

## READY for the future? New roles and professional practices for 21st century educators

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### Abstract

The expectations of educators' roles and professional practices have changed considerably due to emerging societal trends and external factors. This paper proposes a structured way to capture and present these changes. We have conducted a literature review of 70 academic and grey publications, an in-depth analysis of 50 existing frameworks, standards and profiles, and a validation workshop with policymakers, researchers and educators. As a result, we have developed a meta-model called READY (Reference Model for Educators' Activities and Development in the 21st century) that focuses on practices which are relatively new or are receiving increased attention in guiding educators' professional development. READY comprises six-plus-one domains of professional activity, twenty-two professional practices, and seventy-three descriptors of how the practices can be implemented. As a reference model, READY can support educators in identifying development needs and updating their professional practices for responding to the changing needs of society.

**KEYWORDS:** READY Reference Model; 21st Century Educators; Educators' Professional Practices.

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### 1. Introduction

Global and local socioeconomic changes require fast adaptation of education and training systems. The pivotal function that educators at all levels play in the transition of skills development systems within the knowledge society and the fact that their role - and their corresponding practices - should adapt to accommodate the effects of major societal trends have increasingly been recognised at the policy and the research level (European Training Foundation, 2020; Galvin et al., 2023). In this paper, the term educator has a broad definition, as proposed by the European Training Foundation (ETF, 2022, in the glossary):

*“any person involved in the process of teaching or guiding and facilitating learning. In particular, it refers to teachers and instructors at all levels of formal education, ranging from pre-primary, primary and secondary, to further and higher education (e.g., university lecturers), to vocational and adult education, and including initial training and continuous professional development. It may also be used to describe trainers, coaches, and other professionals supporting learning in the workplace and people involved in providing training in non-formal and informal settings, e.g., social workers, library staff, parents providing home schooling, etc.”*

A literature review by the European Training Foundation (2020) identified four interrelated trends that mainly impact education and training systems and, consequently, educators:

1. the digital transition of education and training systems, including the industry 4.0 developments, urges educators not only to acquire the capacity to implement meaningful technology-enhanced pedagogies across different learning environments

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but also to have critical knowledge about digitalisation issues such as Artificial Intelligence (AI) or digital privacy (e.g., Wagiran et al., 2019; Subrahmanyam, 2020; Sarva & Puriņa-Biezā, 2023; Wohlfart & Wagner, 2023; Deng, 2024; Maine, 2024).

2. climate change pressures education and training systems to emphasise the development of green skills. Therefore, educators need both knowledge about the required green skills in the labour market and a green attitude in executing their daily work (e.g., Leicht et al., 2018; Sevilla & Dutra, 2018; Pavlova, 2019; Huang et al., 2024).
3. changing demography and migration dynamics are bringing into the core of educators' professional practices the capacity to support an increasingly diverse and ageing learner population by improving their intercultural communication and linguistic competences (e.g., Marope et al., 2015; Tran & Pasura, 2018; Rissanen et al., 2023).
4. new dynamics in the labour market, such as the circular economy and crowdfunding, put more importance on skill sets (Gonzalez Vazquez et al., 2019). In this context, educators must be able to support learners in developing skill sets and competences, such as entrepreneurship competence (Bacigalupo et al., 2016; Morselli, 2024). Therefore, educators must develop these skill sets themselves (e.g., through adequate training) to have the professional capacity to enable learners to develop them as well (e.g., Avis, 2017; Zhang et al., 2017; Ovcharuk et al., 2023).

On top of these trends, developments in teaching approaches further impact educators' work. For instance, new teaching approaches such as competence-based education require educators to update their teaching strategies to ensure higher integration of theory and practice (e.g., Gulikers et al., 2018; Zyrianova et al., 2018; Phan, 2024). Similarly, collaborative and team-based approaches are gaining ground as essential aspects of educators' professional practices, also in response to the above trends, calling for increased participation in professional networks and open communities (e.g., Roberts & Owen, 2012; Marope et al., 2015; Martinovic & Milner-Bolotin, 2024; Thurlings, 2015; Dickson, 2024).

The European Commission (2012; 2018; 2020) has responded to these developments by emphasising the importance of educators possessing professional, pedagogical, transversal and networking competences to respond to the diverse requirements of contemporary teaching and training processes. Cedefop (2015) states that the role of on-the-job trainers needs to be enriched beyond conveying knowledge and skills with coaching and mentoring activities so that they can stimulate a learning culture in enterprises. The European Training Foundation (2019) recognises that the role of educators is changing with the introduction of new pedagogies such as blended learning and experiential learning.

Finally, the European Council (2020, p. 11) puts forward this imperative:

*“In the context of constant social, demographic, cultural, economic, scientific, environmental and technological changes, the world of education and training is changing, and so is the occupation of teachers and trainers, with increasing demands, responsibilities and expectations put before them. Continuous innovations and challenges have an effect not only on the competences required but also on teachers' and trainers' well-being and the attractiveness of the teaching profession”.*

### 1.1 Educators' new roles

The meta-model presented in this study aims to scope the educators' emerging roles and professional practices that are particularly important to respond to societal trends and to support learners in developing the knowledge, skills and attitudes needed to thrive in a fast-changing world. The global socioeconomic trends and the new insights into how people learn confirm the new demands on educators (e.g., Salamatov et al., 2017; Carlsson & Willermark, 2023). Reviewing the literature, we found agreement on three aspects that are increasingly important for the 21st century educators:

1. They are encouraged to work in new ways, which is reflected in the new terms used to refer to them as professionals. Instead of using teacher and trainer, terms such as facilitators, coaches, supervisors, mentors, and counsellors are increasingly used (e.g., Rivoltella & Rossi, 2012; Oddone et al., 2019; Russon & Wedekind, 2023). Caena and Redecker (2019) refer to teachers and trainers as alchemists who mix strategies, techniques, and resources to create meaningful learning, orchestrators who lead individual and group learning, or welders who connect bits and pieces of knowledge and activities into a meaningful whole. Looking specifically at Vocational Education and Training (VET), the profile of educators has been defined as a mix of pedagogy, social and career development, and socio-emotional skills such as self-regulation, empathy, and emotional intelligence (Marope et al., 2015; European Commission, 2018; Subrahmanyam, 2020).
2. Educators are expected to expand their responsibilities beyond teaching, getting involved in administrative and management tasks, quality assurance processes, school improvement, and curriculum design (Finnish National Board of Education and Cedefop, 2009; European Training Foundation, 2019). Also, educators are increasingly considered agents of change within skills development reform processes (European Training Foundation, 2020). To play these new roles, educators must constantly develop their innovative capacities to keep teaching and learning

experiences up-to-date with recent trends and developments (e.g., Messmann & Mulder, 2011; Gu, 2024).

3. Educators are increasingly called to collaborate with colleagues, experts and external stakeholders to share expertise in their day-to-day work, as one person cannot have all the competences needed to the highest level (Tapani & Salonen, 2019). For instance, collaboration is essential for creating multidisciplinary learning opportunities or for making better use of the strengths of all members of the team of educators to foster well-being and peer support. Team teaching has also proved effective, especially when integrating theory and practice (Sturing et al., 2011; De Weerd et al., 2024).

The literature recognises that these transitions imply a major paradigm shift in how educators perceive themselves and interact with other key actors in the education systems, such as school leaders and teacher educators (Snoek & Dengerink, 2019; Admiraal & Kittelsen Røberg, 2023). They need to change their ideas on how the teaching and learning processes take place, and in line with that, they need to rethink and reshape the roles they play in these new settings (e.g., Duch & Andreasen, 2015; Kovalchuk et al., 2023). The new requirements on educators' roles highly influence their professional identity, which is linked to what they (should) do and the expectations arising from the labour market as well as from learners, parents, and society at large. Therefore, educators might need to change their personal and professional attitudes to meet these expectations (De Bruijn, 2012). Furthermore, educators should be given sufficient time, resources, and support to adapt to the new requirements and develop innovative teaching practices and training programmes (Ganter de Otero, 2019; Brevik et al., 2023). Finally, educators are also expected to play a crucial role in the structural reforms many transitions and developing countries implement (European Training Foundation, 2018).

Fostering a transition to the required new roles of educators within the education and training systems is a long-term (although urgent) and multifaceted challenge. At the same time, a clear understanding of what these new roles entail in professional practice is often lacking because of the multiplicity of concepts and approaches, as well as difficulty of adapting the many existing international competence and qualification frameworks and standards for educators to the local context (Nascimbeni, 2018). Therefore, this paper aims to contribute to the understanding of the new roles educators should play and the professional practices they should apply for supporting learners to develop adequate knowledge and skill sets for the 21st century, by answering the following research questions:

1. What are the emerging domains of professional activity and related practices that 21st century educators should consider in their everyday work?
2. How can the emerging professional practices be presented in a structured and aggregated way to

inspire and engage 21st century educators in playing their new and demanding roles?

## 2. Materials and methods

A qualitative research design was applied to study the new roles of 21st century educators and the emerging professional practices they could perform in their everyday work. In this context, we conducted desk research followed by a validation process to answer the study's research questions presented in the Introduction. The emerging roles and professional practices of educators were collected, analysed and mapped through desk research, based on a literature review and on the in-depth analysis of existing models and approaches (frameworks, standards, profiles). This desk research served as a basis for the first draft of the **READY (Reference Model for Educators' Activities and Development in the 21st century)** model that was presented and discussed in a validation workshop, where insights and feedback were collected from researchers, practitioners and various education and training stakeholders.

### 2.1 Desk research – literature review and analysis of existing models

The initial stage of the desk research was an extensive review of academic and grey literature built by the European Training Foundation (2020). The literature review was complemented by an online search covering existing professional standards, profiles and competence frameworks that provide insights into educators' roles and professional practices. Through this two-step approach, we created a pool of 70 existing models (frameworks, profiles and standards used at regional, national or international levels). The following criteria were applied to select the ones of particular interest and relevance for developing the READY reference model:

- to include educators' professional standards, characteristics, practices, skills or competences;
- to be relevant for educators from different educational or training sectors.

Fifty models with a wide geographical coverage (international, national and local) fulfilled these criteria and were analysed in depth. We focused the analysis on three dimensions: (1) the different functions, roles and practices distinguished for educators, (2) the proposed teaching, learning and assessment approaches and (3) the references to specific skills or competences required by the 21st century educators. The analysis aimed (a) to gain insights into the focus, content and structure of the selected models, (b) to identify commonalities and points of divergence across them, and (c) to provide the basis for drafting a reference model that can be adapted and used in various education and training settings.

Given the scope of this study, the analysis was limited to providing an overview of the 50 models in terms of structure and content, and it did not provide a

comparative scrutiny of their effectiveness and impact. Appendix 2 summarises the models analysed, including their structure, geographical coverage, target group, and whether they use any progression or proficiency levels.

**2.2 Validation workshop**

The draft model was presented and discussed during an online validation workshop on 2 December 2021. Overall, 23 international experts and stakeholders with diverse backgrounds (policymakers, researchers, and educators) attended this by-invitation-only workshop, plus four research team members (see Table 1 below).

**Table 1** - Workshop participants.

Female	15	Male	8
From EU member states	15	From EU neighbourhood and other countries	8
External participants	17	Staff from the organising agency	6

The draft reference model was shared with the participants one week in advance. The workshop started with introducing the model and answering general questions concerning its purpose, structure and content. After the introduction, the participants were allocated to three predefined heterogeneous focus groups achieving an optimal variety of genders, nationalities and profiles. Each group discussed the draft model in depth and provided feedback structured around four questions:

- What proposals do you have for improving the model’s structure?
- What proposals do you have for improving the terminology used for the educators’ professional practices and attributes?
- What proposals do you have for changing/adding/removing content for the educators’ professional practices and attributes?
- How could the model be used (why, how, when, where, by whom)?

The group discussions were moderated by the first three authors of this paper and supported by Mural canvases for online collaboration and feedback collection. In each group, one participant was assigned the role of rapporteur. At the beginning of the group session, all participants were asked to provide their questions, comments, and recommendations individually by adding virtual post-its to the Mural canvases. Then, based on the collective input on the canvases, the moderators facilitated an open discussion and feedback collection. In the workshop’s last session, the rapporteurs presented the collective feedback of their group. Finally, the workshop concluded with a plenary discussion moderated by the last author of this paper.

Overall, the workshop participants, representing different stakeholder organisations and having diverse backgrounds (e.g., educators, teacher trainers, representatives of school networks, and people working on educational reform), confirmed the need for an up-to-

date reference model that is adaptable, flexible, and grounded in the literature. Also, they recognised the potential of READY to serve as such reference model for educators, policymakers, researchers and other education and training stakeholders.

As final step READY has been applied by two major educational networks (Ort and Amal) in Israel from July 2022 to September 2023. These networks have engaged Israeli educators and students from ten schools in using the READY model to develop new pedagogical approaches and test new teaching and learning practices that can be implemented in their respective schools. During the feedback loops, the READY domains and practices have been used for identifying educators’ professional development needs to support them in implementing these new teaching approaches. The feedback provided by the participating experts and educators confirmed both the structure and the usefulness of the READY model.

**2.3 Limitations**

The methodology for developing READY has its limitations. First, only publications and models in English were considered in the literature review and desk research, respectively. Future research should consider literature in other languages to provide a more comprehensive overview of relevant models that can offer new insights for an update and further development of the READY model. Second, READY has been constructed based mainly on insights collected through the literature review and analysis of existing models with limited consultations with educators and other education and training stakeholders, mainly through the validation workshop. The feedback collected so far shows support for the model. However, future research should test the READY model by conducting more consultations and field work to validate its relevance and applicability in different education and training settings.

**3. Results**

Through the methodology described above, we developed the READY reference model comprising six-plus-one domains of professional activity and twenty-two professional practices. READY stands for the Reference Model for Educators’ Activities and Development in the 21st Century. The complete model is presented in Appendix 1, while the detailed mapping of existing models against READY is presented in Appendix 2.

**3.1 Model development**

Based on the analysis of the existing literature and models, the first draft of the READY reference model was developed to offer a structured way to identify the professional practices and development needs of 21st century educators. The domains and practices that comprise READY will not be particularly new or

surprising to most educators, the novelty of READY being that it combines these key elements in a structured and comprehensive way to provide a shared language and an easy-to-use reference point.

We took a selective approach in designing READY, as we did not aim to capture all possible domains of educators' professional activity. Instead, we decided to select those receiving increased attention in recent literature. Also, we aimed to develop a multi-sectoral model. Although our starting point was VET, we aimed to create a reference model applicable to the lifelong learning perspective that would be relevant for all educators independently of the educational or training sub-sector they are working in. Further, we aimed to develop a model that would be relevant for all educators, regardless of their subject, background, and expertise. In other words, we aimed to develop a model that can be a reference point from which all educators can choose and pick the aspects that are most relevant and useful in their professional practice. Finally, we developed a model that is customisable by design as it includes a context-specific domain that can be further developed, along with related professional practices and descriptors, to be relevant to different education and training contexts.

### 3.2 Model revision and validation

After the workshop, the authors of this paper organised the feedback and insights collected through the online canvases in one document under five thematic areas (i.e., content, structure, terminology, potential users and use) and performed content analysis. The feedback provided during the validation workshop resulted in significant changes (see an overview in Table 2) in the consolidated version of the READY model presented in this paper. The first change was in the structure of the model and the terminology used. The use of the term attributes in the draft model elicited many concerns as an attribute could be perceived more as a characteristic of an individual than the capacity of a professional like, in our case, an educator. Based on the discussion and suggestions provided by the workshop participants, the authors decided to use the term domain of professional activity instead of attribute. This term reveals that the related professional practices are linked to a domain in which educators might have specific knowledge, skills and attitudes which can develop further throughout their career and not to a characteristic of their personality.

A second change was the reduction in the number of domains and related professional practices. In all three discussion groups, proposals were made to reduce overlapping by merging some domains and then reshuffling related practices. We adopted many of these suggestions by significantly reducing the number of the READY model's domains from ten-plus-one to six-plus-one and practices from 43 to 22, respectively.

On the other hand, the consolidated version includes 73 descriptors instead of the 53 in the draft model, based on suggestions of the workshop participants. These descriptors have been added to provide more examples

of how a professional practice can be implemented. For instance, the practice Bridge the worlds of education and work of the Adaptability and initiative domain contains two descriptors: "educators design activities that bring together learners and educators with business and community leaders and other stakeholders to expand opportunities for understanding the worlds of work and education and explore opportunities for synergy" and "educators support learners in exploring and understanding business models and the role they play in the economy and society". The role of the descriptors is to illustrate how the practice could be implemented, but they are not meant to be exhaustive. Most of the descriptors emerged from analysing existing models, while the workshop participants proposed some additional ones. The complete list of 73 descriptors is presented in Appendix 1.

As a final step, after the validation workshop, the 50 models from the desk research in-depth analysis were next mapped against the domains and practices of the consolidated READY model (see last column of Table 2 and Appendix 3). The aim of such mapping was twofold: first, to contribute to fine-tuning READY's descriptors. Second, to check the added value of the READY meta-model by comparing its up-to-date structure and content with those of existing models.

## **4. Discussion**

The READY model was developed to support educators and people working closely with them to inform and update their daily professional practices and identify development needs to respond to the changing needs in society.

As presented earlier in the paper, several trends have a significant impact on education and training systems and, consequently, on educators' work: (1) the digital transition, (2) the green transition, (3) the changing demography and migration dynamics, (4) the new dynamics in the labour market. READY highlights the need for educators to adapt to a fast-changing world and take advantage of emerging teaching paradigms and approaches, including the increased need for collaborative and team-based approaches. While existing models, qualification and education standards and occupational profiles typically correspond to one or more trends and related professional practices, READY offers an up-to-date and holistic approach, presenting in a structured way all the emerging areas of practice that contemporary educators should consider in their work.

The mapping of the 50 existing models shows that some of the 22 professional practices identified in the READY model are well reflected in existing models, while others are less present. When interpreting this, it is crucial to consider the wide variety of models analysed. Most of the analysed models directly target educators.

**Table 2** - Changes made to the main structure of the READY model based on the validation workshop.

READY draft model		READY consolidated model			
10+1 attributes	40 professional practices	6+1 domains	22 professional practices	Existing models with similar practices	
<b>Learner-driven</b>	1. Fostering meaningful learning	<b>Learner-driven</b>	1. Foster meaningful learning	11	
	2. Fostering soft skills development		2. Facilitate peer- and team-learning	06	
	3. Facilitating peer and team learning		3. Apply a variety of assessment methods	22	
	4. Using a variety of assessment methods		4. Coach learners across learning environments	11	
	5. Coaching learners across learning environments		5. Develop personalised learning experiences	12	
	6. Developing personalised learning experiences				
	7. Fostering learners' agency				
	8. Providing career guidance				
<b>Entrepreneurial</b>	9. Fostering entrepreneurship competence	<b>Adaptability &amp; initiative</b>	6. Foster learners' entrepreneurship	05	
	10. Bridging the worlds of education and work		7. Bridge the worlds of education and work	11	
<b>Adaptive</b>	11. Being flexible		8. Demonstrate resilience and adaptability	10	
	12. Demonstrating resilience				
	13. Learning from failure				
<b>Environmentalist</b>	14. Adopting environmentally sustainable practices		<b>Sustainability &amp; inclusion</b>	9. Create inclusive learning environments	24
	15. Fostering environmentally sustainable behaviours among learners			10. Be attentive to personal well-being and that of others	08
<b>Inclusive</b>	16. Fostering intercultural communication with and among learners			11. Manage one's own and others' emotions	08
	17. Creating inclusive learning environments	12. Adopt and promote environmental, social and economic sustainability		10	
<b>Ethical/empathetic</b>	18. Implementing ethical work practices				
	19. Being attentive to personal well-being				
	20. Being attentive to learners' well-being				
	21. Being attentive to colleagues' well-being				
	22. Being empathetic				

READY draft model		READY consolidated model		
10+1 attributes	40 professional practices	6+1 domains	22 professional practices	Existing models with similar practices
<b>Collaborative</b>	23. Working in team with other educators	<b>Collaboration &amp; engagement</b>	13. Collaborate with peers and other stakeholders	21
	24. Learning through peers and professional communities		14. Contribute to professional networks and communities	13
	25. Encouraging co-creation and sharing of knowledge		15. Contribute to organisational development and improvement processes	14
	26. Using a variety of communication strategies			
	27. Opening the learning settings to external stakeholders			
<b>Engaged staff member</b>	28. Engaging in institution-wide activities			
	29. Engaging in curriculum development			
	30. Engaging in quality assurance			
<b>Lifelong learner</b>	31. Proactively engaging in professional development opportunities	<b>Lifelong learning &amp; reflection</b>	16. Proactively engaging in professional development opportunities	22
	32. Developing autonomously through their career		17. Reflect on professional practices	23
	33. Reflecting on professional practices		18. Apply evidence-based pedagogies	13
	34. Applying research-based pedagogies			
<b>Digital</b>	35. Using digital technologies for teaching	<b>Digital technologies</b>	19. Use digital technologies to enhance teaching	16
	36. Reflecting on data to adjust instructional plans		20. Create digital resources and content	02
	37. Being aware of the impact of digital technologies		21. Be aware of copyright and online privacy	06
	38. Respecting copyright and online privacy		22. Understanding the potential role and impact of digital technologies	02
	39. Encouraging learners to use digital technologies for knowledge production			
	40. Fostering responsible digital citizenship			
<b>[Context specific]</b>		<b>[context specific]</b>	[to be defined locally]	

In contrast, others are aimed at citizens in general, such as the EU competence frameworks (e.g., *EntreComp*, *DigComp 2.1*) or at teaching and learning without a specific focus on educators, such as the Baltimore City Instructional Framework Rubric (Model 34 in Appendix 2). The focus of the different models differs as well. Some cover many areas an educator should develop or perform, such as the *Graduand Teacher Competencies Framework* (Model 9 in Appendix 2). Others focus on specific areas, such as *Green Skills in Vocational Teacher Education* (Model 15 in Appendix 2), or on specific sectors, such as the *Core Competency for TVET Educator* (Model 30 in Appendix 2) or the *Teacher Educator Technology Competencies* (Model 30 in Appendix 2) for teacher educators. This variety of models helped us construct and validate READY, as they provided different perspectives on the required individual competencies, units of professional qualifications or professional activities of contemporary educators, who are both professionals in the field of education and role models inspiring their learners.

The READY model's diversity allowed us to understand which areas of practice are covered by the most common approaches and which are less common. Five professional practices are reflected in at least 20 of the 50 analysed models, representing a 'shared common ground'. These are: (1) Apply a variety of assessment methods, (2) Create inclusive learning environments, (3) Collaborate with peers and other stakeholders, (4) Proactively engage in professional development opportunities, and (5) Reflect on professional practices. It is not a surprise that assessment is included in many existing models, as it is an integral part of contemporary teaching and learning, and also because innovative forms of assessment have become critically important in the context of the COVID-19 lockdown. The way the different models view assessment varies, but most models distinguish between formative and summative assessment and emphasise the need for informative and timely feedback. With classrooms becoming more heterogeneous due to migration and other demographic changes, more and more attention is paid to creating inclusive learning environments. This is reflected in the number of existing models that included this aspect, often using terms like diversity, equity, culturally responsive and respect. Collaboration with peers and other stakeholders is also incorporated in many existing models. The shift from subject-oriented to more integrated, cross-curricula approaches requires educators not only to collaborate, but also to make learning more relevant by including real-world problems or authentic learning experiences. This means that educators have to collaborate with various actors.

Interestingly, the two practices most often found in existing models are in the domain of lifelong learning and reflection. This is not surprising: lifelong learning is considered essential in any occupation across various life transitions. Thus, it equally applies (or even more so) to educators. At the same time, it aligns with the concept of an educator as a reflective practitioner

embraced by scholars and education stakeholders for a long time.

Five professional practices included in the READY model are supported by six or fewer other models: (1) Facilitate peer- and team-learning, (2) Foster learners' entrepreneurship, (3) Create digital resources and content, (4) Be aware of copyright and online privacy, (5) Understanding the potential role and impact of digital technologies. Remarkably, three of these five professional practices come from the domain of digital technologies, which gets much attention in light of the digital transition of education and training systems. There could be different explanations for this. First, most existing models were developed before 2020 and do not incorporate the recent developments in digital education triggered by the COVID-19 pandemic. Although the use of digital technology in education has been in the spotlight for some decades, it got a real boost with the pandemic resulting in school closures and the online education wave. The OECD report *Education at a glance 2022* shows that many countries intend to maintain or further develop digitalisation measures implemented during the school closures (OECD 2022). 'Copyright' and 'online privacy' are also issues that gained more attention in the public debate in recent years, connected to the emerging concept of critical digital literacies (Pangrazio 2016). The last one, Understanding the potential role and impact of digital technology, is more forward-looking. It is about understanding the potential impact of emerging technologies (such as generative artificial intelligence or virtual, augmented and mixed reality) in society and economy and trying to prepare citizens through education and training. This is quite particular and, therefore, not reflected in many other models. Still, two models refer to this aspect, one being the *Teacher digital competence framework* (Model 26 in Appendix 2), which focuses explicitly on educators.

The mapping of existing models in Appendix 3 shows that all the professional practices identified as important for the 21st century educators have also been included in existing models. On the other hand, most of the existing models only cover a limited number of the professional practices identified within READY. Only three models cover at least half of the professional practices identified by READY: *DigCompEdu* and *ISTE Educator Standard* cover 13 practices each, while *Educator Competencies for Personalised, Learner-centred Teaching* covers 12 practices. The fact that none of the existing models analysed fully covers the scope of the READY model shows that the proposed approach can provide a different and more holistic perspective on the professional activities and areas of professional development of contemporary educators in response to the trends affecting their professional practices.



## 5. Conclusions and further research

As a reference model, READY represents an original conceptual approach aiming to promote a shared understanding of 21st century educators' domains of professional activity and related practices. However, it is not intended to be prescriptive or to provide solutions for specific education and training settings. To be used in real settings, it must be first adapted and customised by interested parties considering the local context, needs and aspirations.

After the first application by the two educational networks in Israel to test the relevance and applicability, READY has also been applied in Ukraine to inspire the revision of the new Teacher Standard that is currently at the final stage of adoption by the authorities under the New Ukrainian School reform. Further testing in practice will continue to collect feedback, evidence and improvement suggestions by educators, teacher trainers, school leaders and others closely working with educators who will be using the model to inform or shape their work. An online training will be developed to support educators, teacher trainers, school leaders and others in applying READY.

Some more activities are needed to explore other possible applications of READY, such as updating educators' professional development plans, building robust support and professional development practices, or informing national frameworks or profiles for educators. To promote READY's use by education and training policymakers and other stakeholders, it must be widely disseminated and accompanied by tools and guidelines for collecting and analysing data about its usability and effectiveness to different user objectives and contexts. The READY model is, by design, flexible and adaptable, and such implementation in various education and training settings can provide valuable insights into the professional practices of 21st century educators.

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