VIRTUAL DEGREE PROGRAMS IN INITIAL TEACHER TRAINING
An Emerging Option in the Digital World
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INTRODUCTION

The emergence of virtual degree programs for initial teacher training offers a compelling opportunity to support the professionalization of all teachers in the region and make pre-service training more accessible. Despite overall access to higher education more than doubling in the 21st century in Latin America, marginalized and lower-represented groups such as rural communities and indigenous peoples continue to be somewhat excluded from the expansion of higher education (OECD, 2015). In addressing this gap, greater availability of quality degree programs online could be key in expanding opportunities for minorities not only in general higher education, but in the teaching profession as well. In fact, a study by the Organization for Economic Co-operation and Development (OECD) reports that 88% of Latin American universities surveyed have found online degree programs to promote the inclusion of traditionally less-represented groups (OECD, 2015). Within this study, 68% of universities reported that e-learning has benefited people in rural communities, 53% reported directly benefiting women and 50% reported supporting low-income students with online programs (OECD, 2015). Although a comprehensive study of the costs of this training option in the region has not yet been conducted, online programs are also generally associated with relatively lower tuition rates. Offering online programs for teacher education could greatly improve teacher quality in key areas, such as rural contexts, by allowing current or prospective teachers to receive training at a lower cost, with a flexible schedule and the option to remain where they are most needed.

Virtual degree programs, also referred to as distance learning or e-learning, are programs that are conducted either entirely or at least partially online and often involve flexible and asynchronous schedules to accommodate students with additional jobs or trouble with connectivity.

Some potential benefits of virtual degree programs that might address the shortcomings of initial teacher training in the region include:

• Flexible schedules that promote further inclusion, especially of working adults.
• Accreditation for teachers already in the classroom.
• Greater enrollment of independent learners intrinsically interested in teaching, rather than students turning to teaching degrees as a back-up option.
• Accessible learning for rural and indigenous communities that may be far from campus.
• Further promotion of the use of educational technology.
• Lower associated costs than attending an in-person institution.

However, there are few common challenges in these virtual programs that necessitate further research and investment in order to support them as viable alternatives:

• Lack of stringent selection criteria resulting in lower admission standards.
• Requirement of consistent internet connection and technological literacy.
• Lack of accreditation for programs in the region.
• Lack of in-person elements that are seen as essential to comprehensive training (especially in teacher training, such as classroom practicums).

Although most virtual degree programs have existed for several years, the global shift towards online education as a result of the Covid-19 pandemic has presented opportunities for transformative technological innovation in online learning and lends a newfound trust in the legitimacy of online education. In 2018, 65% of the population in Latin America and the Caribbean was reported to have internet access; after 2020, that percentage is projected to increase exponentially as a result of government collaboration with telecommunications companies as the majority of the population transitioned to virtual education and teleworking since the start of the pandemic (UNESCO-UIS, 2018).
With new technologies, increased internet access and further investment in the pedagogical practices of online learning, virtual degrees can emerge as a more accessible methodology for initial teacher training and have the potential to address key issues on teacher excellence in Latin America and the Caribbean (LAC).

In this report, we review virtual degree programs from seven countries (Argentina, Chile, Colombia, Costa Rica, the Dominican Republic, Guatemala and Mexico) to evaluate the offer and viability of online learning as an option for teacher training in LAC. These countries were selected based on the prevalence and history of virtual training programs while ensuring some level of representation of all geographic regions in LAC. These programs will be examined in a three-prong approach: accessibility to students and working adults, content and curriculum of the degree programs, and viability as an alternative to in-person instruction.

Overview and Methodology

The report findings were derived from a survey of virtual degree programs pertinent to initial teacher training from the seven countries in the region. Given the regional trend transitioning teacher education away from normal schools and pedagogical institutes and towards traditional universities, this research focuses on undergraduate programs based in four-year universities. This study is not meant to be an exhaustive list but rather has been sampled in order to explore virtual degrees in initial teacher training as an option for students in the region.

There are approximately five institutions from each country represented, including both public and private universities. Programs and institutions were included in this review as long as the majority of coursework (50% +) was conducted through a virtual platform. It is important to note that although almost all universities have gone online in the 2020 and 2021 academic years due to the pandemic, these have not been considered virtual degree programs in the context of this report, since many will most likely transition back to in person instruction when possible. Similarly, degrees that offer simply one or two courses online have also not been included, as their primary modality is in-person.

All information presented in this study has been drawn directly from university websites and degree program pages. No additional information was collected for this report. Specifically, information on theory-based and practicum elements as well as Information and Communication Technology (ICT) coursework in these programs have been determined by information available to the general public. As virtual degree programs grow in the wake of the Covid-19 pandemic, this report can be utilized as a stepping stone to understand the virtual learning landscape and framework from which further surveys may be conducted to analyze student and institutional experiences in the future.
ONLINE PROGRAMS FOR INITIAL TEACHER TRAINING IN LATIN AMERICA

A Broad View of Initial Teacher Training in Latin America

It is important to note that each country has distinct teacher training systems, however most initial training occurs in four major types of institutions:

- Traditional Universities
- Normal Schools (Escuelas Normales)
- Pedagogical Universities
- Higher Pedagogical Institutes (Institutos Profesionales)

In a movement often labelled as tercerización, many countries have shifted away from housing teacher training programs at secondary level institutions or trade schools and toward incorporating them in universities (Puryear, 2015). This transition is part of the effort to legitimize the teaching profession alongside other careers. At some universities in Argentina and Colombia for example, this movement has been fairly successful. However, the transition away from normal schools and other secondary institutions has been criticized for becoming too theoretical and failing to adequately prepare students for a career in the classroom (OREALC-UNESCO, 2013).

In order to become a teacher, there is a wide variety of guidelines and requirements specific to each country that students must meet, but higher education is now a fairly consistent expectation across the region. Particularly as higher education has expanded, tertiary degrees have become an essential part of initial qualifications to be considered for teaching positions (See Table I). There is a wide variety of specific majors that prospective teachers may study, but most countries in the region require that anyone entering into the teaching profession must have some kind of higher education degree related to education or pedagogy. Although this expectation is fairly universal, some countries like Colombia and Chile are a bit more flexible since they may still consider candidates competitive for teaching positions as long as their degrees are somehow related to the subject area they wish to teach (Mineduc Colombia 2020, Gobierno Nacional de Costa Rica, 1970).

Accreditation of initial teacher training programs or their institutions is sometimes essential to receiving employment, but often countries and local communities do not have the luxury of enforcing accreditation standards due to the persistent lack of trained teachers. As a result, in countries like Costa Rica, students may apply to be certified based on classroom experience rather than higher education. In the assessment of these applications’ higher education degrees in a teaching-related field are heavily

<table>
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<tr>
<th>TABLE I: INITIAL TEACHER TRAINING INSTITUTIONS IN THE REGION</th>
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<td>Source: Information retrieved from Dialogue institutional knowledge and resources</td>
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<tr>
<th>INITIAL TEACHER TRAINING INSTITUTIONS</th>
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<tbody>
<tr>
<td>Argentina</td>
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<tr>
<td>Where does initial teacher training take place?</td>
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considered, but ultimately perceived as something that aids in making candidates competitive rather than disqualifying them from entering into the profession (Inter-American Dialogue, 2018). However, many countries such as Chile and Mexico are making a significant effort towards enforcing existing regulation measures more rigorously, which may improve after the forced standardization of online education through the Covid-19 pandemic.

Similar to other regions, the majority of programs in Latin America are in-person, but 19% are conducted online and 16% have some type of hybrid model (OECD, 2015). Despite virtual degrees still being uncommon, the use of at least some technology or alternative methodologies make up an essential part of the higher education infrastructure in Latin America and is a possibly valuable tool for initial teacher education (See Table II).

How Accessible are Virtual Programs?

Virtual degree programs in initial teacher training are widely marketed towards working adults and teachers already working in the classroom. The flexible nature of these virtual degrees supports engagement from students seeking further professionalization of jobs they are interested in or already working on, rather than act as a default option for traditional online universities. Unfortunately, enrollment information was not available for these programs, however messaging for incoming student profiles indicate that programs were made with accessibility in mind for those who might be unable to attend traditional in-person classes.

Programs are made further accessible through typically lower admissions standards for virtual modalities. Most degrees only require that students have a high school level education. While there are a few countries and institutions that require national entrance exams such as Chile and Colombia, minimum scores needed to qualify in order to enter into education-related fields are low (OECD, 2015).

For in-person modalities, low admissions standards are sometimes seen as undermining the quality of the programs by attracting low quality students. However, an important distinction with virtual degrees is that since student are studying remotely, they are far more accountable for their own learning and participation than the average student. Particularly in programs that are marketed towards adults, flexibility and accessibility are essential to increasing engagement. The individuals who seek out these opportunities are more likely to have an interest in the teaching profession itself, filtering out disinterested students hoping to graduate with any degree. Appealing to motivated these applicants minimizes the correlation between low admissions standards and low-quality students found in in-person programs.

In undergraduate degrees, most programs are the same duration as their in-person counterparts lasting anywhere from three to five years. However, there are a few that offer a variation of timelines that students may choose from including regular, accelerated and part-time tracks. These options are less common in traditional universities, but institutions geared more towards adults such as the Universidad Abierta Para Adultos in the Dominican Republic are more flexible to the needs of working adults.

Generally, virtual degrees in initial teacher training allow students in need of a flexible schedule and the ability to work from home, who were otherwise unable to acquire a degree, to pursue a career in teaching. As internet access

<table>
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<th>TABLE II: DISTRIBUTION OF HIGHER EDUCATION MODELS IN LATIN AMERICA (PERCENT OF UNIVERSITIES)</th>
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<tbody>
<tr>
<td>Source: OECD, 2015</td>
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- Online (19%)
- Hybrid (16%)
- In-person (65%)
is expanded across the region after the demands of the Covid-19 pandemic, the offer of virtual degree programs will likely increase, making online education more readily available to those in rural and indigenous communities.

What Do Virtual Degrees Look Like?

Virtual degrees for initial teacher training provide an accessible option for students in Latin America and the Caribbean. In fact, a report on E-learning in Latin America by the OECD found that education is the most popular area of study for online learning second only to business administration (OECD, 2015). In the seven countries included in this survey specifically, each one has at least one university that offers online degrees for those interested in teaching (See Table III).

Some of the surveyed countries, such as Colombia and Argentina, offer a multitude universities of programs whereas in Central America and the Caribbean only a few major national universities offer online degrees. Colombia is a regional leader in virtual programs, with most public and private universities offering some type of online or distance option for education related degrees.

Similarly, traditional universities in Argentina have a multitude of online programs. Argentina offers a more representative view of the region in that virtual degree programs are commonly found in smaller private universities rather than public institutions. Unlike public universities, private institutions typically have a bit more latitude in developing their online capacity and are less regulated by governments. Universities like the Universidad de Morón, Universidad de Santo Tomás de Aquino and Universidad Siglo 21 offer virtual degrees in general education at both the graduate and undergraduate levels.

Chile, Guatemala and the Dominican Republic were also found to have most of their virtual education degrees based in private institutions. Chile is the most limited in options for virtual degrees in educational-related fields with virtual options only available at three universities, none of which are accredited by the ministry or CNAP. Although there are a few universities like Universidad de las Américas that offer education degrees with a remote option, it is unclear whether this will continue after the Covid-19 pandemic.

What content is offered in the curriculum of these programs?

Somewhat in line with the curricular and ministry guidelines set forth by many of the regional governments, the specific concentrations of virtual education degrees cover a range of topics including pedagogical theory, subject-specific majors and education level-specific majors. General education degrees are also often referred to as Educational Sciences, in which pedagogical theory as well as practice and subject-specific knowledge are often incorporated together.

Most programs have at least some focus on pedagogy and the theoretical framework for teaching even if the degrees are technically focused on subject-specific knowledge. This concentration in theory stems from the tercerización of initial teacher training and the broadening of these degrees to include students beyond potential teachers in hopes of education degrees being taken more seriously (Vaillant, 2013).
TABLE III: CHARACTERISTICS AND TYPES OF DEGREE PROGRAM BY COUNTRY

Source: Authors’ own elaboration based on survey results

<table>
<thead>
<tr>
<th>DEGREE PROGRAMS</th>
<th>Argentina</th>
<th>Chile</th>
<th>Colombia</th>
<th>Costa Rica</th>
<th>Dominican Republic</th>
<th>Guatemala</th>
<th>Mexico</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do online options exist in universities?</td>
<td>Yes</td>
<td>Few</td>
<td>Yes - many</td>
<td>Yes</td>
<td>Yes - one major university</td>
<td>Yes</td>
<td>Few</td>
</tr>
<tr>
<td>Public or private universities?</td>
<td>Private</td>
<td>Private</td>
<td>Both</td>
<td>Both</td>
<td>Private</td>
<td>Private</td>
<td>Both</td>
</tr>
<tr>
<td>What areas of study are available for undergraduate programs?</td>
<td>Focus on pedagogy</td>
<td>Focus on pedagogy</td>
<td>Anything related to education, pedagogy and various subjects</td>
<td>General education and pedagogy</td>
<td>Education sciences</td>
<td>Education by level and subject</td>
<td>Focus on general education</td>
</tr>
<tr>
<td>Are online graduate degrees offered?</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes - many</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Few</td>
</tr>
<tr>
<td>Are concentrations in education technology offered?</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

BOX II: COLOMBIA - VIRTUAL AND DISTANCE LEARNING

Colombia is a model for virtual and distance learning modalities in Initial Teacher Education. Distance education, in this context is defined as any modality where students learn through alternative methods that may include virtual platforms, television, radio and satellite campuses. First established in the 1970s, distance learning has a long history in higher education in Colombia (Vizacaíno, 2013). Initially the modality was established in order to meet an increasing demand for higher education. At the time programs more heavily relied on radio broadcasting and independent learning materials to help access students who were not able to attend the in-person instruction in urban centers (Bruns & Luque, 2015). Currently most distance programs now include the use of virtual platforms. However, most universities classify distance learning as a separate modality from 100% virtual degrees. Distance education seeks to provide a certain degree of blended learning by utilizing ICTs and remotely available materials to make degree programs more widely accessible. As a result, degrees utilizing the distance modality often have either evening or weekend-based class schedules to accommodate students. Students are able to access programs like this fairly easily such as the bachelor’s degree in Basic Primary Education at the Universidad de Antioquia and the Universidad Nacional Abierta y a Distancia. Virtual degrees are more likely to model the schedule of a traditional university or are offered asynchronously.
As a result, pedagogy is a primary and consistent element of most virtual degree programs, with all degrees highlighted in this study containing at least some theoretical coursework.

There is a range in the importance of theoretical frameworks to the overall degree programs. In countries such as Chile, Colombia and Mexico most education-related degrees are explicitly in pedagogical science such as bachelor’s degrees in education being offered at universities like the Universidad Tecnológica Latinoamericana in Mexico (see Box IV) and the Corporación Universitaria del Caribe in Colombia. However, in countries like the Dominican Republic and Costa Rica, degrees are more typically focus on subject specific knowledge (e.g. mathematics or science) and more practical professional development such as the program at the Universidad Estatal de Distancia in Costa Rica.

Practicums are also typically a key tenant of initial teacher training as they are often the only source of experience for actual teaching in the classroom. For obvious reasons, incorporating some type of in-person praxis element into virtual degrees is challenging, but many institutions included in this study have managed to establish at least some kind of praxis coursework.

Although some programs do not offer in-person elements, like the Universidad de San Marcos in Costa Rica, the majority of programs in the region, especially those that have been developed recently, incorporate the praxis element experience through technological practicums and use of ICTs in the classroom (see Box V). Approximately 83% of programs offer at least some kind of educational technology course work. Not only are classes on technology in the classroom accessible, but many institutions even offer degrees in virtual education and teaching in response to an increasingly digital world. These degrees can be found at both the undergraduate level such as the Licenciatura en Educación y Tecnologías de Información y Comunicación at the Universidad de San Carlos de Guatemala and even more at the graduate level both for master’s degrees and specializations, found at universities in Colombia, Argentina and Guatemala.

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**BOX III: PROGRAM SPOTLIGHT – UNIVERSIDAD DE MORÓN**

**Country:** Argentina  
**University:** Universidad de Morón  
**Degree:** Licenciatura en Ciencias de la Educación  
**Type of Institution:** Private University

One of the primary models found for virtual education in initial teacher training is the bachelor’s degree in Educational Sciences at the Universidad de Morón in Argentina, a private institution located in the Buenos Aires Province of Argentina. The university offers a number of in-person degrees, however the specific program on Educational Sciences operates a 100% virtual and accredited option and models the typical structure of a four-year degree program, with a curriculum specifically tailored to the distance modality. The degree takes a mainly theory-based focus, with a large portion of coursework focused on pedagogy and social sciences like sociology and anthropology. It also features important coursework in educational technology. As aspect especially pertinent to virtual modalities, classes in technological innovation and distance learning are essential to the comprehensive training of teachers through this modality.

However, the primary feature that sets the degree apart is the field work capstone in students’ fourth year. Information available online does not indicate whether this entails in-classroom experience or another type of practicum, but the requirement itself is significant considering many other virtual degree programs in the region lack a practicum element at all, which is often seen as necessary to quality initial teacher training. The program has flexible hours and can be done from anywhere with the exception of in-person exams, making it an extremely accessible program.
BOX IV: PROGRAM SPOTLIGHT – UNIVERSIDAD TECNOLÓGICA LATINOAMERICANA

Country: Mexico  
University: Universidad Tecnológica Latinoamericana  
Degree: Licenciatura en Pedagogía  
Type of Institution: Private University

The Universidad Tecnológica Latinoamericana is somewhat unique even within the context of virtual degree programs in the region. The university operates completely online based out of Mexico City, offering fifty different accredited degrees to over 35,000 students. Its program specifically related to education allows for students to earn their degree in pedagogy, promoting teaching as just one of many career choices students may choose to pursue after graduation. Although the program does not include an in-person practicum, there is a significant emphasis on coursework and training in technological innovation to support initial teacher training. The program also is marketed towards working adults and non-traditional students with three different degree timelines including options for regular, intensive and super intensive all ranging from 2-4 years. The program is accredited through the Sistema Educativo Nacional de México.

INCORPORATING AN IN-PERSON INTERNSHIP COMPONENT INTO VIRTUAL DEGREES IS CHALLENGING, BUT MANY OF THE INSTITUTIONS REVIEWED IN THIS STUDY HAVE MANAGED TO IMPLEMENT SOME KIND OF PRACTICAL COURSEWORK.

BOX V: PROGRAM SPOTLIGHT – UNIVERSIDAD DE SAN CARLOS DE GUATEMALA

Country: Guatemala  
University: Universidad de San Carlos de Guatemala  
Department: Licenciatura en Educación y Tecnologías de Información y Comunicación  
Type of Institution: Public University

The Universidad de San Carlos de Guatemala, Guatemala’s oldest and largest public university, is a particularly good example of virtual degree programs in initial teacher training. With an entire department dedicated to virtual education, the university offers an undergraduate degree in Education and ICT specifically meant to train prospective teachers to utilize technology and digital platforms in the classroom. The virtual program is only two years but includes comprehensive coursework in the subject matter and even involves a practicum element. Unlike many other virtual degree programs in Central America, the degree is also accredited by Guatemala’s primary accreditation body: el Consejo Superior Universitario. The university offers both graduate and undergraduate degrees in virtual education with an additional postgraduate degree in Education and ICT and Distance Education.
Are Virtual Degree Programs a Viable Alternative for Initial Teacher Training?

It is difficult to determine the quality of these programs without publicly available data on student performance, evaluation and post-graduate employment, however an important aspect to consider in whether these programs are at the very least on par with in-person degrees is their accreditation status.

The accreditation and the enforcement of regulatory guidelines of education programs are somewhat varied (See Table IV). In some countries including Colombia, Mexico and Guatemala, the Ministries of Education provide specific curricular guidelines and frameworks for any higher education program relating to teaching (Vaillant, 2013). There are some countries that enforce these regulations and even supply training through national entities specifically dedicated to teacher training such as the Instituto Nacional de Formación Docente in Argentina (INFD, 2020). Whereas in Chile, university programs are far more autonomous, but accreditation is given less frequently as a result of increased minimum standards (Vaillant, 2013).

<table>
<thead>
<tr>
<th>ACCREDITATION</th>
<th>Argentina</th>
<th>Chile</th>
<th>Colombia</th>
<th>Costa Rica</th>
<th>Dominican Republic</th>
<th>Guatemala</th>
<th>Mexico</th>
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<tbody>
<tr>
<td>Is accreditation required to teach?</td>
<td>Yes</td>
<td>Recommended</td>
<td>Yes</td>
<td>Recommended</td>
<td>Yes</td>
<td>Yes</td>
<td>Recommended</td>
</tr>
<tr>
<td>Do online programs typically receive accreditation?</td>
<td>Few</td>
<td>Few</td>
<td>Yes</td>
<td>Few</td>
<td>Few</td>
<td>No</td>
<td>Few</td>
</tr>
<tr>
<td>If yes, from where?</td>
<td>Instituto Nacional de Formación Docente</td>
<td>Comisión Nacional para Acreditación de Chile</td>
<td>Consejo Nacional de Acreditación</td>
<td>Resolución de Renovación de Acreditación de Alta Calidad</td>
<td>Dirección General de Acreditación y Certificación</td>
<td>MINERD</td>
<td>Consejo Nacional de Acreditación</td>
</tr>
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</table>

TABLE IV: ACCREDITATION OF ONLINE DEGREE PROGRAMS IN LATIN AMERICA
Source: Authors’ own elaboration based on survey results
The lack of accreditation of initial teacher training programs and specifically virtual degree programs is a primary barrier to teacher excellence in the region. Virtual degree programs are even less likely to receive accreditation, which can significantly hurt the perceived legitimacy of the degrees. Chile, in particular, severely lacks accredited virtual degrees in education-related programs, with none of the virtual degrees featured in this study earning accreditation. With the exception of Colombia and Argentina, where essentially all programs are accredited, the remainder of programs found through this research struggle to meet the standards necessary to become accredited by national institutions.

However, initial teacher training through non-accredited degree programs does not disqualify prospective teachers from being considered for their positions in all countries, with the exception of entering some public education systems. Although the lack of a certified status is problematic in the long term, virtual degrees remain an option for prospective teachers. Additionally, as a result of the pandemic shifting the majority of higher education to online formats, virtual learning has experienced a boost in legitimacy that will likely help the accreditation processes of virtual degrees in the future.

Accreditation alone should not be a factor that discourages Latin America and the Caribbean from expanding virtual programs. Increased access to teacher training is essential, particularly for rural and indigenous communities for whom expanded access to teacher training could subsequently improve the quality of their teacher. While monitoring the quality of these programs is important in making sure they are answering the needs of students, increased access and engagement of independent learners cannot be undervalued when assessing investment in these programs.

**INCREASED ACCESS TO TEACHER TRAINING IS ESSENTIAL TO IMPROVE TEACHER QUALITY, PARTICULARLY FOR RURAL AND INDIGENOUS COMMUNITIES WHO ENROLL IN IN-PERSON TEACHING DEGREES IN LOWER RATES THAN THEIR COUNTERPARTS.**
CONCLUSION

Latin America faces a daunting educational future in part due to its shortage of adequately trained teachers. This issue has only been exacerbated by the Covid-19 pandemic and failure to prepare teachers for digital and remote learning. Further investment in virtual teaching degrees could help bridge the gap in teacher excellence by supporting the growth of qualified teachers and expanding access to training for groups and professionals that would otherwise not complete these programs. Additionally, in the context of the pandemic and remote learning, the virtual training modality could help promote the development of more comprehensive ICT competencies and trainings. The increased access that these programs grant and their unique position to promote technological literacy are benefits worth investing going forward.

In order for virtual initial teacher training programs to meet their potential, it is important to resolve some of the underlying shortcomings identified throughout this report. First and foremost, there needs to be a change in perception towards virtual degree programs. Although virtual programs are being more positively perceived as a result of the new reality imposed by the Covid-19 pandemic, there are some areas that need to be improved to further legitimize the programs. In that sense, making sure that virtual degree programs are accompanied by the appropriate accreditation is essential to address both persistent teacher quality assurance issues in the region, as well as legitimizing and recognizing virtual programs as providing the necessary skills to become a teacher. Additionally, stricter admission requirements and gatekeeping will help build the rigor and legitimacy of these programs by distinguishing students who have a specific interest in teaching as opposed to students who are looking to acquire any university degree.

Finally, detailed information about the content and methodologies used to train and evaluate prospective teachers is currently not readily available on institutional sites or reports. Additionally, the costs associated with these programs are not generally publicized on program sites. Thus, in order to produce a more comprehensive assessment of the current state of virtual teacher training in the region, further research and data is needed around issues such as learning evaluation, costs, the level of incorporation of teaching practicums and training on ICTs. In the longer term, further research could help assess the impact of pandemic on the increase of online degree offers.
References


