

Culturally Sensitive and Congruent Digital Learning Initiatives for Health Professions across Europe: Towards an Inclusive European Professional Mobility

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The importance of digital education seems to have gained momentum since Covid-19 pandemic especially in the field of health professions. Since then more innovative options, new terms, frameworks and uses, introduced in this chapter, have emerged with the aim to assure at least the same quality as the face-to-face traditional educational approaches and recently by including the culturally competent perspective. This progress may contribute positively by avoiding high expenses for organizations and promoting values in digital education such as equity, inclusion and diversity recognition, even when mobility restrictions happen for any reason. The chapter presents the routing guide to developing culturally sensitive and congruent digital learning initiatives for health professionals, according to international organizations and experts, that could be applied worldwide, by outlining the experiential learning and good practices from projects conducted across Europe.

Keywords: Digital health, Cultural Competency, Europe; Education, [Diversity, Equity, Inclusion]



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Introduction

Even though many authors have published on this, a *culturally sensitive learning* context could be understood broadly as a welcoming environment for people of all cultures, where everyone feels recognised, safe and respected, with inclusion of their similarities and differences, free from bias and prejudice (Nijhuis, 2019). *Cultural Sensitivity* is defined as being aware that cultural differences and similarities between people exist without assigning them a value – positive or negative, better or worse, right or wrong – resulting in acceptance, adaptation and integration (Foronda, 2008). Moreover, *cultural congruence* is a process of effective interaction between the provider – understood as the health professional or the educator – and client

or user levels – such as the patients or the students – in which providers must continue to improve their quality of communication (Au & Kawakami, 1994). When it comes to learning initiatives, a *culturally sensitive and congruent learning environment* is, according to the previous statements and definitions published by many authors along the years, understood as the context – real, online or virtual scenarios – where a exposure to cultural differences and similarities takes place, by working in multicultural contexts, by recognising others' education and trainingships in health professions used to focus on one's own cultural aspects and settings throughout face-to-face learning in simulated and real practice. Additionally, mobility programmes have contributed to such traditional learning with a complementary view of other cultural perspectives though being a limited option, only available for some students (El-Messoudi et al., 2023). However, in the last years digital learning initiatives facilitated by distinct forms of technology have appeared providing potentially all students with some element of control over time, place, path and pace; being no longer restricted to the school day or the academic year; and no longer restricted to one's own culture or just very few cultural perspectives (Stork, 2018). These digital learning initiatives may allow people to learn wherever or whenever they choose since these learning materials are online and accessible at any time and can provide students with a broader cultural perspective, consequently preparing future health professionals, whatever their condition is, not only for a professional free mobility across Europe but also for a wider cultural competent professional mobility in a global world. Thus, along the years mobile devices have become especially enticing to educational institutions because of their portability, flexibility, and intuitive interfaces. A growing number of organizations have begun using tablets as a cost-effective strategy in a digital learning environment. Other institutions have embraced a *bring your own device* (BYOD) policy, which addresses pedagogical goals as well as the lack of funds many schools struggle with to support digital learning. BYOD makes digital learning easier by leveraging the devices students already have.

The *digitalisation* process understood as the material process of converting analog streams of information into digital bits and consequently the way many domains of social life are restructured around digital communication and media infrastructures (Brennen & Kreiss, 2016) is an-umbrella concept that falls not only on the side of education and training but also on the communities' and organizations' side. Under the umbrella of *digitalization* the concept of *digital health* represents one important branch that continues to evolve

and especially since the Covid-19 pandemic appeared in our lives. First introduced in 2000 by Seth Frank, *digital health* largely encompassed internet-focused applications and media to improve medical content, commerce, and connectivity (Frank, 2000). The term *digital health* has expanded to encompass a much broader set of scientific concepts and technologies, including genomics, artificial intelligence, analytics, wearables, mobile applications, and telemedicine (Boodoo et al, 2017) all of them used not only with patients but also in the training process of health professionals, either in classrooms, during simulation or in practice. In addition, digital health technologies are being applied much more broadly in health professions to include diagnosis, treatment, clinical decision support, care management, and care delivery. In 2018, the *World Health Organization* issued a detailed *taxonomy of Digital Health*, articulating dozens of facets of this expanding space (World Health Organization, 2018). The classification of *digital health interventions* (DHIs) categorizes the different ways in which digital and mobile technologies are being used to support health system needs. Historically, the diverse communities working in *digital health* – including government stakeholders, technologists, clinicians, implementers, network operators, researchers, academics, donors – have lacked a mutually understandable language with which to assess and articulate functionality. A shared and standardized vocabulary was recognized by the World Health Organization as necessary to identify gaps and duplication, evaluate effectiveness, and facilitate alignment across different digital health implementations. Targeted primarily at public health audiences, this Classification framework aimed to promote an accessible and bridging language for health program planners to articulate functionalities of digital health implementations. However, when it comes to education and in relation with *digitalization* and *digital health*, another term *digital learning* appears and many people use it interchangeably in the form of synonym terms such as *distance learning*, *e-learning*, *online learning*, and *virtual learning*. *E-learning*, *online learning*, and *virtual learning* all fall into the umbrella concept of *technology-enhanced learning*. However, they mean different things, and all focus on a different aspect of education. In order to distinguish them, it's useful to think about where and how the learning process happens. The location can be onsite or remote, the communication can be synchronous or asynchronous, the delivery can be online or offline, and the device can be digital or analogue. Here is an overview of how *distance learning*, *e-learning*, *online learning*, and *virtual learning* differ in terms of location, communication, delivery mode, and device according to the major assumptions of World Health Organization (2018):

- *Distance learning* simply means that educators and students are in a different location. It doesn't mean the instruction is necessarily delivered online. *Distance learning* has existed for a long time, way before the advent of the Internet.
- *E-learning* means *electronic learning*. An interactive learning application on a tablet not connected to the Internet would be considered an e-learning application, even though it is not online. In fact, in *e-learning*, communication is entirely optional. An in-app curriculum could be crafted in advance, with content being dripped whenever a learner progresses to the next module, without the need for an educator to interact with the students. *E-learning* also doesn't need to be remote. That same e-learning application could be used onsite by students in a classroom with the help of their teacher. Again, *e-learning* simply focuses on the digital aspect of education.
- *Online learning* is about learning over the Internet. However, perhaps counter intuitively, communication is optional in *online learning* as well. Video lectures could be recorded and uploaded in advance, without the option for students to connect together or ask questions to an educator. That probably would not be the optimal instructional design, but it would still be considered *online learning*, as the learning experience is delivered over the Internet. A wider definition of *online learning* would even include any self-directed studies conducted online, such as looking up information on search engines, watching educational videos, or reading blog posts about a study topic.
- The most recent incorporation of these *technology-enhanced learning* approaches is *virtual learning*, which was propelled to the forefront of education during the pandemic. In a virtual classroom, the teacher and the students join the class at the same time, which helps facilitate real-time interactions. Similarly to the traditional classroom, virtual classrooms offer a synchronous experience by allowing students to ask questions and interact with their teachers and their peers. The same way a traditional classroom is usually part of a school, a virtual classroom is often part of a wider *virtual learning environment*, which can include additional resources, such as study material, schedules, assessments, and ways to reach out to members of the school staff outside of class.

Nowadays the challenge is mainly focused on integrating the culturally sensitive and congruent perspective – also understood as culturally competent – into the digital health initiatives. In the following lines we are clari-

fying key terms and frameworks as well as introducing cases according to the author experience regarding this topic and presenting a routing guide to developing culturally sensitive and congruent digital learning initiatives for health professionals that could be applied worldwide by outlining experiential learning and good practices from projects conducted across Europe. Once having read this chapter the questions and reflections that come up should make readers wonder if the digital learning initiatives they use and apply daily, could be considered as culturally sensitive and congruent, and if they really fit with the recommendations, principles and characteristics presented.

The Bridge Between European Health Professions' Education and Digital Health

Digitalisation has brought both significant challenges and opportunities in the last years, fundamentally shaping the contemporary educational landscape. However, *digitalisation* applied to health professions' education and trainingship does not only consist on using digital tools with future and current health professionals. It seems obvious that a new scope, framework and major assumptions should be developed and thus understood under the umbrella of a broader term such as *digital health*. In line with this, the *Regional Digital Health Action Plan for the World Health Organization (WHO) European Region 2023–2030* published in september 2022 (World Health Organization, 2022) aimed to contribute to the achievement of health-related and education-related *Sustainable Development Goals*, the *WHO European Programme of Work 2020–2025* (World Health Organization, 2021), the *WHO Thirteenth General Programme of Work 2019–2025* (World Health Organization, 2019); as well as the operationalization of the previous *WHO Global strategy on digital health 2020–2025*. The last Action Plan submitted in 2022 intends to support countries in leveraging and scaling up digital transformation for better health and in aligning digital technology investment decisions with their health and educational systems' needs, while fully respecting the values of equity, solidarity and human rights. The vision of the global strategy is to improve health outcomes for everyone, everywhere, with the recognition of the cultural differences and similarities, by accelerating the development and adoption of appropriate, accessible, affordable, scalable and sustainable person-centred digital health solutions to prevent, detect and respond to epidemics and pandemics, and developing infrastructure and applications that enable countries to use health data to promote health and wellbeing. Therefore it not only consists on providing health professionals and future

ones with digital tools during their education but also providing them with a holistic perspective that could be inclusive for cultural aspects. By urging European Member States to promote the digitalization of their health systems including the training of their health professionals, the last regional action plan provides a framework that aims at:

1. recognizing digital technologies as a key determinant of health, both directly and through their interactions with traditional health determinants;
2. developing guidance and building capacity for the digitalization of health systems;
3. transforming health systems and strengthening prevention and well-being;
4. promoting an appropriate enabling environment and foundations for digital health transformation, ensuring equity and building trust;
5. engaging with key partners and leveraging regional networks to foster digital health development and innovation and promote knowledge-sharing; and
6. promoting evidence-informed investments and facilitating the implementation, evaluation and scale up of digital solutions.

Therefore, all the digital learning initiatives designed for and used with health professionals across Europe should be understood under this framework submitted by the *Regional Digital Health Action Plan for the World Health Organization (WHO) European Region 2023–2030* (World Health Organization, 2022) which is characterised for being culturally sensitive and congruent.

Prior to the WHO initiatives for Europe exposed until now, The Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009 in the United States (US) sparked the long-awaited adoption of electronic health records (EHRs) by healthcare systems across the country and eventually the development of patient portals, allowing patients online access to key elements of their medical charts. Nowadays high percentages of hospitals in the US and Europe use a government-certified EHR, allow their patients to view health information online and train their staff also in a digitalised and personalised way. HITECH additionally spurred private industry investment in digital health, including mobile health, wearable devices, remote patient monitoring (RPM), and telehealth. Since 2009 HITECH has developed a comprehensive Framework for Digital Health Equity, detailing key digital determinants of health (DDoH), to support the work of digital health tool cre-

ators in industry, health systems operations, and academia (Richardson et al., 2022). Later the coronavirus disease 2019 (COVID-19) pandemic highlighted both the continued impact of long-standing systemic oppression on disparate health outcomes as well as the growing importance of digital healthcare.

The Guiding Principles of Health Professions' Digital Learning Initiatives across Europe.

In the implementation of the most recent WHO framework, the guiding principles that should lead all digital learning initiatives for health professions towards the appropriate and sustainable adoption of digital health solutions according to the last Action Plan, within the context of national health sectors and health and digital transformation strategies in Europe, and characterised for being culturally sensitive and congruent (World Health Organization, 2022) are:

1. *Place the individual at the centre of trustworthy care delivered digitally.* The successful uptake and use of digital technologies in health and health professions' education is contingent on a patient-centred approach. Individuals, health workers and patients should be empowered through digital health to make informed choices that benefit the health and wellbeing of themselves, their families and their communities.
2. *Understand health system challenges, including health needs and trends, and acknowledge the needs and expectations of citizens and health workers.* Digital technologies, when used appropriately, can make a substantial contribution to advancing universal health coverage, aiding the work of health professionals, protecting the public in times of emergencies – like for instance the Covid-19 pandemic – and enhancing health and wellbeing.
3. *Recognize the need for policy decision-making based on data, evidence and lessons learned while allowing for continuous learning, adaptation and innovation.* There are still gaps in the evidence base on digital health, and there is a role for WHO and Europe to work with other agencies, Member States, international organizations, academic institutions, civil society and the digital technology industry to learn from previous experiences and strengthen this evidence base. A comprehensive evidence base will help ensure that digital technologies contribute effectively to health outcomes, while minimizing potential risks, and that decisions and investments relating to digital health are sustainable, evidence informed and driven by needs and by lessons learned.

4. *Leverage digital transformation to reimagine the future of health systems.* As countries seek to build more resilient health systems within the context of socioeconomic recovery from the COVID-19 pandemic, national health plans and agendas are being reviewed and enhanced, new and innovative ways of working are being introduced, and significant investments are being made in digital technologies in consultation with stakeholders. It is therefore timely to work with countries to ensure that the innovation agenda, through the adoption of digital solutions, leaves no one behind, improves patient pathways and the delivery of care, and considers the current environment and the necessary changes in financial, infrastructural, human, organizational and cultural resources as part of the digital ecosystem.
5. *Recognize that institutionalization of digital health requires a long-term commitment and an integrated care approach.* Whether at the national, regional or local level, this action plan acknowledges that the institutionalization of digital health requires leadership and a long-term commitment by countries to achieve transformation of health systems and improvement in people's health and well-being.

The strategic Priorities to Develop a Real Digital Learning for Health Professions in Europe.

This Action Plan (World Health Organization, 2022) that apparently focuses only on the field of European population health outcomes and Healthcare systems is strongly linked with health professions' education and trainings across the European regions and therefore identifies four strategic priorities for the achievement of this vision that should be considered when designing learning initiatives and innovation proposals:

1. setting norms and developing technical guidance and formulating direction to support decision-making in digital health;
2. enhancing country, regional or local – in any environment – capacities to better govern digital transformation in the health sector and advance digital health literacy;
3. building networks and promoting dialogue and knowledge exchange to facilitate interaction between partners, stakeholders and the wider public to steer the agenda for innovation in digital health;
4. conducting horizon-scanning and landscape analysis for patient-centred solutions that can be scaled up at country or regional level to help

shape public health and health systems, as well as the educational systems, in the digital era.

In an age where digital technology permeates every aspect of our lives; accessing, understanding, and utilising digital health information and systems is paramount, not only to care of populations' health but also towards training those who will be attending those populations – the health professionals. This is not just a matter of convenience, it is necessary for equitable healthcare delivery, empowerment of individuals in managing their health and inclusive education. It is also important to create environments, which are favourable and supportive to the health-related behaviours we want the individuals to engage in. It is not enough to merely provide digital health services, literacy and education for professionals, populations and stakeholders; it must also be ensured that they are culturally sensitive and congruent, appropriate, accessible, and convenient, that individuals whether they are health systems' users or professionals, have the skills and knowledge to use these services effectively, and the systems support them.

The Traditional European Mobility Action for Health Professions' Education and the Potential Contribution of Digital Learning Initiatives to its Improvement.

According to the information provided by the European Union programme for education, training, youth and sport (European Commission, n.d.), the *Erasmus* programme was originally established by the European Union in 1987. It looked to promote closer cooperation between universities and higher education institutions across Europe. This meant setting up an organised and integrated system of cross-border student interchange. Over time, the programme has expanded in its breadth and depth and is now known as *Erasmus+*. Its extended form is a broad umbrella framework which combines former EU's different schemes for transnational cooperation and mobility in education, training, youth and sport in Europe. Increasingly, it is also looking beyond Europe. Since the start of the programme in 1987, over 16 million people have taken part in Erasmus+, thanks to enthusiastic take-up of opportunities by staff, students, young people and learners of all ages. Erasmus began as stand-alone programme for European cooperation and mobility which ran through two programme phases between 1987 and 1994. It became the higher education sectoral programme within the broader *Socrates* programme for education (1995–2006) and the *Lifelong Learning* programme (2007–2013). EU programmes on education and culture expanded, with *Socrates* and *Leonardo*

da Vinci covering education and training (in the period 1995–2006) and the *Lifelong Learning* programme succeeding these from 2007–2013. In 2014 the EU created a single overarching programme for Education, Training, Youth and Sport. Given its resounding success over the years and the fact that *Erasmus* was far more widely known than the other programme titles, it was decided to extend the *Erasmus* brand name to the whole of the new programme. The ‘+’ is meant to recall that the programme supports more sectors than just higher education as it did at its origins. In this second phase, nowadays the programme is focused on four overarching priorities: (a) supporting the green transition, (b) addressing the digital transformation, (c) promoting social inclusion and diversity and (d) fostering stronger participation in democratic life, common values and civic engagement. In the fields of health professions, until now the European higher education mobility action only supported physical and blended mobility of higher education students in any study field and cycle (short cycle, bachelor, master and doctoral levels). Students could either study abroad at a partner higher education institution or carry out a traineeship in an enterprise, a research institute, a laboratory, an organisation or any other relevant workplace abroad. Students could also combine a study period abroad with a traineeship, further enhancing the learning outcomes and development of transversal skills. While long term physical or face-to-face mobility used to be strongly encouraged, nowadays and especially since Covid-19 pandemic this action plan recognises the need to offer more flexible physical mobility duration to ensure the programme is accessible to students from all backgrounds, circumstances and study fields and therefore digital learning options could be the key solution. Specifically in the case of European health professions’ education, *digitalisation* under the umbrella of the European *digital health* framework -presented until now- seems to be the path to be followed. The Mobility action has also aimed until now to foster employability, social inclusion, civic engagement, innovation and environmental sustainability in Europe and beyond by enabling students from all study fields and at all study cycles to have the opportunity to study or train abroad as part of their studies and again digitalisation could guarantee this as everyday the number of jobs based on technologies and digital tools are increasing without any need to move from home. The objectives of the traditional mobility action – apart from the main one based on the cultural approach and immersion – that could be assured by including digitalisation are, among others (Pereira et al., 2024):

- 1) expose students to different views, knowledge, teaching and research methods as well as work practices in their study field in the European

and international context; and not only one – as it used to be with the traditional way;

- 2) develop their transversal skills such as communication skills, language skills, critical thinking, problem solving, inter-cultural skills and research skills;
- 3) develop their forward looking skills, such as digital and green skills, that will enable them to tackle the challenges of today and tomorrow;
- 4) facilitate personal development such as the ability to adapt to new settings, situations and self-confidence.
- 5) share their expertise with others from other contexts;
- 6) experience new teaching environments;
- 7) acquire new innovative pedagogical and curriculum design skills as well as digital skills;
- 8) connect with their peers abroad to develop common activities to achieve the programme's objectives;
- 9) exchange good practices and enhance cooperation between higher education institutions;
- 10) better prepare students for the world of work.

In addition, the digital learning initiatives achieve the objective to foster the development of transnational and transdisciplinary curricula as well as innovative ways of learning and teaching, including online collaboration, interprofessional approach, research-based learning and challenge-based approaches with the objective of tackling societal challenges.

Integrating New Terms Such as Artificial Intelligence, Big Data, E-health, Telemedicine and Nursing Informatics in Health Professions' Knowledge

The interpretation of the concept *digital health* and other related ones remains confusing. As we introduced previously *Digitalisation* means much more than simply using the technology in the classroom. It is a paradigm in which information is accessed, stored, distributed and processed in a digital way. This fundamental change in the way the educational process itself takes place has a profound impact on the entire educational system. One of the most obvious transformations is the increased accessibility to educational resources. *Digital health* expands the concept of *E-health* to include digital consumers, with a wider range of smart devices and connected equipment. It also encompasses other uses of digital technologies for health, such as the *artificial intelligence, big data* and *robotics*. Through online platforms, courses

and educational materials can be accessed at any time and from anywhere, removing geographical and time barriers. This opens doors to education for those who would otherwise have difficulty accessing traditional learning resources or even difficulties in mobility. *Digitalization* is not just about providing educational content online then. It is also redefining the way educators teach and learn. Consequently, it is not possible to move all the educational resources utilized in the traditional face-to-face directly into the digital ones. The process definitely needs an adaptation that includes a holistic perspective and a culturally sensitive and congruent scope. In fact, emerging technologies, such as *virtual* and *augmented reality*, understood as an interactive experience that enhances the real world with computer-generated perceptual information, enable interactive and immersive learning experiences that may improve comprehension and retention and had not any previous equivalent in the traditional education. It also happens with data analytics tools which can also provide valuable insights into individual student progress and needs, allowing teachers to better personalize learning, something that was unbelievable just some years ago.

Other related terms with digital learning that were defined by the *Global strategy on digital health 2020–2025* (Mariano, 2020) are *Artificial intelligence* which is an area of computer science that emphasizes the simulation of human intelligence processes by machines that work and react like human beings; *Big data* which means rapidly collected and complex data defined by four dimensions: volume, velocity, variety and veracity; *Blockchain* understood as a digital database containing information, such as records of financial transactions, that can be simultaneously used and shared within a large decentralized, publicly accessible network; *e-Health* defined as the cost-effective and secure use of information and communications technologies in support of health and health-related fields, including health care services, health surveillance, health literature, and health education, knowledge and research; and *Telemedicine* considered as the delivery of health care services where distance is a critical factor by health care professionals using information and communications technologies for the exchange of valid information for diagnosis, treatment and prevention of disease and injuries, research and evaluation, and the continuing education of health care workers, with the aim of advancing the health of individuals and communities. In the last years another key term that has emerged in the field of Nursing and healthcare is *Nursing Informatics* which is the specialty that transforms data into needed information and leverages technologies to improve health and health care equity, safety, quality, and outcomes (Abdrbo, 2015). *Nursing informatics* is a

field that integrates nursing and Technology and this professional role guarantees the holistic and human perspective in the use of technologies, that is to say the culturally sensitive and congruent scope. Examples of this specialty include using data to make patient care decisions, using technology to collect and store data, and analyzing data to update nursing practices and protocols. Advancements in the future of *Nursing informatics* will center on automated patient and clinical data records, improved operations at health care facilities, simplified data collection, tracking, and analysis, and real-time access to patient information anytime, anywhere.

The Covid-19 as an Outstanding Milestone for the Development of Health Professions' Digital Learning Initiatives

The importance of digital learning, understood as the type of learning facilitated by Technology, seems to have gained momentum since Covid-19 pandemic appeared in our lives. In the aftermath of the lockdown, considerable scholarly attention has been devoted to the examination of online education, encompassing an extensive range of investigations pertaining to its merits and drawbacks. Although the development speed of digital education used to be slower before the historical milestone of Covid-19, since then more innovative options and new uses have emerged with the aim to assure at least the same quality as the face-to-face educational approaches, and in some cases even enhancing the traditional education and permitting higher accessibility. Apart from the barriers related with the existing digital gaps for some populations in the world, like for instance older adults as well as vulnerable and low income people, many stakeholders are scaling up its usability and demanding each day more and more applications to face future challenges. Such is the case of health professions' education in which a range of digital educational options are being refined with special emphasis on simulation. Thus the emergence of online education seems to have revolutionized the learning landscape offering flexibility, accessibility and interactivity. While traditional classrooms are quite effective, digital learning solutions will elevate education to a whole new level by increasing accessibility, engagement, and customization (Lillo-Crespo, 2022).

Teaching and learning digitally and through electronic media are not inherently better or worse than traditional classroom methods, but rather offers a different experience for both educators and learners. It brings forth certain challenges that can be more difficult, as well as certain advantages that can be easier to achieve compared to a traditional classroom setting. Simulated practice in real places settled within the Higher Education Institutions (HEIs)

that try to show real scenarios and performing to the maximum the reality of health organizations and other settings where interactions between professionals and patients happen with relation to health and illness, has been for many years the gold standard of the health professions' formal education before students could put one step into real practice settings. However, these simulated environments usually represent only one social and cultural reality, mainly the one of the context. The reflection at this point should make us wonder who decided the characteristics of such rooms for simulation, what those individuals had in mind and from what cultural perspective.

Even though today we tend to think that online courses refer only to educational programs or classes that are primarily delivered over the internet, progress is demonstrating to us that digital simulation in different forms is much complex than this and may contribute as positively as the traditional real face-to-face simulation avoiding important expenses such as the investment in resources that unfortunately have a quite short timeline and only represent one context, usually the typical one for that audience. However one improvement that has arisen in relation with the latest digital simulation initiatives has to do with the provision of social and cultural scope, something that exists and happens in real life and previous experiences had not taken into account so far. Our students used to be trained even in simulation with just one cultural perspective, one context and in many cases with just one professional view. Nevertheless the social and cultural perspectives stress the provision of important insights and views regarding gender perspective, age perspective, cultural and ethnic perspective, inclusivity and recognition of other gender identities, realities and life experiences, as well as the inclusion of vulnerable populations, far away from the traditional clinical-based simulation style mainly focused on the physical perspective of health and standard population, and being nearer the person-centred and holistic trends.

Therefore, governance of data and digital technology use is a key lesson learned from the pandemic. It has been demonstrated that it is necessary to establish and update digital health platforms. Having well-articulated principles, standards and governance of data and digital technologies during pandemics and other health emergencies is vital to ensure that trust is established in their use and, in turn, for the delivery of an effective and proportionate public health response. Accountability and oversight mechanisms need to be included as part of good governance, in addition to the monitoring and evaluation of the public health impact. The role of publicly owned digital platforms should be strengthened to ensure public trust in and security of public data. In fact, COVID-19 has had a crippling effect on the health care

systems around the world with cancellation of elective medical services and disruption of daily life. Experts and authors such as Iyengar et al. (2020) have highlighted the learning opportunities offered by the pandemic and their implication for a better future health care system through a comprehensive review of the current literature undertaken to analyse the consequences of COVID-19 on health care system by using suitable keywords like COVID-19, 'telemedicine', 'health care' and 'remote consultations' on the search engines of PubMed, SCOPUS, Google Scholar and Research Gate. Virtual and remote technologies have been increasingly used in health care management. COVID-19 has offered unique learning opportunities for the health care sector. Yet, according to *Age Platform Europe* this fast digitalization is also pushing aside a growing number of people in preventing them to access essential services, as many older people's organisations across Europe have warned (Kucharczyk, 2021). Therefore not all the results of digitalisation are positive as some of them can be experienced as negative by other populations who do not have the adequate resources. Some paradoxes observed are the advantages of online tools versus the dependency on their smartphone and social media, the availability of a wide range of news sources versus the dangers of disinformation, the ease of use of data-driven services versus the concern for our privacy, security and control over their personal data.

Furthermore, the current epidemic situation has made every HEI acutely aware of the need to create digital, or distance, or blended learning courses. It is vital that these are created in a way that optimizes learning and ensures the students' further development of their skills and competences in the future.

Experiential Learning and Good Practices Across Europe to Develop Culturally Sensitive and Congruent Digital Learning Initiatives

The digital scope is also gaining stakeholders into other sorts of education: *blended simulation* – described as combining hands-on simulation, such as the use of high-fidelity manikins, with computer-based simulation in the same course, *continuing professional development* (CPD) – any type of learning undertaken which increases your knowledge, understanding and experiences of a subject area or role, *combined mentoring* – by combining traditional face-to-face and digital ones, among others. Several proposals have succeeded in international calls funded by the *European Commission* (EC) especially Erasmus+ calls under the purpose to fill the gap of a new digital education paradigm that could cover the current situation lived in different parts of the world and overcome one future characterized by population mobility and the possibility of public health and epidemiological lockdowns

and isolations. Digital education also advocates for those unable to move for different reasons (pathologies, disabilities, movement restrictions, among others). Since the beginning, the EC has been witnessing and continuously advancing the idea of one world without boundaries where free mobility of citizenship, including professionals from different fields, is the target. Some of these proposals directly included one digital outcome compared with other previous projects whose objectives resulted in the production of knowledge and outcomes ready to be transferred later on to the digital world.

In the case of the ISTEW Project, *Improvement Science Training for European Healthcare Workers*, several modules were developed though not digitally approached. With the principle aim to develop shared academic and practice based programmes that could enable European universities to build improvement capability and capacity within their own healthcare workforce, through engagement with students based on an agreed scope of practice, essential knowledge base, and improvement science competence across partner countries; ISTEW ended in 2015 and resulted with: four new accredited evidence informed healthcare improvement science modules, a new consensus definition of Healthcare Improvement Science, the evidence on the specific nature of Healthcare Improvement Science in seven European countries, the current state of Healthcare Improvement Science education in seven European countries, and a framework to evaluate the impact of education on practice (MacRae et al., 2016; Lillo-Crespo et al., 2017; Lillo-Crespo & Sierras-Davó, 2019; Lillo-Crespo et al., 2019; Skela-Savič et al., 2017; Sierras-Davó et al., 2021). The Dementia Palliare Project, *Equipping the qualified dementia workforce to champion evidence informed improvements to Advanced Dementia Care & Family Caring through education*, did one step further by designing and creating a *Community of Practice* (CoP) based on the best available evidence on experimental learning. The Community of Practice gives practitioners access to resources and an opportunity to participate in discussion forums in multiple languages. It was a space for those interested in advanced dementia to share and learn from one another. Moreover four modules on advanced dementia care for health and social care professionals across Europe were developed and delivered online by the consortium from seven countries and are accessible to professionals across the globe. These will enhance the impact of modern universities to provide professional life long learning and their commitment to offer evidence based education that maximises the quality of the student experience (Tolson et al., 2016; Lillo-Crespo et al., 2018). E-motion Project, Lights4Violence Project and Demophac Project as well as the previously mentioned only produced podcasts, videos, educational re-

sources, digital books and papers on high sensitivity, dating violence in youth and pharmaceutical care, respectively. The main goal of the E-motion project was to develop, test and implement a comprehensive model of support for highly sensitive children in preschool and early-school age. E-motion resulted in the preparation of an online platform containing a set of questionnaires for high sensitivity assessment as well as educational materials and materials that support work with highly sensitive children for parents and teachers (for teaching staff), the organization of workshops for teaching staff at the international and national levels by every partner institution, as well as theoretical documents such as handbooks, compendiums and frameworks regarding high sensitivity (Baryła-Matejczuk et al, 2022). Lights4Violence Project, *Lights, Camera and Action against Dating Violence*, focused on promoting adolescents' capabilities to improve their intimate relationships with their peers through different activities such as seminars with teachers 'Promoting Protective Assets Related to Violence Together', Workshop with adolescents from different countries 'Filming Together to See Ourselves in a New Present', Short film exhibitions with participants, their families, authorities and other stakeholders from different cultural backgrounds; Teaching guides for the use of short films and Computer-based evaluation system (Vives-Cases et al., 2019). However the new era projects have contributed further to a one-world digital education characterised for being inclusive, gender-based, culturally-sensitive, congruent and competent as well as environmentally-friendly, which is another positive point of digital education compared with traditional face-to-face education. In this context, the objectives of *GNurseSIM*, a European Commission funded Project under Erasmus+ are to support HEIs to provide students in geriatric nursing with opportunities during their training to practise skills of adopting a multidisciplinary holistic approach to the care of older patients throughout the High Fidelity Simulation approach (Lillo-Crespo, 2022; Grochowska et al., 2023). This will be achieved by combining elements from different approaches to arrive at a unified model and develop an intercultural, culture-sensitive geriatric nursing course, as well as recommendations and guidelines regarding the implementation of the course and possibilities it offers to other areas of nursing. Moreover another case of good practice to be pointed out are *HEALINT* and *HEALINT4ALL* Projects, both of them supported by the European Commission, whose aim was to support students from the field of health in participating in best practice environments (Jankowicz-Szymańska et al., 2023). They started from the rationale that quality processes must be in place and these require innovation to assure audit material resources that are fit for purpose, can work well within the situation and provide

the correct teaching and learning to train auditors. Quality assured clinical learning, including evidence shared across boundaries, will support a globally prepared Medical international workforce able to transfer skills and practice and offer best interventions to enhance patient treatment throughout digital development. Shared evidence is essential within the EU, due to benefits of free movement, of health professionals across borders and cross border healthcare, which includes movement of patients to receive treatment. Such perspective includes requirements to ensure parity of competence and standards of professional proficiency, and their very presence points to the necessity of cultural appreciation and understanding of the needs of patients across borders. *HEALINT* and *HEALINT4ALL* were focused on providing Medical Education and Professionals Allied to Medicine a digital interactive audit system to facilitate quality assurance of EU clinical learning environments so that European Healthcare students will be confident that they can obtain an increased number and variety of safe optimised learning placements through extensive partnerships developed, thus fostering inclusivity. In all these projects one of the most difficult parts was the inclusion of the culturally sensitive and congruent perspective, especially by partnerships in which different cultural groups were represented. In fact, consensus methods were needed in all of them to guarantee the culturally sensitive and congruent scope. All these lessons learned and good practices from the European experience of creating culturally sensitive and congruent digital education and learning initiatives and projects for health professions across Europe are essential for fostering true effective professional Mobility. From the experience of the participants in those projects here are some key components and good practices to be considered that could guide others:

1. Curriculum Development through:
 - Inclusive Content by Integrating diverse cultural perspectives in health education, emphasizing the importance of understanding local health practices and beliefs.
 - Use of Standardized Competencies by creating a framework of core competencies that all health professionals should achieve, allowing for consistency across countries while respecting local contexts.
2. Technology Utilization through:
 - Digital Platforms by using adaptable e-learning platforms that cater to various learning styles and languages, promoting accessibility.
 - Telehealth Training by Incorporating telehealth modules that prepa-

re professionals to engage with diverse populations remotely.

3. Cultural Competence Training through:

- Workshops and Simulations by implementing training sessions that focus on cultural competence, using role-playing and simulations to address real-world scenarios.
- Collaboration with Local Experts by partnering with local health professionals to provide insights into regional health issues and cultural nuances.

4. Assessment and Feedback through:

- Formative Assessments by using ongoing assessments that allow learners to receive feedback on their cultural competence and adaptability.
- Peer Reviews by fostering peer evaluations across countries to promote cross-cultural understanding and collaboration.

5. Policy and Accreditation

- Harmonization of Standards by working towards common accreditation standards for health professions that incorporate cultural sensitivity.
- Support for Mobility by advocating for policies that facilitate easier recognition of qualifications across Europe.

6. Community Engagement

- Partnerships with Local Communities by involving community stakeholders in the design and implementation of educational programs to ensure relevance and effectiveness.
- Service-Learning Opportunities by encouraging students to engage in service-learning projects that immerse them in diverse cultural settings.

7. Research and Evaluation

- Data Collection by gathering data on the effectiveness of digital learning initiatives in improving cultural competence among health professionals.
- Continuous Improvement by regularly updating programs based on feedback and research findings to ensure they remain relevant and effective.

By prioritizing cultural sensitivity in digital learning initiatives, Europe can enhance professional mobility in health professions, ultimately leading to improved health outcomes and a more collaborative healthcare environment across borders.

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Kulturno občutljive in skladne pobude za digitalno učenje za zdravstvene poklice po vsej Evropi: na poti k vključujoči evropski poklicni mobilnosti

Pomembnost digitalnega izobraževanja je pridobila na pomenu po pandemiji covida-19, zlasti na področju zdravstvenih poklicev. V pričujočem poglavju predstavljamo inovativne možnosti, nove pojme, okvire in načine uporabe digitalnih tehnologij v izobraževanju, ki so se razvili v tem času z namenom zagotavljanja enake kakovosti, kot jo zagotavljajo tradicionalni pristopi k izobraževanju v živo, pri čemer se v zadnjem času vse bolj vključuje tudi kulturno

kompetentna perspektiva. Ta napredek lahko pozitivno prispeva k zmanjšanju visokih stroškov za organizacije ter spodbujanju vrednot digitalnega izobraževanja, kot so enakost, vključenost in prepoznavanje raznolikosti, tudi v primerih omejitev mobilnosti zaradi različnih razlogov. Poglavje predstavlja smernice za razvoj kulturno občutljivih in skladnih digitalnih učnih pobud za strokovnjake s področja zdravstva, ki temeljijo na priporočilih mednarodnih organizacij in strokovnjakov ter so lahko uporabne na globalni ravni. Pri tem so izpostavljeni pristopi izkustvenega učenja in dobre prakse iz projektov, izvedenih po Evropi.

Ključne besede: digitalno zdravje, kulturna kompetenca, Evropa, izobraževanje, raznolikost, enakost, vključenost]