Should universities train teachers for employability or for effectiveness?

Oscar Espinoza [a, e, *], Luis Eduardo González [b], Noel McGinn [c], Luis Sandoval [d], Dante Castillo [b]

[a] *Center of Advanced Research, Universidad de Playa Ancha and Researcher at the Instituto Interdisciplinario de Investigación Educativa-IESED, Traslaviña 450, Viña del Mar, Chile*
[b] *Programa Interdisciplinario de Investigaciones en Educación (PIIE), Chile*
[c] *Harvard University, School of Education, United States*
[d] *Universidad Tecnológica Metropolitana (UTEM), Chile*
[e] *Facultad de Educación y Humanidades, University of Tarapaca and Instituto Interuniversitario de Investigación Educativa (IESED-Chile), Chile*

HIGHLIGHTS

- Employers from lower-income sectors prefer lower-income graduates, because they presume higher class management skills.
- Employers from higher income sectors prefer higher income graduates, because they presume higher academic knowledge.
- The recruitment and education of teachers in Chile reproduces social inequalities.
- Emphasis on employability may have negative consequences for Chile as a society.

ARTICLE INFO

ABSTRACT

In principle, the learning sought by universities is universal; that sought by employers of their graduates is contextual. This study illustrates this contradiction in Chile. The three participating universities differ in the socio-economic level of those admitted to teacher training. Teachers for schools in lower-income areas hired from less selective universities are seen by employers as having more skills in classroom management. Schools that enroll middle and upper-income students, on the other hand, hire teachers strong in academic knowledge from the most selective university. This reliance on employability as an indicator of quality of training sharpens social and economic inequalities.

© 2019 Elsevier Ltd. All rights reserved.

1. Introduction

The term "employability" emerged as an indicator of the quality of a university's programs (Marope, Wells, & Hazelkorn, 2013; Rauhvargers, 2013), based in part on formally acquired knowledge and skills but more importantly on generic skills not linked to any particular discipline nor necessarily to school attendance. These skills, sometimes referred to as non-cognitive or "soft", include communication, critical thinking, information retrieval and analysis, social relationships, self-esteem and self-understanding (Geeregat, Cifuentes, & Villarroel, 2016; Heckman, Stixrud, & Urzua, 2006).

Not all educators welcomed pressures for uniformity, or employability, as an objective of university education (Santos, 2014), and at least one Latin American critic resented the imposition of European values (Aboites, 2010). Many universities responded positively, however, using Tuning Process employability indicators to assess the "quality" of their degree programs (Centro de MedicionMIDE, 2008; Vila, Dávila, & Mora, 2010).

This shift in the stated mission of higher education was justified in terms of the necessity of private universities to compete for

* Corresponding author.
E-mail addresses: oespinoza@academia.cl (O. Espinoza), legonzalez.fiegehen@gmail.com (L.E. González), nmcginn@igc.org (N. McGinn), lsandoval@utem.cl (L. Sandoval), dcastillo@estudiospiie.cl (D. Castillo).

students in order to survive. In Latin America as elsewhere, the number of new university graduates exceeded the rate of growth of new jobs. At the same time, given lower birth rates, the number of students entering primary schools had leveled off or declined, reducing the demand for schoolteachers. In Chile, decentralization of primary and secondary education (and rapid expansion of private schools) increased competition among schools for hiring of teachers.

Globally, both universities and employers are concerned about the employability of graduates (Al Tobi, 2006; Hamdan et al., 2014). But neither the reliability of its measurement, or validity of its prediction of employee productivity have yet been definitively established (Suleman, 2018). Many questions remain unanswered, especially with regard to the training and employability of teachers. Do the intentions and expectations of university teacher trainers match those of the persons that will hire teacher candidates? Is employability an appropriate objective for teacher training? Are the competencies associated with employability likely to enhance teachers' capacity to enable student learning? Are there other factors that influence learning outcomes that are not taken into account by employability? This paper compares the skills emphasized by the directors of programs to train Basic Education teachers with those sought by employers of their graduates.

2. Previous research

The return to democratic government in 1990 freed universities in Chile to learn from recent innovations in other regions of the world. A major influence was the European Community's effort to unify curriculum, methods and programs. This would graduate professionals capable of working anywhere in Europe. The so-called Tuning Process engaged hundreds of universities in a collaborative convergence (Gonzalez & Wagenaar, 2008; Pálvölgyi, 2017). The PROFLEX Project carried this campaign to other continents, including Latin America (Beneitone, , Esquetini, , & Gonz, 2007).

Employability of graduates has been defined officially as a major criterion for assessing the quality of a university (European Commission/EACEA/Eurydice, 2016; McCowan, 2015; McQuaid & Lindsay, 2005; Tran, 2016). As such it has been applied to graduates of all fields of study, of which education and specifically pedagogy is one. Systems for ranking universities developed by commercial media include employment of graduates as an indicator of quality. Universities feature graduate employability in their recruiting publicity and at least one institution has developed a stand-alone "employability curriculum" (University of Kansas, 2014). Universities in Australia and the UK have added to their curricula, in all disciplines, a variety of skill-based learning outcomes they believe will increased graduate employability (Andrewartha & Harvey, 2017; Clarke, 2018). In Portugal academics and employers have collaborated in developing employability criteria (Sin & Amaral, 2017).

Universality of use, however, has not resulted in a common definition of terms. In the United Kingdom, for example, the competencies[1] defining an individual's employability are team-work, communication, leadership, critical thinking, problem-solving and managerial ability (Lowden, Hall, Elliot, & Lewin, 2009). In China the list includes problem-solving ability, communication and team work, self-confidence, initiative, and responsibility (Su & Zhang, 2015). In the United States emphasis is on career identity,

personal adaptability, self-esteem and self-efficacy, and social and human capital (Fugate & Kinicki, 2008; Horvath, Goodell, Kosteas, & Horvath, 2018). An employability scale developed in a variety of firms in the Netherlands included dimensions of occupational expertise, anticipation and adaptation of work requirements, personal flexibility, corporate service and balance (Van Der Heijde & Van Der Heijden, 2006).

Limited research has been done to establish the reliability of measurement of employability. The most common method is subjective judgments by employers. Little is known about whether judgments are consistent across observers, or from one time to another time. Questionnaires given to candidates for employment are internally reliable (same scores on different items), but the consistency of responses over time or across jobs is not known. Most of the published scales or measures of employability have demonstrated only construct and content validity. We found no studies that predicted employee's salary or wages on the basis of their "employability" at time of hiring. Not surprisingly, given the difficulty of collecting such data, we also found no studies that demonstrated that raising the employability level of new hires increases a firm's profits or productivity. We did, however, find a study that assessed "employability" of persons already hired, reporting that scores correlate moderately with supervisors' ratings of on-the-job performance (Van Der Heijde & Van Der Heijden, 2006). We also found one study that reported a significant correlation between employers' subjective evaluation of teacher candidates and the eventual achievement of those they hire (Rockoff & Speroni, 2011).

Efforts by universities to increase the employability of their graduates have been criticized for several reasons. First, "employability" is based on subjective impressions formed in a relatively brief time, rather than on controlled, objective and replicable measurements. As such it is of questionable reliability and subject to biased judgments based on gender, race or appearance. Hiring based on "employability", instead of on "objective" criteria such as academic grades or work samples, could mask discrimination (Morley, 2001).

Second, some studies assume that employment is dependent solely on attributes of job candidates, on the quality of the supply of persons looking for work. But studies show that the level of employment varies directly with the demand for workers, independent of the number of applicants. In other words, the level of employment depends on the work to be done. In most cases, both supply and demand influence levels of employment. Employability should, therefore, be understood not as embedded in an individual but instead as a transactional construct. Universities can affect (some) characteristics of the candidates, individuals can seek certain jobs and not others, and employers can influence characteristics of the "demand" (job requirements) (Clarke, 2018; Tomlinson, 2012).

Third, some researchers doubt that the universities are sufficiently prepared to train students in such a way as to increase their employability. A study in British universities of training in employability skills (communication, problem-solving, etc.) in five disciplines (physical sciences and social sciences) reported that training had little effect on graduates' time to employment and placement in graduate-level positions (Cranmer, 2006; Mason, Williams, & Cranmer, 2009). Actual work experience, however, does increase skills that increase employability. Some argue, therefore, that rather than "training" students in employability skills, universities should provide actual work experience prior to graduation (Cifuentes, Villarroel, & Geeregat, 2018). Other critics are concerned that the adoption of a uniform perspective on competencies required for employment will discourage innovation and crystallize social and economic inequalities (Noonan & Coral,

---

[1] In this paper, the term "competences" is used to refer to knowledge or general capabilities, while "competencies" refers to ability to perform in specific situations. The difference is hard to observe in practice.

2015).

There seems to be little movement toward a uniform perspective. In the UK, occupations are not highly differentiated, training is less job-specific, and salaries vary widely. Competition for jobs is highly competitive, and in hiring much more importance is given to "soft skills" and competences than to academic knowledge and skills. In the Netherlands, jobs are more differentiated in terms of knowledge and skill requirements yet salary differentials vary less in the UK within and across fields (Tholen, 2013). An Italian study shows that employers using employability as a criterion for hiring gave less attention to candidates' knowledge and skills than to candidates' cultural background, reinforcing social and economic inequalities (Leoni, 2014).

Most research has focused solely on the employability of recent graduates, that is, on their first post-university job. Most graduates, however, will hold more than one job in their lifetime. Is employability a stable characteristic or does it evolves over time? Research suggests that commitment to a new employer depends more on the labor market and employees' influence over their work, than it does on specific skills acquired in the university. Those with high employability ratings were more likely to look for another job if there were few resources or staff support (Acikgoz, Sumer, & Sumer, 2016; De Cuyper, Mauno, Kinnunen, & Mäkikangas, 2011).

In summary, a growing body of researchers is convinced that even though the substance of employability is of considerable importance, as yet we have little understanding of how it is generated, and how it should be observed and interpreted in different circumstances. Given what research has shown, we should not conclude that employability is dependent solely or even principally on attributes of individuals, nor that it is their responsibility. Universities must proceed carefully in the development of new credentialing procedures based on employability (Suleman, 2018). This advice is particularly relevant with respect to employment of teachers.

2.1. Employability of graduates of degree programs in teaching in Chile

The promotion of employability as an academic subject is a mistake, some claim, because while it can be learned, it cannot be taught by academics. To do so effectively requires its coherent and shared conceptualization based on experience. One researcher has asserted that there is no theory to support claims that the employability of teachers, as distinct from their specialized knowledge and skills, is a reliable determinant of their performance in their profession. There is no "established, research-based canon of essential education knowledge" (Hess, 2002, p. 174).

As a subjective judgment, employability is difficult to measure. Employability of teacher candidates can be estimated in at least three ways, through interviews with prospective employers (e.g., principals), through instruments designed to assess employability attributes, and by observation of actual teaching. These procedures are not highly reliable. We have not found any studies that compare judgments of employability based on these methods.

A second issue is whether one-time measures of employability predict future teaching quality. Do employability judgments forecasst who will decide to remain in teaching? Who will be most effective in enabling students to learn? Both of these outcomes are the products of many variables, not controlled by teachers, such as family background and location of school. Primary and secondary school teachers in Chile are trained in universities, and in professional institutes. Some of the universities have selective admission policies; in the most prestigious of these, students admitted with high scores on a national examination receive tuition subsidies. The attributes of teacher candidates vary widely across universities.

There are 57 academic programs in Chile that train teachers for the Basic level of teaching (grades 1–8). These programs range from 8 to 10 semesters; graduates receive a teaching certificate. Enrollments in teaching programs have increased in recent years stimulated by government policies intended to raise the academic level of graduates. These policies include scholarships for applicants with high scores on the national university examination who are admitted to accredited programs, and significant increases in salaries of full-time teachers (Espinoza et al., 2019; Gobierno de Chile, 2017).

There are three different markets for teachers in secondary schools in Chile: public schools, subsidized private schools, and self-financing private schools. These sets of schools differ in their location, the populations they serve, their organization and operation, and elements of their mission. Public school students are drawn almost exclusively from the local neighborhood; many schools are in low income areas. Most, 78 per cent, of the subsidized private schools are run as for-profit organizations. Most of these (70 per cent) are owned by teachers. Most of the non-profit schools are run by religious communities (Corvalán, Elacqua, & Salazar, 2009). Some subsidized schools are located in low income neighborhoods but most in middle income areas. The non-subsidized, for-profit private schools are located in or close to upper income areas of the city.

New teachers are recruited and hired in an open market, essentially at the school level. In this open market, the three kinds of schools described above tend to hire teachers from the same socio-economic income level as the students in the school. In 2005, a nationally representative sample of 6008 teachers was surveyed to study the relationship between their social class origin and school attended. The social origin (principally parents' education level) of teachers was significantly correlated with the average test score of students in their secondary school and university (Puga, Polanco, & Corvalán, 2015).

Recruitment and selection for hiring of graduates of teacher training programs reflects fairly large differences in resources across kinds of schools. It also is related to social networks. Graduates from private secondary schools are more likely to attend the more prestigious universities, and the principals of private schools are more likely to be graduates of those universities. These schools typically pay larger salaries than subsidized private and municipal schools, and have smaller classes (Meckes & Hurtado, 2014). A survey of 32 schools in Santiago found that all principals including those in municipal schools preferred to hire teachers from the more prestigious universities as they were considered to be better trained. On the other hand, these preferred teachers also were seen as more difficult to keep once hired. A few of the private schools seek to reduce turnover by offering new teachers smaller classes, and offering to negotiate salaries (Meckes & Hurtado, 2014).

Many, perhaps most, teachers will change schools in their lifetime. Is employability a stable characteristic or does it evolves over time? In Chile, about 20 per cent of new teachers leave by the end of their first year of teaching; by the fifth year, 40 per cent have left (Avalos & Valenzuela, 2016). A study carried out between 2008 and 2011 concluded that only 20 per cent of teachers remain more than six years (Rivero & Hurtado, 2013).

In the absence of induction and mentoring, teaching performance declines in the first year on the job. Studies outside of Chile have shown that schools that have high levels of teacher turnover have lower student achievement score averages (Ronfeldt, Loeb, & Wyckoff, 2013). In addition, recruitment costs increase directly with teacher turnover (Barnes, Crowe, & Schaefer, 2007). This has been found also in Chile (Carrasco, Godoy, & Rivera, 2017).

Our study was designed to make up for the absence of information in Chile about current criteria and practices in the recruitment and selection of new teachers. The research explored the beliefs of employers and university program directors, seeking to understand the personal attributes and competencies that guarantee an adequate performance by new teachers.

The answer to this question has implications for many countries. We believe that the present case is important as an example of how unregulated expansion of higher education common in many countries, has produced a surfeit of trained teachers, with a consequent segmentation of the system of recruitment and selection (Puga, Polanco, & Corvalán, 2015). We review the results of recent legislation that established a system for the development of the teaching profession by regulating the recruitment process and the induction of new teachers (Ministerio de Educación, 2016).

3. Methodology

As illustrated in the research reported above, employability is a complex construct. In this qualitative study we seek to understand employability through the experiences of two sets of actors, employers and principals. In order to represent their subjective impressions we chose the methods of grounded theory. These permit the development of a conceptual framework to explain the actions of the various participants. At the same time, this approach makes it possible to identify the central processes in the social practices that constitute employability (Glaser, 2001; Pandit, 1996).

3.1. Sources of data

At the end of the 2017 academic year in Chile, detailed, semi-structured interviews were carried out with university program directors responsible for the organization and implementation of their university's program for training teachers in Basic (Primary + Middle) Education; and employers of graduates from these programs, primarily principals (directors) of Basic schools. We applied a semi structured qualitative interview procedure that made it possible to adapt our questions in response to the conversation with the interviewee (Alonso, 1998; Taylor & Bogdan, 1998).

The analysis of the information generated by the interviews had several elements. Narrative analysis (Chase, 2005) constructs the meaning of events, episodes and objects by linking them retrospectively to the processes in which they occurred and the meaning attached to them at that moment. Semantic categorical analysis (LeCompte & Preissle, 1993) is intended to reduce a complex set of data to a more manageable size. We employed the software program ATLAS.ti to identify relationships among the many terms used in the interviews, and to establish a set of related categories that would permit codification of the interviews.

3.2. Sample of universities and program directors

The research was carried out in three universities located in Santiago, Chile. The universities were selected to represent the range of admission selectivity. One institution, public, identified here as highly selective (HSU), ranks among the top 5 Chilean universities in the QS World University list.[2] Students entering the

HSU must score 600 points or above on the national University Selection Test (PSU).[3] Average scores are above 650. The second university is private and receives no direct financial subsidies from the government. A minimum of 475 points on the PSU is required for admission. Students entering this university had average scores of 550. We refer to it as the Moderately Selective university (MSU). The third university also is private and more recently established. Applicants are required to take an admission examination but all applicants are admitted. We refer to it as the Low Selective university (LSU).

Universities in Chile can be accredited by a National Accreditation Commission that evaluates the quality of programs and staff. Accreditation can be awarded for a period of 0−7 years. The HSU was, in the last evaluation period, awarded 6 years of accreditation period. The MSU was accredited for 3 years and the LSU was not accredited.

We interviewed the program director for each of the three Teacher Training degree programs. The interviews explored the following topics:

a. The underlying theory or conceptual model of the degree program for which they were responsible;
b. Objectives and contents of the study plans;
c. The relationship between the university's public image and the program;
d. How 2012−2014 graduates were received by the labor market.

3.3. Sample of employers

Each university submitted a list of typical employers of their Teacher Training graduates. for the years 2012−2014. From the list of 37, we chose three different employers for each university, a total of nine. Evidence indicates that in a range from 6 to 12 interviews it is possible to find the key aspects that are being studied and the saturation point (Guest, Bunce, & Johnson, 2006). We combined purposive and volunteer sampling (Cohen, Manion, & Morrison, 2007). First we chose those employers that recently had employed graduates of the three universities. We then solicited volunteers from that group and conducted semi structured interviews in Spanish that lasted about 45 min. The interview transcripts were translated into English taking care to preserve the informality of the interviewees` comments. Their identities are coded with an individual number, a letter indicating the selectivity of the university, and their gender.

Interviews with employers were organized around the following topics:

a. Criteria considered when hiring graduates for teaching positions;
b. Differences in universities with respect to the type and quality level of the training provided; and
c. The level and suitability of graduates' attributes as teachers.

4. Results

We have organized the results in two main sections, one pertaining to program directors, the second pertaining to employers. Within each section we present quotations from the interviews. Where relevant we call attention to similarities and differences in what is stated about the three universities.

4.1. Program directors

Conceptual Model of Program. The LSU director described the

---

university professors' teaching as primarily constructivist, the MSU director characterized theirs as critical pedagogy, and the HSU director noted that the orientation of the program had changed with changes in directors. The three program directors agreed, however, that their programs were not tightly aligned with any theoretical orientation. Instead of planning their programs to meet the academic requirements of a particular model or theory of education, the program directors have based their curricula on the development of competencies.

The LSU program director was most concerned about classroom order.

As of 2011 we had a new study plan, including 18 generic competencies and learning objectives. So, our focus is realist, that is, emphasizing the development of skills and conduct that a good Basic teacher should be able to handle … We are not all alike … here we prepare to work with diversity, a present necessity even though it doesn't appear in all the plans. We face the problem of diversity, which is the stamp of the University (LSU).

The MSU Director was more concerned with on-going changes in Chilean society.

We are going along with current policies, which focus on competencies. That doesn't mean from a traditional perspective, as we are constantly stressing a more critical curricular approach. Central to the discourse is critical thinking, to be able to dialogue with current policy from the position of our principles (MSU).

In the HSU, the diversity of their incoming students was recognized, but seen as something to be overcome by bringing all students up to predetermined standards.

While our curricular focus is guided by competencies, the programs are not. What we see in the graduate profile are capacities, not competencies. (…) That is what the study plans say, and we ask professors to link learning with the graduate profile (HSU).

Even when not explicitly mentioned, concern for employability appears throughout the universities' programs. The LSU program director commented explicitly on the pedagogical formation of teachers.

… the emphasis of our curriculum comes from the (academic) discipline-based formation our professors have which, looking at the national reality, is in direct response to the different needs of Basic education. And another important factor we take into account are the reports employers made during the accreditation process … they say our teachers are well-prepared in the discipline, which supports our program (LSU).

The MSU and HSU directors included employment as an objective but stated other criteria as well. These include research and continuous learning, and identification of graduates with the image of the university.

The MSU program director emphasized preparing teachers as learners, continually expanding their educational knowledge and skills.

Another example that supports our approach– a few years ago we had professionals (alumni) … that had earned scholarships for a master' or doctorate. Sometimes we meet up with a graduate who is in charge of training his colleagues (MSU).

The HSU program director, on the other hand, referred to generic, university-wide objectives, rather than just those of the

program and was explicit about the importance of forming students in the university's perspective. He commented that the program's emphasis on employability was justified given the high employment rate of graduates.

We have done studies of satisfaction of students and of graduates, …when they get to the working world and see how it really is, they are very satisfied, because they stand up well in comparison with their peers, and that makes us think we are doing well (HSU).

All the program directors stated that the core abilities graduates have are consistent with the university's objectives, rather than with the program by itself; university documents lay out the official image of the institution. The LSU describes its mission as "a focus on effort and performance and not just knowledge of content." The MSU describes the educator's role as "critical and transformative." The HSU refers to "the social responsibility of the university".

The program director from the LSU explained how graduates' behavior is consistent with the university's ideal.

Our core ability is companionship, teachers who accompany their students even outside the classroom. We have that characteristic, of teachers who are close, who go to a school to see students' problems and stay to help. I believe it went well for us in the INICIA (a voluntary program to assess teaching practices) because we stayed doing workshops, there was physical, direct, personal accompaniment, also aimed at teaching (LSU).

The directors from the MSU and HSU emphasized the transformative role of their graduates, affecting social structures as well as individuals. The HSU director emphasized the knowledge basis for this role.

We understand the school as part of a whole, we don't train the teacher as an atom but as someone who is inside a community. We believe that the teacher is an agent of change, but inserted in a context of relating with peer, relating with parents, with students in the complexity of a school culture … Our students know that the school requires change not only at the classroom level, but also at the level of the family, community, and society (MSU).

We use various means to introduce students to the practice of teaching, slowly inserting them into schools. We have been careful in this, not wanting to frustrate or shock students with the reality of the school. We believe that the teachers are first professionals, not apostles or volunteers. This is a labor that is professional, which means above all to know what it is that one has to teach (HSU).

The LSU has relied on its graduates' performance in INICIA, a government project to evaluate teacher's training (Centro de Medicion MIDE, 2008).[4] Ratings of their teaching practices by INICIA were offered as testimony of the program's quality.

The development of INICIA makes it possible to assess (the fulfillment of) our Graduate Profile. Generalist teachers are weak

---

[4] The INICIA Test was a written questionnaire that assessed disciplinary knowledge and disciplinary pedagogy for Basic Education (2008−2015). The test was advertised as a diagnostic tool for new teachers. First implemented in 2008 on a voluntary basis, in 2014 only 13.8% of new teachers participated. A new test has been developed and the new teachers are obliged to take it in order to qualify for a position.

in terms of content, requiring more training in the teaching discipline. Just for that we decided to expand our Profile with more emphasis on Math and Language, making sure to not abandon other areas, because they are needed with diverse students, but we also need teachers with a solid foundation in the subject area (LSU).

The program directors in the MSU recruited employers in the design of their curriculum, increasing the likelihood that their graduates would be welcomed.

Last year … we were able to form an Employers' Council. We could therefore work with various directors who gave us insights for the profile, helping us to focus on whether what the university states with respect to graduates' competences responds to what the market is asking for at this moment (MSU).

The HSU notes that their graduates are quickly offered employment, sometimes even before they are licensed.

We have exaggerated our emphasis on intensive practice during the whole time in training, so it is clear that they are going to give their all during the practice. When they finish the (supervised) practice and are offered employment right away, they jump into the labor market even without getting their license. This backs up our Graduate Profile (HSU).

4.2. Employers of teachers

Most of the principals that hired teachers from the LSU work in schools located in low income areas. They characterized (many of) their students as "vulnerable", that is, likely to fail in school. Their vulnerability was attributed to family problems such as constant domestic conflict, absent fathers or mothers, a violent neighborhood, limited intellectual capacity or severe physical handicaps. Their students were said to have a limited attention span, and to find it difficult to sit quietly in their seats attending to the teacher or learning task. In these schools, the principals said, more time is spent on classroom management than actual instruction. The most effective teachers are known for their interpersonal skills more than their subject knowledge. The principals were more concerned about their lack of interpersonal skills than their level of academic formation.

There were girls recently out of the (LSU) who, I can tell you, were lacking tools. They were very nervous, not used to group work. Here [in this school] there is no discipline, understood traditionally, and that frightened them a lot. They said, 'here there is no monitor, nobody to raise their voice to say, 'no more.' These were the youngest girls (3-L-F).

Principals hiring from the LSU were more likely than the others to state that the personal formation of the teacher was more important than their academic training. They observed that some universities were less interested in pedagogical training and more in teaching content. In general, the principals were pleased with the classroom performance of teachers from the LSU, if they demonstrated classroom management skills.

It is all the same to me if they come from a traditional university (in Chile, more selective) or whatever. If they have the competencies, I want a teacher to have … I have no problem (1-L-M).

I repeat that adequate professional performance depends on the person. Because we have had teachers here from the LSU that have not adapted. In the preparation of their lesson plans and materials, yes, that you can attribute to the University … but that doesn't count for much if the teacher isn't motivated to do what's required (2-L-F).

One of the reasons why we work with these teachers (from the LSU) is that in their training they have been implementing active methodologies and were starting to implement the project method. We knew that it (the LSU) was not well regarded. I believe that teachers are not made in the university, they are made in practice; I am absolutely convinced of that (3-L-F).

Most of the graduates from the MSU also teach in secondary schools with high levels of student vulnerability. The principals stated that they are hired partly because they come from a similar socio-context as their students. Their employers believe that having been raised in the same environment as the students increases the likelihood that they will be effective teachers.

When we hire someone, the first thing we do is tell them what this school is, and what has to be done to attend to the children who come (with high levels of vulnerability). For that reason, we hope the teachers will be guides for the students, since the academic part is not all that is important. We also hope for a (more integral) formation considering that they are such vulnerable children (2-M-F).

These principals, like those hiring from the LSU, rate social over technical competencies in new teachers. The social competencies are generic, learned early in life; the latter can be acquired on the job. But the employers are not in agreement as to the skill level of the MSU graduates. Some are rated very highly, others not.

These teachers from the MSU very clearly demonstrated social skills. They have excellent strategies for classroom management, which gets my attention since in the traditional universities, teacher training is more focused on theory (3-M-F).

This principal went on to say that all the graduates they have had from the MSU have turned out to be excellent teachers, above all because they threw themselves into the job and learned from their colleagues and students. Another employer, in contrast, said that only about half survive in public schools (which have more difficult students than the private). A third admits they are a "mixed bag" who all learn, but that it is not easy to work in his/her particular school.

The principals agree that where teachers were trained is not too important, so that a university's selectivity is not a good indicator of how well a graduate will perform in a given context. They feel that university training in general is deficient in the linkage between theory and practice.

(No matter from which university they come) they all are eager to work but have little experience. They are well formed theoretically, but practically, speaking of recently licensed teachers, they find it hard to get into it. I think theory eats them up, because professional practice is different especially in a school

like this one, that is not easy. They are shocked when their idealism to change the world runs smack into a closed door (1-M-M).

So, some candidates from the MSU are found employable not because they come from a moderately selective university, but from one known for training teachers who relate well to students. They are hired for their competencies in classroom management and reasonably skill in instructional practices without necessarily being superior in academic knowledge.

In contrast, other principals did not comment on students' behavior as a factor affecting teacher effectiveness except to note that in schools with few or no "vulnerable" students, teachers find it easier to focus on teaching and learning of the curriculum. Principals in these schools preferred to hire teachers with extensive content and pedagogical knowledge; classroom management skills were of lesser importance.

According to employers, what characterizes teachers from the HSU is their high level of academic knowledge and ability to articulate their understanding of the instructional process.

I note that the teachers from the HSU are very thoughtful, constantly questioning their practice in terms of its objectives. They are not people who do only what they are told, they are thinking beyond that and bringing to the task a characteristic that I like: they look at the challenges they face with foresight, taking a larger view of them (2-H-F).

Unlike the employers of graduates from the LSU and MSU, who minimized the importance of academic training to form an excellent teacher, these employers regarded academic skills as most important. As their own schools are (self-)defined as centers of academic excellence, they regard intellectual or cognitive abilities in teachers as highly important. The HSU, precisely because it is a highly selective institution, is preferred by the principals surveyed as a source of teachers.

(The strength of training) is not just curriculum, since all of its content can also be found on the Internet … What interests us is the cultural baggage they acquire in the University because you immediately are aware in conversations a teacher has with his/her peers, for example, if they are flat, with no ideas, poor and sterile. For example, when we talk about pedagogy or constructivism, citing authors, not only talking about Maria Montessori, but also indicating he knows about Freire and others, where s/he cites various authors … What I like about the people from the HSU is their preparation, since they come with lots of things in their heads … (1-H-F).

In other words, the distinguishing mark of teachers graduated from a university with a higher level of selectivity is more their understanding of academic and theoretical aspects of education and teaching, rather than their facility in the social skills required to capture and hold the attention of unruly youth. The kinds of problems (or vulnerabilities) that make teaching in the schools served by the LSU and MSU more difficult, are almost completely absent in the schools that prefer to hire teachers from the HSU. The interviews did not reveal whether or not graduates of the HSU have the non-cognitive skills deemed important in engaging students in learning. The principals did, however, comment on other non-cognitive skills related to image.

I am the Academic Director of this school, which this year celebrates its 20th anniversary. Of great importance to us is that this school pursues and maintains a high level of academic excellence. What interests us is the cultural baggage that is acquired in the university. Otherwise, you can find loads of teachers that don't read, that don't know where they are, that when you talk about pedagogy understand nothing (1-H-F).

I have been working in this school 16 years … last year I started as Principal. In general, in the academic area, we are interested in teachers who are responsible, with a good level of preparation of classes that matches the school's level (2-H-F).

The principals who had hired teachers from the HSU commented on their high level of thoughtfulness or reflection, and their knowledge of theory.

At the end of the year we carry out a performance evaluation. All the professionals of the HSU have come out highly rated. We have had only one case of a teacher with whom I talked about methodological problems or weaknesses and asked to improve in two specific areas. From the HSU we currently have four teachers, five up to last year. The experience, in general, is plenty positive, in fulfillment of responsibilities, and academic preparation of classes (2-H-F).

When you have people with higher cognitive capacities, everything you want to install and try out, goes faster, you get it quicker. You gain a common language, independent of the curriculum. That is to say, these universities are a cut above the rest. You can always be surprised, but these are universities that are more demanding. That's why I tell you, I know people from the HSU in other fields and I know the high level the university requires (3-H-F).

In sum, the principals interviewed emphasized that the stamp that distinguishes teachers graduated from a more selective university is related more to academic and theoretical aspects, than to humanist and social concerns.

5. Discussion

Is it likely that emphasis by program directors and principals on employability (as distinct from attention to academic knowledge and skills, or human capital) can have negative consequences for Chile as a society? Reflecting on current practices in the United Kingdom, Morley (2001) argued that the de-contextualization of employability masks the impact of social structures (such as gender, SES, disability) on educational, and eventually income, equality. Characterizing employability as a "floating signifier" whose meaning can be accommodated to different interests, Sin and Neave (2016) note that it has been used by universities to shift the responsibility for success in their career to graduates. In so doing, universities are liberated from their traditional pursuit of excellence and "the truth"; their efforts can shift from product quality to marketing.

Teaching may follow one or more models or theories, and the Graduate Profile may include academic knowledge and skills, but a program's success is judged primarily by hiring of graduates. In that sense, employability of graduates becomes a major objective of the universities.

Emphasis on training graduates for employability might have the effect of freeing university program directors from concern about the academic and intellectual quality of their programs. The program directors interviewed made no reference to reliance on research that identifies which models of education are most effective for given student populations. They made no reference, for

example, to advances in direct instruction which have proved effective with certain populations (Hänze & Berger, 2007) nor modifications of discovery learning that have broadened its applicability (Mayer, 2004). The program directors' use of the construct of employability was much simpler than that promoted initially in Europe. Instead of employability, Steur, Jansen, & Hofman (2016) recommended the term "graduateness" (sic). A more recent critic of employability observes that graduateness involves:

> … reflective thinking (the capacity to evaluate complex situations and apply skills and knowledge on the basis of personal judgement), scholarship (the capacity to link theoretical and functional knowledge in addressing complex problems), moral citizenship (acceptance of an individual's responsibility towards society) and lifelong learning (the capacity to adapt to unanticipated situations and develop new skills) (Clarke, 2018, p. 1925).

In terms of social development and justice, graduateness appears a much more attractive term, and much more related to the common understanding of the purposes of education.

The assessment procedure is not necessarily comprehensive, reliable or valid; principals appear to rely principally on hearsay, reputation and prestige in hiring teachers, and the validity of that information has not been rigorously tested. It may well be, however, that reliance on "soft" information about program quality is sufficient given a high level of variability in the supply of candidates for teaching positions. Rockoff and Speroni (2011) claim that subjective evaluations are as valid as quantitative measures in hiring first-time teachers. In addition, in many schools, teachers are hired on a trial basis; principals may trust that within three or more years they can identify teachers that have the knowledge and skills required to generate high levels of student learning.

6. Limitations

These critical observations should be interpreted with caution; perhaps the principals thought that the study was concerned only with employment and not social justice issues. The comment by principals that teachers improve teaching skills over time could be taken as an expression of their concern for learning outcomes. Also missing in the interviews with program directors and principals was reference to teacher turnover, and to employability in future years of teaching. These issues were not included in the interview protocols.

Measures of employability may be more relevant in some contexts than in others. Classroom management is an important skill in all schools but particularly in those in which the physical and mental conditions of students result in a high level of classroom disorder. LSU and MSU graduates were employed principally in the more difficult schools in Chile. These schools are known for lower levels of academic achievement by students, in part because teachers find it difficult to cover the curriculum (on which achievement tests are based (Ministerio de Educación, 2013). HSU graduates, on the other hand, were recruited to teach in schools known for their more orderly environments, and higher test scores. But these differences tell us not about the quality of their teaching, only about working conditions. The employers' comments could be taken as evidence that LSU and MSU graduates are more employable for lower-income schools than are those from the HSU. Employers can "overlook" their lower levels of academic preparation of these teachers because order and not student learning is set as the major objective.

7. Conclusion

The program structures and contents of these three universities are designed to match the educators' perception of their particular niche in the educational labor market of Chile. Graduates' competencies and values are emphasized to match the universities' view of the particular groups of students that will be served. Although employment is a uniform objective for program directors, the knowledge and skills that define "employability" vary according to the labor markets in which their graduates compete.

The graduates hired to work in schools in low-income neighborhoods experience different conditions of work than those employed in middle and upper income, and elite private schools. As two of the universities serve schools located in mid-low and low-income communities, the critical competencies are those that enable teachers to maintain discipline and order in the classroom. The university that (by virtue of its selectivity, prestige and tradition) provides teachers for upper-middle and elite schools does recruit and hire teachers on the basis of their academic knowledge and instructional skills.

The principals did not refer explicitly to selective admission of students as a reason for hiring graduates of some universities. But some principals preferred graduates of the HSU because of their superior academic preparation. What is clear is that the criteria employed for hiring teachers vary as a function of the school for which the candidates are being hired, the university in which they were trained, and characteristics of the individuals.

The program directors of the LSU and MSU, whose graduates more frequently are employed in lower-income schools, placed more emphasis on development of competencies that contribute to employability. As noted below, their HSU counterparts called attention to their graduates' academic knowledge and skills, as much or more than their employability skills.

These affirmations of program directors and employers are consistent with quantitative data describing the links between teachers' socio-economic origins, their school and university education, socio-economic characteristics of the school in which they teach, and the socio-economic level of their students. Students of lower social origin were significantly more likely to be employed in schools that provided fewer benefits and paid lower salaries, and to be employed in schools whose students score lower on national achievement tests. In other words, the recruitment and education of teachers in Chile reproduces social inequalities. Students are sorted by social origin into schools and universities, poor(er) students going to poor(er) universities, and then hired to teach in poor(er) schools providing their students an education of poor(er) quality.

This system was not discussed by the program directors; apparently reduction of social inequality is not their (primary) objective. Each of the three program directors claimed success for their programs, in terms of the employment of their graduates. That is, the programs achieved their objective of graduating students who would be offered jobs in teaching. In their focus on employability, both program directors and employers had little to say about whether the new teachers would be effective in terms of increasing student learning. None of the directors referred to the learning outcomes produced by their graduates, nor did principals; the "quality" of the degree programs was defined only in terms of employment rates.

The experiences reported here and the discussion of their implications indicates that we should be more deeply concerned about the implications of making employability the major objective of teacher training. We believe that this emphasis constitutes a serious risk, not only in terms of social equality, but also in respect to the quality of education. We propose rebalancing efforts with

more attention to the academic training of future teachers.

The findings of this study call for more research in the area. In Chile, little is yet known about how the issues involved in employability play out in difference academic disciplines. Not much research has been done on the specific competences students require to be more employable (Tomasson-Goodwin, Goh, Verkoeyen, & Lithgow, 2019). In Chile and elsewhere this research should include other disciplines, and be based on quantitative analyses. Especially in the developing countries, it is important that the research identify, in comparative, cross-disciplinary terms, the relative importance of key abilities, with attention to how training practices tested and proven in other regions can be incorporated into local programs (Artess, Hooley, & Mellors-Bourne, 2017). Particular attention should be given to how labor markets will be affected as a consequence of increased automation (McKinsey Global Institute, 2018).

Funding

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.tate.2019.102960.

References

Aboites, H. (2010). Latin American universities and the bologna process: From commercialisation to the tuning competencies project. *Globalisation, Societies and Education, 8*(3). Retrieved from https://www.tandfonline.com/doi/abs/10.1080/14767724.2010.505107.

Acikgoz, Y., Sumer, H., & Sumer, N. (2016). Do employees leave just because they can? Examining the perceived employability–turnover intentions relationship. *Journal of Psychology, 150*(5), 666–683. https://doi.org/10.1080/00223980.2016.1160023.

Al Tobi, K. (2006). *The effectiveness of teacher recruitment and selection in Oman: An analysis of stakeholder perceptions*. England: Doctoral thesis, University of Leicester.

Alonso, L. (1998). *Una mirada cualitativa en sociología: Una aproximación en sociología*. Madrid: Editorial Fundamentos.

Andrewartha, L., & Harvey, A. (2017). Student voice and influence on employability in Australian higher education. *Journal of Teaching and Learning for Graduate Employability, 8*(1), 202–214.

Artess, J., Hooley, T., & Mellors-Bourne, R. (2017). *Employability: A review of the literature 2012 to 2016. A report for the higher education academy. Higher education academy*. Retrieved from https://www.heacademy.ac.uk/knowledge-hub/employability-review-literature-2012-2016.

Avalos, B., & Valenzuela, J. P. (2016). Education for all and attrition/retention of new teachers: A trajectory study in Chile. *International Journal of Educational Development, 49*, 279–290.

Barnes, G., Crowe, E., & Schaefer, B. (2007). *The cost of teacher turnover in five school districts: A pilot study consultant national commission on teaching and America's future*. Washington DC. Retrieved from https://pdfs.semanticscholar.org/b4ab/6eaa2ac83f4721044e5de193e3e2dec07ac0.pdf.

Beneitone, P., Esquetini, C., Gonzàlez, J., Maletà, M., Siufi, G., & Wagenaar, R. (Eds.). (2007). *Reflections on and outlook for higher education in Latin America*. Bilbao: Universidad de Deusto. Retrieved from http://tuningacademy.org/wp-content/uploads/2014/02/TuningLAIII_Final-Report_EN.pdf.

Carrasco, G., Godoy, M., & Rivera, M. (2017). *Rotación de profesores en Chile: Quiénes son y cuál es el contexto de quienes dejan su primer trabajo* (Vol. 11). Mid-Evidencias. Retrieved from https://www.mideuc.cl/wp-content/uploads/2016/MidEvidencias-N11.pdf.

Centro de Medicion MIDE. (2008). *Percepción de la Calidad Actual de los Titulados y Graduados de la Educación Superior Chilena. Informe Final*. Santiago: MIDE UC. Retrieved from http://www.bib.ufro.cl/portalv3/files/informe-de-persepcion-de-la-calidad-actual-de-los-titulados-y-graduados-en-la-educacion-superior-chilena-2008.pdf.

Chase, S. (2005). Narrative inquiry: Multiple lenses, approaches, voices. In N. K. Denzin, & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (pp. 651–679). Thousand Oaks, CA: Sage Publications Ltd.

Cifuentes, G., Villarroel, M., & Geeregat, O. (2018). ¿Influye la universidad en la empleabilidad exitosa de los titulados de pedagogía? *Estudios Pedagogicos, XLIV*(1), 207–224. Retrieved from https://scielo.conicyt.cl/pdf/estped/v44n1/0718-0705-estped-44-01-00207.pdf.

Clarke, M. (2018). Rethinking graduate employability: The role of capital, individual attributes and context. *Studies in Higher Education, 43*(11), 1923–1937. https://doi.org/10.1080/03075079.2017.1294152.

Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education*. New York: Routledge.

Corvalán, J., Elacqua, G., & Salazar, F. (2009). *El sector particular subvencionado en Chile. Tipologización y perspectivas frente a las nuevas regulaciones*. Santiago: Ministerio de Educación.

Cranmer, S. (2006). Enhancing graduate employability: Best intentions and mixed outcomes. *Studies in Higher Education, 31*(2), 169–184. https://doi.org/10.1080/03075070600572041.

De Cuyper, N., Mauno, S., Kinnunen, U., & Mäkikangas, A. (2011). The role of job resources in the relation between perceived employability and turnover intention: A prospective two-sample study. *Journal of Vocational Behavior, 78*(2), 253–263. https://doi.org/10.1016/j.jvb.2010.09.008.

Espinoza, Ó., González, L. E., Sandoval, L., Loyola, J., McGinn, N., & Castillo, D. (2019). *The satisfaction of graduates from basic education teaching programs in Chile. Higher education, skills and work based-learning* (Ahead of print).

European Commission/EACEA/Eurydice. (2016). *Structural indicators on graduate employability in Europe-2016*. Brussels: European Commission.

Fugate, M., & Kinicki, A. (2008). A dispositional approach to employability: Development of a measure and test of implications for employee reactions to organizational change. *Journal of Occupational and Organizational Psychology, 81*(3), 503–527. https://doi.org/10.1348/096317907X241579.

Geeregat, O., Cifuentes, G., & Villarroel, M. (2016). Factores que inciden en las condiciones de empleabilidad de los egresados de Pedagogía. *Revista Electrónica "Actualidades Investigativas en Educación", 16*(1), 1–19.

Glaser, B. (2001). *The grounded theory perspective: Conceptualization contrasted with description*. Mill Valley, CA: Sociology Press.

Gobierno de Chile. (2017). *Decreto N°253. Diario oficial, 2 june*. Retrieved from https://www.leychile.cl/Navegar?idNorma=1103632.

Gonzalez, J., & Wagenaar, R. (2008). *Universities' contribution to the bologna process: An introduction (second)*. Bilbao: Universidad de Deusto. Retrieved from http://www.unideusto.org/tuningeu/images/stories/Publications/ENGLISH_BROCHURE_FOR_WEBSITE.pdf.

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods, 18*(1), 59–82.

Hamdan, K., Aguilar, J., Yee, P., Nee, A., Benitez, X., Medina, C., et al. (2014). Recruitment, selection, placement, and support in the preparation of quality of urban secondary teachers. In *Pathways to excellence: Developing and cultivating leaders for the classroom and beyond (advances in educational administration* (Vol. 21, pp. 221–237). Emerald Group Publishing Limited.

Hänze, M., & Berger, R. (2007). Cooperative learning, motivational effects, and student characteristics: An experimental study comparing cooperative learning and direct instruction in 12th grade physics classes. *Learning and Instruction, 17*(1), 29–41. https://doi.org/10.1016/j.learninstruc.2006.11.004.

Heckman, J., Stixrud, J., & Urzua, S. (2006). *The effects of cognitive and noncognitive abilities on labor market outcomes and social behavior*. Cambridge, MA: National Bureau of Economic Research. Retrieved from http://www.nber.org/papers/w12006.

Hess, F. (2002). Tear down this wall: The case for a radical overhaul of teacher certification. *Educational Horizons, 60*(4), 169–183. Retrieved from https://www-jstor-org.ezp-prod1.hul.harvard.edu/stable/pdf/42927125.pdf.

Horvath, M., Goodell, J., Kosteas, V., & Horvath, M. (2018). Decisions to enter and continue in the teaching profession: Evidence from a sample of U.S. secondary STEM teacher candidates. *Teaching and Teacher Education, 71*, 57–65. https://doi.org/10.1016/j.tate.2017.12.007.

LeCompte, M., & Preissle, J. (1993). *Ethnography and qualitative design in educational research* (2nd ed.). New York: Academic Press.

Leoni, R. (2014). Graduate employability and the development of competencies. The incomplete reform of the "Bologna Process. *International Journal of Manpower, 35*(4), 448–469. https://doi.org/10.1108/IJM-05-2013-0097.

Lowden, K., Hall, S., Elliot, D., & Lewin, J. (2009). *Employers' perceptions of the employability skills of new graduates*. London: Edge Foundation. Retrieved from https://www.educationandemployers.org/wp-content/uploads/2014/06/employability_skills_as_pdf_-_final_online_version.pdf.

Marope, P., Wells, P., & Hazelkorn, E. (2013). *Rankings and accountability in higher education uses and misuses*. Paris: UNESCO. Retrieved from http://unesdoc.unesco.org/images/0022/002207/220789e.pdf.

Mason, G., Williams, G., & Cranmer, S. (2009). Employability skills initiatives in higher education: What effects do they have on graduate labour market outcomes? *Education Economics, 17*(1), 1–30. https://doi.org/10.1080/09645290802028315.

Mayer, R. (2004). Should there Be a three-strikes rule against pure discovery learning? The case for guided methods of instruction. *American Psychologist, 59*(1), 14–19. https://doi.org/10.1037/0003-066X.59.1.14.

McCowan, T. (2015). Should universities promote employability? *Theory and Research in Education, 13*(3), 267–285. Retrieved from http://discovery.ucl.ac.uk/1498957/1/Shoulduniversitiespromoteemployability,authordraft.pdf.

McKinsey Global Institute. (2018). *Skill shift automation and the future of the workforce*. McKinsey Global Institute. Retrieved from: https://www.mckinsey.com/featured-insights/future-of-work/skill-shift-automation-and-the-future-

of-the-workforce.

McQuaid, R., & Lindsay, C. (2005). The concept of employability. *Urban Studies, 42*(2), 197–219. Retrieved from https://pureportal.strath.ac.uk/files-asset/12212609/Concept_of_Employability_FINAL.pdf.

Meckes, L., & Hurtado, C. (2014). Los nuevos profesores en Chile: ¿Quién los contrata, qué aprenden y cuán efectivos son? *Notas Para Educación*, (16). Retrieved from https://es.scribd.com/document/388143309/4-Los-nuevos-profesores-en-Chile-Quien-los-contrata-pdf.

Ministerio de Educación. (2013). *Implementación del currículum de Educación Media en Chile. Serie Evidencias*. Santiago, Chile: Centro de Estudios, Ministerio de Educación (Santiago).

Ministerio de Educación. (2016). *Ley N° 20903 Crea el sistema de desarrollo profesional docente y modifica otras normas. Diario Oficial de la República de Chile, Santiago, Chile, 1 de abril*. Retrieved from https://www.leychile.cl/Navegar?idNorma=1087343.

Morley, L. (2001). Producing new workers: Quality, equality and employability in higher education. *Quality in Higher Education, 7*(2), 131–138. https://doi.org/10.1080/13538320120060024.

Noonan, J., & Coral, M. (2015). The tyranny of work: Employability and the neoliberal assault on education. *Alternate Routes, 26*, 51–73. Retrieved from http://scholar.uwindsor.ca/philosophypubhttp://scholar.uwindsor.ca/philosophypub/41.

Pálvölgyi, K. (2017). Implementation through innovation: A literature-based analysis of the tuning project. *Higher Learning Research Communications, 7*(2). https://doi.org/10.18870/hlrc.v7i2.380.

Pandit, N. (1996). The creation of theory: A recent application of the grounded theory method. *The Qualitative Report, 2*(4). Retrieved from htttp:http://www.nova.edu/sss/QR/QR2-4/pandit.html.

Pearson, P. L. C. (2013). *Final report evaluation of the Chile PSU 22 january 2013*. London. Retrieved from http://www.educacion2020.cl/sites/default/files/20130311057540.chile_psu-finalreport.pdf.

Puga, I., Polanco, D., & Corvalàn, D. (2015). Segregaciòn de la formaciòn y carrera docente y su rol en la reproducciòn social de la desigualdad. *Calidad en la Educación, 43*, 57–102.

Rauhvargers, A. (2013). *Global university rankings and their impact, report II*. Brussels: European University Association.

Rivero, R., & Hurtado, C. (2013). Indicadores de resultados de los programas de pedagogía básica: Evidencia para mejorar el aseguramiento de la calidad de los docentes en Chile. *Revista Calidad en la Educación, 43*, 17–55.

Rockoff, J., & Speroni, C. (2011). Subjective and objective evaluations of teacher effectiveness: Evidence from New York city. *Labor Economics, 18*(5), 687–696.

Ronfeldt, M., Loeb, S., & Wyckoff, J. (2013). How teacher turnover harms student achievement. *American Educational Research Journal, 50*. https://doi.org/10.3102/0002831212463813 (Published online).

Santos, M. (2014). Purposes of the university and employability challenges in higher education. *Procedia - Social and Behavioral Sciences, 139*, 16–25. https://doi.org/10.1016/j.sbspro.2014.08.014.

Sin, C., & Amaral, A. (2017). Academics' and employers' perceptions about responsibilities for employability and their initiatives towards its development. *Higher Education, 73*(1), 97–111. https://doi.org/10.1007/s10734-016-0007-y.

Sin, C., & Neave, G. (2016). Employability deconstructed: Perceptions of Bologna stakeholders. *Studies in Higher Education, 41*(8), 1447–1462.

Steur, J., Jansen, E., & Hofman, A. (2016). Towards graduateness: exploring academic intellectual development in university master's students. *Educational Research and Evaluation, 22*(1–2), 6–22. https://doi.org/10.1080/13803611.2016.1165708.

Suleman, F. (2018). The employability skills of higher education graduates: Insights into conceptual frameworks and methodological options. *The International Journal of Higher Education Research, 76*(2), 263–278. https://doi.org/10.1007/s10734-017-0207-0.

Su, W., & Zhang, M. (2015). An integrative model for measuring graduates' employability skills: A study in China. *Cogent Business & Management, 2*(1), 1–11. https://doi.org/10.1080/23311975.2015.1060729.

Taylor, S., & Bogdan, R. (1998). *Introduction to qualitative research methods: A guidebook and resource* (3rd ed.). Hoboken, NJ, US: John Wiley & Sons Inc.

Tholen, G. (2013). The social construction of competition for graduate jobs: A comparison between great. *Sociology, 47*(2), 267–283. https://doi.org/10.1177/0038038512444815.

Tomasson-Goodwin, J., Goh, J., Verkoeyen, S., & Lithgow, K. (2019). *Can students be taught to articulate employability skills? Education & training*.

Tomlinson, M. (2012). Graduate employability: A review of conceptual and empirical themes. *Higher Education Policy, 25*(4), 407–431. https://doi.org/10.1057/hep.2011.26.

Tran, T. (2016). Enhancing graduate employability and the need for university-enterprise collaboration. *Journal of Teaching and Learning for Graduate Employability, 7*(1), 58. https://doi.org/10.21153/jtlge2016vol7no1art598.

University of Kansas. (2014). *The employability curriculum a roadmap for creating global professionals*. Kansas: The University of Kansas. Retrieved from https://career.ku.edu/sites/career.ku.edu/files/files/EmployabilityCurriculum.pdf.

Van Der Heijde, C., & Van Der Heijden, B. (2006). A competence-based and multi-dimensional operationalization and measurement of employability. *Human Resource Management, 45*(3), 449–476. https://doi.org/10.1002/hrm.20119.

Vila, L., Dávila, D., & Mora, J. (2010). Competencias para la innovación en las universidades de América Latina: Un análisis empírico. *Revista Iberoamericana de Educación Superior, 1*(1), 5–23. Retrieved from http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S2007-28722010000100002.