.org/sites/default/files/DevelopingEmployabilitySkills.pdf>.
- Crespo, S., Cuamatzi, M., & González, M. (noviembre, 2009). *Opinión de los empleadores sobre el perfil del licenciado en enfermería de la Facultad de Estudios Superiores Zaragoza*. Paper presented at X Congreso Nacional de Investigación Educativa (COMIE), 1-10. Conference held in Veracruz, Mexico. Retrieved from <http://www.comie.org.mx/congreso/memoriaelectronica/v10/pdf/carteles/0182-F.pdf>.
- Damián, J. Montes, E., & Arellano, Ll. (2010). Los estudios de opinión de empleadores. Estrategia para elevar la calidad de la educación superior no universitaria. *RINACE*, 8(3), 180-203. Retrieved from <http://www.rinace.net/reice/numeros/arts/vol8num3/art11.pdf>.
- Estrella, G., & Ponce León, M. (2006). *Impacto Laboral de egresados universitarios y opinión de empleadores*. México: UABC. Retrieved from <http://www.uabc.mx/planeacion/reportesdeestudios2004/reporteempleadores.pdf>.
- Garrido-Trejo, C. (2011). Funcionalidad técnica de la educación y demanda de profesionales. Zona metropolitana de Toluca, 1995-2005. *Convergencia Revista de Ciencias Sociales*, 0(55), 69-85. Retrieved from <http://convergencia.uaemex.mx/article/view/1131/1700>.
- González, L. (1993). Nuevas relaciones entre educación, trabajo y empleo en la década de los 90. *Revista Iberoamericana de la Educación*, 2. Retrieved from <http://rieoei.org/oeivirt/rie02a03.htm>.
- Institute of Statistics and Geography (INEGI). (2018a). *Encuesta Nacional de Empleo. Población ocupada*. Retrieved from [http://www.inegi.org.mx/Sistemas/Olap/Proyectos/bd/encuestas/hogares/enoe/2010\\_PE\\_ED15/po.asp?s=est&proy=enoe\\_pe\\_ed15\\_po&p=enoe\\_pe\\_ed15](http://www.inegi.org.mx/Sistemas/Olap/Proyectos/bd/encuestas/hogares/enoe/2010_PE_ED15/po.asp?s=est&proy=enoe_pe_ed15_po&p=enoe_pe_ed15).

- Institute of Statistics and Geography (INEGI). (2018b). *Encuesta Nacional de Empleo. Población desocupada*. Retrieved from [http://www.inegi.org.mx/Sistemas/Olap/Proyectos/bd/encuestas/hogares/enoe/2010\\_PE\\_ED15/pda.asp?s=est&proy=enoe\\_pe\\_ed15\\_pda&p=enoe\\_pe\\_ed15](http://www.inegi.org.mx/Sistemas/Olap/Proyectos/bd/encuestas/hogares/enoe/2010_PE_ED15/pda.asp?s=est&proy=enoe_pe_ed15_pda&p=enoe_pe_ed15).
- Knight, P., & Yorke, M. (2001). *Employ ability through the curriculum*. Skills Plus Project Report.
- Márquez, A. (2011). La relación entre educación superior y mercado de trabajo en México. Una breve contextualización. *Perfiles Educativos*, 33, 169-185. Retrieved from [http://www.ses.unam.mx/integrantes/uploadfile/amarquez/AMJ2011\\_LaRelacionEntreESyMercado.pdf](http://www.ses.unam.mx/integrantes/uploadfile/amarquez/AMJ2011_LaRelacionEntreESyMercado.pdf).
- Mincer, J. (1958). Investment in human capital and personal income distribution. *Journal of Political Economy*, 66(4), 281-302. Retrieved from [https://www.jstor.org/stable/1827422?seq=1#page\\_scan\\_tab\\_contents](https://www.jstor.org/stable/1827422?seq=1#page_scan_tab_contents).
- Mora, M., & Oliveira, O. (2012). Las vicisitudes de la inclusión laboral en los albores del s XXI: trayectorias ocupacionales y desigualdades sociales entre jóvenes profesionistas mexicanos. *Estudios Sociológicos de El Colegio de México*, 34(102), 3-42. Retrieved from <http://estudiossociologicos.colmex.mx/index.php/es/article/view/157/157>.
- Official Gazette of the Federation (DOF) (2013). *Plan Nacional de Desarrollo 2013-2018*. Retrieved from [http://www.dof.gob.mx/nota\\_detalle.php?codigo=5299465&fecha=20/05/2013&print=true](http://www.dof.gob.mx/nota_detalle.php?codigo=5299465&fecha=20/05/2013&print=true).
- Organization for Economic Co-operation and Development (OECD). (2003). *Education at a glance*. Paris: Author. Retrieved from <http://www.oecd.org/education/skills-beyond-school/educationataglance2003-home.htm>.
- Organization for Economic Co-operation and Development (OECD). (2017). *Diagnóstico de la OCDE sobre la Estrategia de Competencias, Destrezas y Habilidades de México. Resumen Ejecutivo*. Paris: Author. Retrieved from <http://www.oecd.org/mexico/presentacion-del-diagnostico-de-la-estrategia-de-competencias-destrezas-y-habilidades-de-la-ocde-para-mexico.htm>.
- Organization for Economic Co-operation and Development (OECD). (2019). *Educación Superior en México. Resultados y relevancia para el mercado laboral*. Paris: Author. Retrieved from [www.oecd.org/centrodemexico/medios/educacion\\_superior\\_en\\_mexico.pdf](http://www.oecd.org/centrodemexico/medios/educacion_superior_en_mexico.pdf).
- Oroval, E., & Escadibul, O. (1998). *Economía de la educación*. Madrid: Encuentro Ediciones.
- Pineda, P. (2001). Economía de la educación: una disciplina pedagógica en pleno desarrollo. *Teoría de la Educación*, 12(14), 143-158. Retrieved from [https://gredos.usal.es/jspui/bitstream/10366/71891/1/Economia\\_de\\_la\\_Educacion\\_una\\_disciplina\\_.pdf](https://gredos.usal.es/jspui/bitstream/10366/71891/1/Economia_de_la_Educacion_una_disciplina_.pdf).
- Ramlia, A., Nawawia, R., & Poh Pau Chun, M. (2010). Employees' Perception of Employability Skills Needed in Today's Workforce among Physiotherapy Graduates. *Procedia, Social and Behavioral Sciences*, 7, 455-463. Doi: <https://doi.org/10.1016/j.sbspro.2010.10.062>.
- Santibáñez, R. J., & Cruz P. R. (2000). *Mercados laborales fronterizos. Migración México-Estados Unidos, Opciones de política*. México: SEGOB/CONAPO/SER. Retrieved from [http://www.conapo.gob.mx/work/models/CONAPO/migracion\\_internacional/MigracionOpPolitica/04.pdf](http://www.conapo.gob.mx/work/models/CONAPO/migracion_internacional/MigracionOpPolitica/04.pdf).
- Schultz, T. (1961). *Investment in human capital*. Chicago: University of Chicago Press.
- State Education System (SEE). (2018). Principales cifras estadísticas. *Anuario de datos e indicadores Educativos ciclo 2017-2018*. Retrieved from <http://www.educacionbc.edu.mx/publicaciones/estadisticas/2018/publicaciones/Cuadernillo%202017-2018.pdf>.

- State Government (2016). *Diagnóstico estratégico. Plan estatal de desarrollo*. Retrieved from [http://www.bajacalifornia.gob.mx/portal/gobierno/ped/doctos/diagnostico\\_estrategico.pdf](http://www.bajacalifornia.gob.mx/portal/gobierno/ped/doctos/diagnostico_estrategico.pdf).
- Tarrés, M. L. (2008). *Observar, escuchar y comprender. Sobre la tradición cualitativa en la investigación social*. México: COLMEX/FLACSO.
- Vargas, Z. F. (septiembre-octubre 1998). Formación profesional en América Latina. Buenas perspectivas, varios desafíos. *Seminario sobre Formación Profesional y Empleo. Encuentro Iberoamericano de responsables de la formación profesional*, 5-15. Ciudad de México, México. Retrieved from <http://www.oei.org.co/iberfob/méxico>.
- Velde, C. (2009). *Employers' perceptions of graduate competencies and future trends in higher vocational education in China*. Philadelphia: Routledge.