Bridging the Digital Divide in Migrant Education: Critical Pedagogy and Inclusive Education Approach

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Abstract: This review paper explores the relationship between migration and issues of social justice, inequalities, and access to education which have been exacerbated recently with the emergence of the Coronavirus (COVID-19) pandemic and have taken on a new dimension with the digitalization of education specifically for refugees among other immigrants. It addresses the use of Technology Enhanced Learning (TEL) and Information and Communication Technologies (ICTs) in practices of inclusion and adaptation of refugees. Additionally, this scoping literature review introduces accessible, sustainable, and effective practices that could help displaced adults and children overcome the adverse effects and inequalities experienced by migration. The idea that critical pedagogy provides a firm ground and implications for multicultural education is emphasized. Solutions and recommendations regarding program, curricula, and syllabi development are presented to create a more inclusive educational ecosystem for displaced people.

Keywords: Digitalization of education, digital divide, refugee experiences, critical pedagogy, scoping literature review

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Bridging the Digital Divide in Migrant Education

Socio-economic and political transformations as well as improvements in communication and technology caused unprecedented numbers of people to move around the world (Arar et al., 2020; International Organization for Migration [IOM], 2020). According to IOM (2020), international migrants have reached around 272 million people globally constituting 3.5% of the world’s population. According to a report published by the Organization for Economic Co-operation and Development (OECD, 2019a), the number of migrants in OECD nations has grown by 30% since 2000. The UN Refugee Agency Global (2020) reports that by the end of 2020, a total of 82.4 million people had been forcibly displaced due to human rights abuses, discrimination, or other conflicts. That included 26.4 million refugees, 48 million internally displaced people, 4.1 million asylum-seekers, and 3.9 million. Alarminglly, data on global migration show that children account for a critical number of global migration influxes, specifically the displaced population. Children under 18 comprise around 35 million (42%) of the 82.4 million displaced people (UNHCR, 2020).

Since most of the world’s refugee population resides in developing countries and undeveloped countries host around 6.7 million refugees (UNHCR, 2020), the influx of migrants bears challenges for those countries with limited resources to provide accessible and quality education, support, and services to meet migrants’ economic, social, and psychological needs. Accordingly, when compared to non-migrants, many migrants from lower socioeconomic backgrounds attend disadvantaged schools, have inferior academic performance, and report variable levels of life satisfaction (OECD, 2019b).

Furthermore, the recent COVID-19 epidemic has demonstrated that immigrant and refugee students were among the most vulnerable throughout the crisis. Worldwide school and university closures were brought on by the COVID-19 epidemic, which has had an impact on education (OECD, 2021b). More than a billion students had to continue classes online while others had to delay their education for a long time.

The epidemic has shown how vulnerable education institutions are to a sudden, unanticipated global disaster, but it has also made inequality and the digital divide in access to education and usage of digital technologies more evident than ever. The digital gap has become more pronounced for those who were already underprivileged because they did not have computers and the internet, neither the resources nor appropriate conditions to continue their education at home.

Undoubtedly, the crises that have occurred throughout the globe have had an evident impact on vulnerable populations. Thus, it is critical to investigate the circumstances generated by this influence and to disclose the existing condition to gain a deeper understanding of the relationship between displacement and education. In this study, a critical pedagogy lens was employed in the process of assessing the existing situation, identifying the impacts it has caused, and addressing the proposed solutions within the
framework of field research. As a result, strategies have been devised by studying the educational experiences of refugees as one of the most fragile groups worldwide.

**Theoretical Framework and Related Literature**

Within the context of this study, critical pedagogy is defined as an understanding that views the main duties of educators as being to ensure that the future brings a socially fair world. A society in which the virtues of reason, freedom, and equality fight to change the underlying principles of life as part of a wider democratic mission (Freire, 2000). Pedagogy is always an intentional endeavor for educators as it affects the way knowledge is formed and acquired through social interactions. In that sense, it highlights the ways knowledge, power, intentions and experience are created in certain learning environments (Giroux, 2021). Giroux (2020) describes critical pedagogy “as an entry point in the contradictory nature of schooling, an opportunity to force it toward creating circumstances for a new public sphere” (p. 116). In order to be able to resist oppressive institutions and structures, it is the responsibility of the educator to help learners gain critical thinking skills (Freire, 2000).

Previous research in the related literature has demonstrated that programs based on Freire's concept of critical awareness may give a wide range of advantages to refugees and internally displaced people (Magee & Pherali, 2019). Garcia (2015) shows the significance of art-based critical education and raising immigrant students' social and political consciousness. In Stevenson and Beck’s (2017) research on a literacy program for migrants, findings indicate that socio-culturally responsive critical literacy pedagogy with supporting teaching resources promotes students' development of conscientization. Fostering students' critical thinking skills to raise citizens that would promote and thus create a fair society is one of the most crucial aims of education. Therefore, critical pedagogy (Kanpol, 1999; Uddin, 2019) may pave the path for reinforcing students' awareness of social justice and equality by providing instruments and strategies to examine and strive to change the learning environments.

Critical pedagogy is concerned with “human agency and their lived experiences as well as the role of class structure and struggles in developing consciousness” (Sleeter & Delgado-Bernal, 2004, p. 241). In terms of its core principles, ethical principles, and theoretical scope, critical pedagogy will contribute to this study by providing several concepts concerning multicultural education (Sleeter & Delgado-Bernal, 2004) which is crucial for students to develop the necessary knowledge, abilities, and viewpoints to become successful citizens across the world (Banks, 2019). As the definitional focus of educational technology also emphasizes, maintaining culture-related problems like relevance, access, equality, and inclusion front and center (Bradshaw, 2017), critical pedagogy posits a critical lens to investigate digitalization and migrant education.

Looking from the lens of critical pedagogy, the purpose of this scoping literature review is to investigate the research on the issues of social justice, inequity, and access to education that have recently been exacerbated by the emergence of the Coronavirus
(COVID-19) pandemic and have taken on a new dimension with the digitalization of education, specifically for refugees among other immigrants. This review paper specifically aims to investigate “What is known and what is the current situation regarding the democratization of education through digital technologies and the use of Technology Enhanced Learning (TEL) and Information and Communication Technologies (ICTs) in practices of inclusion and adaptation of refugees through a critical pedagogy lens?”

The novelty of the research is in the way it describes the use of digital technologies to democratize education and focuses on the application of Technology Enhanced Learning (TEL) and Information and Communication Technologies (ICTs) in refugee inclusion and adaptation strategies. Furthermore, this scoping literature review offers techniques that are accessible, durable, and effective in assisting displaced adults and children to overcome the negative effects and disparities associated with migration. It is underlined that critical pedagogy provides a solid foundation and has consequences for multicultural education. To build a more inclusive educational ecosystem for displaced individuals, solutions and proposals for program, curriculum, and syllabus development are offered.

Method

A scoping literature review aims to outline the research on a particular subject or area of research and help researchers define the key concepts, knowledge gaps, and proofs to guide application, policy and practice (Daudt et al., 2013). Scoping literature reviews describe current literature and other sources of information, and they frequently contain findings from various study designs and approaches (Davis et al., 2009).

In this review, the trustworthiness of the findings was made more credible by adhering to well-known scoping review reporting requirements and a methodological approach. It was also important to manually explore the literature to guarantee the process's reliability (Sucharew & Macaluso, 2019). In order to enhance the validity of the scoping review, researchers adhered to the scoping literature review framework suggested by Arksey and O’Malley (2005) which provided structured steps for conducting the review. The review protocol was further refined by the PRISMA protocol (Page et al., 2021) which helped organize the identification of studies via data pages and registers as shown in Figure 1.

Data collection and analysis methods for scoping literature reviews are explained through the steps of the Scoping Literature Review Framework proposed by Arksey and O’Malley (2005). The scoping literature review framework proposed by Arksey and O’Malley (2005) includes the following five stages: (1) developing research questions, (2) identifying relevant studies and search terms, (3) study selection, (4) charting the data, and (5) summarizing and reporting the results.
1. Developing the research question: As a first step in the study, we identified the research question which is “What is known and what is the current situation regarding the democratization of education through digital technologies and the use of Technology Enhanced Learning (TEL) and Information and Communication Technologies (ICTs) in practices of inclusion and adaptation of refugees through a critical pedagogy lens?”

2. Identifying Relevant Studies and Search Terms: In this stage, we searched the Scopus Database for relevant studies related to the digitalization of education, the digital divide, refugee experiences, Covid-19, and critical pedagogy, as well as the related grey literature publishers such as UNESCO, The World Bank, and the OECD which provided a broader representation of diverse populations. We used both single and combined search strings including: digitalization of education, digital divide, refugee and immigrant experience, Covid-19, and critical pedagogy. The combined search strings included: "Inclusion" AND "Digitalization of Education" AND "Migrant education" AND "Covid-19", "Inclusive education", "Critical Pedagogy" AND "immigrant learners” OR “refugee learners” AND “Digitalization of education”.

3. Study Selection: After the search for related studies on the Scopus database and report providers such as UNESCO and UNHCR, we found studies (n=95) including conference papers (n=37), work-in-progress papers (n=20), published papers (n=20), recently published reports (n=15), and book chapters (n=3). The following diagram depicts the data selection process which includes the identification of studies via databases and registers through screening and inclusion criteria. As illustrated in Figure 1, following the PRISMA protocol (Page et al., 2021), a database search yielded 95 results. 20 records were eliminated for reasons such as being unrelated to population, context, or scope. 75 publications were reviewed, with 20 being rejected as they were irrelevant and not a good fit for the purpose of the study. We aimed to investigate literature with proof of practice, thus, conference papers were also excluded from the literature database. Full-text articles, reports, and book chapters were evaluated for eligibility (n=55), with 17 of them not retrievable. Finally, 38 studies were selected for inclusion.
A summary and count of themes we searched for, publication year ranges, and publication types are shown in the following Table 1.

4. Charting the Data:

The charting of findings was the fourth phase. After we decided to include each study based on the inclusion and exclusion criteria, summaries for each article are combined under a number of themes. Table 1 illustrates the distribution of publications according to themes, publication year, and type. 22 of the publications discussed the digitalization of education, 20 discussed the digital divide, 32 discussed immigrant and refugee experiences, 5 discussed COVID-19, 11 discussed critical pedagogy, and 45 discussed inclusive education. 20 of the publications were articles, 3 were book chapters, and 15 were reports.
Table 1.

Distribution of Publications according to Themes, Publication Year, and Type

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<th>Themes</th>
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<th>Immigrant &amp; Refugee experiences</th>
<th>COVID-19</th>
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Following that, we discussed the determined themes in light of the literature we identified.

5. Summarizing and Reporting the Results: The final phase of the scoping literature review was to synthesize and submit results based on the steps taken. Creating summaries for each study made it easy to follow and debate the findings in light of the research questions.
Findings

The selected studies are discussed with regard to the research question: “What is known and what is the current situation regarding the democratization of education through digital technologies and the use of Technology Enhanced Learning (TEL) and Information and Communication Technologies (ICTs) in practices of inclusion and adaptation of refugees through a critical pedagogy lens?”

We organized the results into three major themes in this section (see Figure 2). The results include the OECD, UNHCR, and UN reports on (1) academic accomplishments and inclusion of migrants, (2) intersecting experiences that affect their adaptation: language barriers, aspirations, and educational attainment. Lastly, (3) the role of digitalization in migrant education: the role of digitalization in the democratization of education and immigrants’ education through TEL.

Figure 2.
Themes Emerged as a Result of the Scoping Literature Review

1. Academic Accomplishments and Inclusion

The findings of the scoping literature review resulted in a number of reports that are related to the academic accomplishments of immigrant and displaced students. We examined the Program for International Student Assessment (PISA) results which include all 37 OECD countries, and 42 of its partner economies to measure 7th and 8th graders' knowledge and skills to develop a thorough understanding of immigrant and displaced students' inclusion and academic accomplishment. PISA results inform us about students’ inclusion and academic life regardless of their background and fairness in the way they are included in their social and academic life. The data on the academic performance and background of grade 7 or higher students enrolled in an educational institution (OECD, 2021a) show that 13% of the students in OECD countries are immigrants with a low-income profile. According to the PISA reading performance report (OECD,
nonimmigrant students scored 42 points higher than immigrant students across OECD countries. It is important to note that the countries where higher performance differences favoring nonimmigrants were observed have been the destination for immigrants with low income and low education backgrounds for a long time and recently experienced a migrant influx for humanitarian reasons. On the other hand, in some countries with successful education outcomes such as Canada, the United Kingdom, and the United States, immigrant students scored over the bottom score in general. When both the socioeconomic backgrounds of schools and students were considered, the relationship between immigrant students’ performance and socioeconomic status was also significant in countries like Qatar and the United Arab Emirates, where most migrant students came from educated families with a higher socioeconomic background and outscored host country students (OECD, 2019a).

2. Intersecting Experiences

The reports and studies included in the scoping review outline several challenges intersecting in the migrant and displaced student experiences. The immigrant integration report (OECD, 2019a) suggests immigrants experience various forms of disadvantages intersecting with their immigrant background. Some of the challenges include experiences of social exclusion and discrimination, language barriers, a higher risk of school leaving, and “neither employment education nor training (NEET)” than their nonimmigrant peers. Education and training programs are the primary means for immigrants to overcome those challenges. Through education, immigrants can gain skills that the labor market requires, contribute to the community, build social relationships, and learn about the cultural values and traditions of the host country.

The Universal Declaration of Human Rights (Article 26) states that the right to education is one of the basic human rights for everyone in the world, meaning that primary education is globally compulsory and free (UN, 1948). Article 26 states that the right to education also includes accessible elementary, fundamental, and higher education which is mostly free for everyone. However, as the review of intergovernmental global reports indicates, the host countries often struggle to integrate the influx of immigrants into their education systems. Thus, being left behind in education adds another layer of subordination to the immigrant and refugee background and challenges their integration into the host country. The major intersecting difficulties and gaps experienced by migrant children and youth in accessing education include the following: a lack of adequate training and guidance for teachers to provide psychological support for refugee and migrant students, and the need for advanced multiculturalism (UNHCR-UNICEF-IOM, 2019).

2.1. The Language Barrier

The findings illustrated studies that indicate learning the language of the host country as part of the challenges in migrant education. When the language that immigrants speak at home is considered, the data (OECD, 2019a) indicate that immigrant students who
use the medium of instruction at home score higher than those who speak their mother tongue. Miyamoto et al. (2020), in their study of immigrant students’ achievements and motivation, emphasize the role of using the medium of instruction in everyday life for immigrant students to attain better reading scores, ambition, academic motivation, and understanding. Matthews and López (2019) similarly, pointed out the relationship between speaking the language of instruction in the school context and academic achievement. However, they also suggest the benefits of language diversity and the need for a balanced focus on minority languages at home and instruction languages at school. Unfortunately, not many education systems support the language training immigrants need to have for successful integration into the host communities (OECD, 2015).

2.2. Immigrant Students’ Aspirations

A set of studies included in this review emphasized immigrant student goals and expectations in relation to social orientation, status, and academic achievement (Chykina, 2019; Feliciano & Lanuza, 2016). Immigrant students reported having greater goals than their non-immigrant peers when their socio-economic backgrounds, reading scores, and school profiles were taken into consideration in response to the PISA (OECD, 2019b) survey. The results indicate that the higher the socioeconomic background and academic performance immigrant students had, the more they expected to complete tertiary education in the future. Similarly, compared to the parents of their non-immigrant peers who come from the same socio-economic background, immigrant students’ parents reported having greater expectations for their children in terms of their attainment of tertiary education (OECD, 2015). In nations like Germany, Belgium, and Hungary, where immigrant kids do not do better academically or come from wealthier homes, parents expect their children to have a higher education degree. The findings show that both immigrant students and their parents have aspirations to continue education and pursue college degrees. They are keen to take advantage of educational possibilities in their host countries.

Since aspirations for education are related to further participation and commitment, it is important to understand the nature of expectations (Chykina, 2019). The positive and high educational expectations of migrant youths have been attributed to a variety of reasons such as the value of education for immigrants and the desire for an upward social status change (Hadjar & Scharf, 2019; Salikutluk, 2016), immigrant optimism (Kao & Tienda, 1995), the social atmosphere and ingroup orientation of immigrants at school, or to the migration background in general (Wicht, 2016).

2.3. Educational Attainment

Another theme identified in the selected literature reviewed referred to the educational attainment of migrant learners in relation to inclusion and educational status. Contrary to the high aspirations of immigrant youth to continue education, the data from migrant integration statistics (Eurostat, 2020) drawn from the EU labor force survey (EU-LFS)
show that most of the 18-24 years old early leavers from education and training were immigrants. The number of immigrant early school leavers was lower only in a small number of countries such as Ireland, the Netherlands, and the United Kingdom. Similarly, the rate of immigrant youth aged 15-29 who had neither employment nor education or training (NEET) was greater (24.6%) than the percentage of the native-born population (18.6%) in the EU countries (Eurostat, 2020).

Immigrants’ educational attainments greatly vary depending on their migration conditions and the immigration policies of the host countries. While the number of educated migrants might be high in countries with selective migration policies for some nations, the number of less-educated migrants can exceed the number of natives when the immigrants come from poorer countries with fewer educational resources and attainments (UNESCO, 2019). For example, according to the American Community Survey data (Bandyopadhyay & Grittayaphong, 2020), the number of immigrants who do not have a high school degree is greater than the non-immigrant population in the U.S. However, the number of non-immigrant populations is slightly lower than the rate of immigrants in terms of educational attainment above a high school degree. Educational attainment of immigrants is higher on both “no high school degree” and “graduate-level degree” rates reflecting the heterogeneity of immigrant backgrounds, the demand for the low-skilled, manual labor force as well as the changes in immigration policy towards favoring the highly skilled people in the U.S. (Radford & Krogstad, 2019).

In terms of the educational attainment of refugees among other immigrants, there is a notable divide between their capacities and opportunities to access education, specifically for girls. Even though 77% of refugee children enrolled in primary schools (remaining stable with the previous year), 31% of refugees were enrolled in a secondary school which included only 27% of girls (UNHCR, 2020). On the other hand, 3% of refugee youth participated in higher education programs comprising vocational and technical education courses. The data collected from the UNHCR database in 2019 suggests that, unfortunately, across the sample of 12 countries, 1.8 million school-age refugee children are out of school. Even though the 12 countries cannot represent the educational status of refugees globally, it provides an insight into the challenges experienced by refugees.

3. The Role of Digitalization in Migrant Education

A set of reports responded to the research question on the use of Technology Enhanced Learning (TEL) and Information and Communication Technologies (ICTs) in practices of inclusion and adaptation of refugees from a critical pedagogy lens in the following themes and subthemes 3.1. and 3.2. As the UNHCR (2021) report reveals, living as a displaced person (refugee, asylum seeker, etc.) in a nation poses social, cultural, and economic obstacles. In order to overcome these obstacles, host countries should recognize current issues, devise innovative solutions, and guarantee that immigrants, refugees, and asylum seekers feel socially, culturally, and economically integrated. It is critical to address the educational demands of both adults and children and to establish
an inclusive living environment for migrants. Currently, there are 82.4 million forcibly displaced people as a result of conflict, violence, human rights violations, and persecution (UNHCR Statistics, 2021). This information gives researchers, social services, and governments liability for the social integration of immigrants into the new environment and for living equally with citizens. Having at least self-sustaining knowledge of the language and culture of the country of destination is one of the essential constituents of being a member of society.

Fairness and inclusion have been two essential topics to be discussed in terms of education but more specifically in immigrants’ education which implicates issues i.e., academic resilience, democratizing education, well-being, and so on (OECD, 2019a). These two terms can be discussed concerning a variety of concepts such as learning loss, children/adults with disabilities, the digital divide, or displaced children/adults. In this review, therefore, the researchers mainly focused on the themes related to education and inclusion of displaced people and the digital divide arising from the lack of physical access to digital technologies. Indeed, the capacity to access and use technological tools, including the Internet, is one of the crucial components of social inclusion and integration.

3.1. Democratization of Education through Technology-Enhanced Learning

Digitalization is the use of digital tools to adapt educational processes and materials for digital devices at the macro and micro levels (Habibi & Zabardast, 2020), and it has been a crucial part of people’s lives for nearly 40 years. In light of this rapid change, the necessity of re-questioning the functions of traditional education and restructuring the various dimensions of learning has emerged (Yildiz-Aybek, 2017). International and national organizations have become influential in training individuals who can manage the digital age by developing both global and local strategies, have human values, respect nature, contribute to the national and global economy in the context of the workforce, are aware of inequalities and take responsibility in this regard.

In the study of Drenoyianni (2006) which is a comparison of the main ideas of Freire and Papert on the role of digitalization, mainly the use of ICTs, in both educational policies and practices, it is argued that the idea of democratizing the educational system with the help of ICTs is not the same as just changing the delivery method by using the ICTs. On the other hand, the transformative role of ICTs for both micro and macro-level strategies in education has been positively discussed as technology as a facilitator in recent literature (Asongu et al., 2019; Hori & Fujii, 2021; Ovcharuk et al., 2020) regarding concepts such as sustainability, poverty, accessibility, inclusiveness, and technology.

The role of digitalization in education in terms of inclusiveness has taken on a new significance with the start of the COVID-19 global pandemic. But even before the pandemic, the idea of using ICTs to provide open, accessible, flexible, environmentally friendly, and cost-friendly formal, informal, or non-formal learning opportunities has
been crucial in terms of democratizing educational practices (UNESCO IITE, 2021; Parkin, 2021). The use of digitally enhanced platforms such as Open Educational Resources (OERs), Massive Open Online Courses (MOOCs), and other open-access programs for underserved or vulnerable populations has been suggested as a pathway for the democratization of educational ecosystems (Jiang et al., 2016; Lambert, 2020; Stich, & Reeves, 2017).

3.2. Immigrants’ Education through TEL

Given that in today’s technology-based network society, even natives of countries need ICTs-related skills to feel included, it is obvious that the same case is in question for the integration of refugees into the new environment. In the EU Action Plan on Integration and Inclusion (2021-2027) presented by the European Commission (2020), a new set of policies and guidance were introduced related to promoting the integration of disadvantaged groups, especially refugees. The major initiatives suggest providing inclusive education and opportunities for training, increasing job possibilities and skill recognition, advancing access to health services, and providing sufficient and affordable housing. In the related report, it is stated that 26.8% of non-EU-born migrants had a high-level education by the year 2019 but they face unmet life-related needs due to issues related to language, financial resources, and a lack of knowledge on how to access related services.

It is well known that access to education is one of the most important human rights and is indispensable for the practice of other human rights (UN, 1948). The use of digital technologies and environments has been an inevitable educational practice for several purposes such as inclusion, integration, and the preparation of migrants for the new environment. Considering the education theme as a focus, there are many good practices for overcoming the challenges related to the language barrier, job seeking, and skill recognition. The use of ICT for the inclusion, education, well-being, and adaptation needs of immigrants has been an important part of both TEL and Sociology related research areas. One of the most recent studies on the use of social media for refugees’ health and welfare conducted by Pottie et al. (2020) suggests that refugee youth generally use ICTs for political rights, health information, social networking, and self-presentation. Mobile devices might have the potential to create positively enhanced interactions among newly arrived refugees. Being a member of the host society requires the participation of the refugees in different levels of civic engagement which improves overall well-being. In another recent study, Lenarčič and Dežan (2021) analyzed and explored a variety of ICT tools and how they support young migrants’ integration into host countries.

ICT use in educational practices holds ‘great promise’ regarding the important role in escalated access to learning opportunities at low cost and with minimized time and place constraints (Wagner, 2017). Considering the urgent need for cost-effective, sustainable, and innovative education for displaced people, inclusive and quality education strategies have been on the agendas of global organizations. According to Joynes and James
(2018), the use of especially mobile technologies might be an opportunity in terms of providing and delivering digital content, training teachers, and improving the management of education information. Indeed, in addition to the literature published on the use of ICT for immigrants' education, recent practices reported by Wagner (2017) also support the idea of being mobile in terms of time and place and thus, mobile solutions for immigrants. It is seen as a basic survival tool for them to connect with the world (Maitland & Bharania, 2017). What follows is a brief overview of good practices in the use of technologies for refugee and immigrant education.

Read to Kids Jordan intervention (Garrahan, 2017) created a mobile app and a web-based platform including high-quality Arabic texts to help Syrian children with the toxic stress of displacement and to develop school readiness by improving language development. It helped nearly 50,000 children across Jordan and India in camp settings as well. The Read to Kids intervention showed that even if there are cost and promotion-related challenges it is still possible to reach out to refugee and immigrant kids to help them in mobile settings.

Planet Learning's “These Inspiring Girls Enjoy Reading (TIGER Girls)” and “Open Learning Exchange” (OLE) are another good example of employing digital technology to aid immigrants. Learning resources, books and courses, collaborative activities, and an accomplishment record are all available on OLE. The technology is being used in a Jordanian refugee camp to help teenage females build new friendships and cooperation skills. The TIGER program, according to Harvard Graduate School of Education’s research, helps Syrian refugee girls build resilience in both life and education (Phimister, 2016).

Finally, the Learn Turkish Language MOOC platform is excellent practice. It assists individuals, specifically Syrian, Afghan, and Iraqi refugees, the majority of whom are in Turkey (UNHCR, 2020) to learn Turkish anytime, anywhere (Ozan et al., 2018). This view shows the urgent need to teach Turkish to displaced persons in Turkey who are asylum seekers, refugees, or immigrants. The platform is one of the early MOOC applications for teaching the Turkish language and culture to children and adults alike. Currently, the system has almost 17,000 students, mostly Syrians residing in Turkey (Ozan & Ozarslan, 2019). There are many useful methods and examples for helping immigrants adjust to a new environment, as well as an enormous, classified library of digital resources for mentors, instructors, and people (UNHRC, 2020). Nonetheless, issues like internet access, digital literacy, and the digital divide have been a problem for migrants, particularly those who left their homes due to war, violence, or poverty.

The digital divide, which means the gap between those who access and use ICTs and those without access to ICTs, has been a controversial issue especially when it comes to vulnerable and underprivileged populations (Mendonça et al., 2015). Alam and Imran (2015) demonstrate the role of ICTs in the social inclusion of refugee migrants; however, they also emphasize that there are inequalities regarding access to technological devices and the internet, the skills needed to use and manage digital technologies, and the ability
to pay for such services. While issues with physical access to ICTs are generally discussed in terms of the digital divide, recent studies and practices also introduced in this review study show that digital technologies are mostly considered as a bridge helping to increase social inclusion (Macevičiūtė & Wilson, 2018) and “community development, economic well-being, and financial inclusion, education, and health” (Patil, 2019, p.1).

**Conclusion and Implications for Future Research Directions**

Having defined the scope of rapidly changing demographics through the influx of migrants around the globe, escalating issues of social justice and inequality in education for displaced people, and discussed the role of digital technology in helping adults and children to close the digital divide, we suggest the following implications regarding program, curricula, and syllabi development for which critical pedagogy would act as a lens for viewing education to transform our society into one that is more socially just (Katz, 2014), digitalization would function as an asset to create an accessible, up to date, and inclusive learning environment. Finally, sustainability for equal education will be addressed.

**Bridging the Educational Gap in the Digital Era**

According to Wagner (2014), there are two achievement gaps in our education systems. While the first one is related to the divide between the standards of schooling for those from a better socio-economy and those who are mostly poor and minority, the second one is about the gap between what is being done in our best capacity in the best schools and what students need to achieve to be successful in today’s global economy. Wagner (2014) suggests seven basic skills for work, learning, and citizenship in the twenty-first century to help close those achievement gaps as follows: (1) Critical Thinking and Problem Solving, (2) Collaboration Across Networks and Leading by Influence, (3) Agility and Adaptability, (4) Initiative and Entrepreneurialism, (5) Effective Oral and Written Communication, (6) Accessing and Analyzing Information, (7) Curiosity and Imagination (pp. 1-42). These are necessary skills to prepare youth for the advances in global society and the digital era.

Given that critical pedagogy is a humanizing approach to educational practices, it is considered the foundation of the digitalization of learning and teaching. The seven survival skills suggested by Wagner (2014), especially those related to critical thinking, collaboration, and adaptability are also essential skills for the ever-changing digitalization. While today’s digital world enables people to learn anything from any location by using digital technologies, it also supports learners to see how education changes in terms of openness, and flexibility and indicates the need to acquire 21st-century survival skills to catch up with the world. Technological improvements and innovations provide alternative ways, techniques, and resources to learn or gain new skills. In other words, now learners can search, select, use, criticize, and evaluate learning materials, courses, instructors, and even organizations.
Sustainable and Equal Education for All

One of the Sustainable Development Goals (SDGs) identified by the United Nations to close the gap is to promote inclusiveness and equal quality education globally for everyone (UN, 2020b). To ensure the sustainability of developments across diverse populations such as displaced people, we need the support of global organizations and structures. One promising example of such an endeavor is the 2030 Agenda for Sustainable Development by the UN. To end poverty, protect the planet, and improve the lives and futures of everyone, everywhere, all UN Member States adopted the SDGs in 2015. As part of the 2030 Agenda for Sustainable Development, a 15-year plan was set out to accomplish the Goals (UN, 2020b). Reimers (2021, pp. 44-46) believes that realizing Sustainable Development Goal 4 (SDG4), quality education for all, and other SDGs rely on the achievement of powerful education and learning systems. According to the UN (2020b), education is “a global common good and a primary driver of progress across all 17 SDGs as a bedrock of just, equal, inclusive peaceful societies” (p.3).

It is important to aim to educate the “whole child” (Reimers, 2021, p. 44), promoting learning outcomes and competencies to create an inclusive ecosystem that would also benefit the displaced and immigrants. Furthermore, it is necessary to appeal to cognitive, interpersonal, and intrapersonal competencies, and foster interaction and peer work. Rather than simply covering the content, it is essential to streamline the lesson and prioritize the main competencies for underprivileged populations. Instead of grade levels, children need to be placed according to their learning performance. Reimers (2021) also underlines that we need to design instructions that foster accelerated learning. Most of the current education systems prioritize covering the loss with remediation instead of focusing on accelerated learning (OECD, 2021b; as cited in Reimers, 2021). Personalized instruction based on the learners’ level and the use of formative feedback through online guidelines can support learners and help them gain independent learning skills.

When the provision of equal resources and access for all is possible, specifically for refugees or immigrants, we suggest the advanced use of digital technologies and artificial intelligence where face-to-face education is not possible. Some of the applications we recommend include Social Media platforms for collaboration with host communities, Augmented Reality for adaptation to the new environment, finding jobs and educational opportunities, MOOCs and OERs (Open Educational Resources) to remove the language barrier, assist, and improve learning, Digital Adaptive Systems to create alternative paths by using their personal and educational backgrounds for adult and youth education.

In conclusion, this study focused on the ever-increasing immigrant and refugee population. We proposed the adoption of critical pedagogy as a macro and micro-level lens set on digital technologies in order to address the difficulties of displacement, as well as the need for quality education, equity in daily life, and employment. However,
more research on these intricate and critical topics needs to be undertaken to gain a richer insight into the socio-economic and cultural mechanisms underlying the potential of digital technologies for reaching the global goals set by intergovernmental organizations, NGOs, and associations.

**Limitations and Strengths**

The inclusion of current papers, book chapters, and reports gives us a comprehensive picture of our predetermined themes. In addition, we mostly included completed practice-based or empirical studies in order to report current results on the themes and research questions. However, since we established the main themes based on our prior experience and research, this study's inquiry technique is not totally exploratory, which can be considered a potential limitation.

**References**


mülteciler ve göçmenler için eşit kaynak ve erişimin sağlanması mümkün olduğunda, yüz yüze eğitimin mümkün olmadığı durumlarda dijital teknolojilerin ve yapay zekâlarının ileri düzeyde kullanılmasını öneriyoruz. Önerdikimiz uygulamalardan bazıları, ev sahibi topluluklarla işbirliği için sosyal medya platformları, yeni ortama uyum sağlamak, iş ve eğitim fırsatlarını bulmak için artırılmış gerçeklik, dil engelini kaldırmak, öğrenmeye yardımcı olmak ve geliştirmek için MOOC'lar ve Açık Eğitim Kaynaklarını içermektedir.

Anahtar Kelimeler: Eğitimin dijitalleşmesi, dijital uçurum, mülteci deneyimleri, eleştirel pedagoji, kapsam belirleme derlemesi

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