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Dear Readers,

The GiLE Foundation, the Publisher of GJSD, believes in doing good things for good reasons. In keeping with the mission and purpose of the GiLE Foundation, we exist to serve young people. For this reason, we empower and *connect young people with diverse stakeholders* - educators, researchers, coaches, trainers and a global community of professionals - who have *insights into young people's skills development*. One way of doing this is to promote dialogue between academia, trainers, and the corporate sector and provide opportunities for disseminating research results in our journal and at our online international scientific conference.

The GJSD was established in 2021 and is now in its second year. Since its inception, the Journal has aspired to impact its target audience – authors and readers - and to provide *a medium and a knowledge hub* for the dissemination of research results in the field of transferrable skills, a complex set of personal characteristics, with a particular focus on young people's skill needs, the challenges they face and youth employability.

We are proud to be part of the *Open Access Publication Model*, where authors do not pay any Article Processing Charges (APCs) and where content is openly and freely available to everyone. We believe that removing barriers for academics, practitioners, and readers helps us create and disseminate valuable knowledge. We are grateful to the authors whose views created *the unique collection of insights* in Volume 2, Issue 1 (2022) of the journal.

Our *Guest Column* comes from Dr Doug Cole and Dr William Donald. They call for shifting the narrative toward a more holistic approach to learning and preparing students for entry into the graduate labour market. They discuss the value of lifelong and lifewide learning to promote career sustainability in preparation for the future world of work.

The theme is continued in our *Food for Thought* article written by Dr Mauro Giacomazzi, calling for contextualisation of soft skills assessment and enhancement. Specifically, the author highlights the need for inclusivity and cultural nuances to be considered.

The issue continues with three *Research Articles* that (i) explore how university careers advisors and graduate recruiters can develop win-win relationships through close collaboration (Dr Thomas Buckholtz & Dr William Donald), (ii) asks if young graduates in Italy are ready for entry into the graduate labour market (Dr Lucilla Crosta & Ms Valentina Banda), and (iii) proposes an assessment model of the congruence between people and work skills (Dr Jaisso Vautero).

The issue concludes with three *Early Career Research Articles*. We are delighted that several PhD students and researchers in the early stages of their careers submitted manuscripts. One of the purposes of the Journal is to offer an outlet and extra support with finalising their manuscripts to researchers who are establishing themselves in the field.

The three papers here cover: (i) adaptability and problem solving as survival skills (Ms Khin Khin Thant Sin), (ii) meaningful mentorship relationships in higher education (Miss Alexandra Zografu & Miss Laura McDermott), and (iii) switching to online learning via the flipped classroom (Ms Jolanta Hudson).

We hope you enjoy the first issue of 2022 as much as we enjoyed working with the manuscripts submitted in this publication round. We hope that your ideas will be challenged and that you will find topics that interest you. We encourage researchers, educators, trainers and those with a non-academic background to read these research papers and submit a paper to contribute to dialogue with our readership for a future issue of the journal.

Having said all of this, on behalf of the 2021-2022 Editorial Team, I'd like to extend many thanks to those who submitted a manuscript, as well as all those who put their reviewing and editing skills to good use, devoted a lot of time and effort, and continued to support GJSD's endeavours to publish papers on skills development.

With best wishes to all readers, authors and visitors of our website.

Dr. Judit Beke

Dr. Judit Beke is the Editor-in-Chief, Co-creator of the GiLE Foundation



GiLE Journal of Skills Development

Shifting the Narrative: Towards a More Holistic Approach for Learning

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1. Problem Statement

The neo-liberalisation of higher education places significant emphasis on the employment of graduates. Such discourse is often dominated by the rhetoric of a skills agenda. Yet, we believe there is a need to consider a combination of factors that moves us beyond a skill-centric focus, thus helping a variety of stakeholders to enhance their understanding and subsequently engage more effectively to meet the demands of the future of work (Cole & Hallett, 2019).

2. Shifting the Narrative: Graduate Capital and a Taxonomy for Employability

A model of human capital, careers advice, and career ownership was conceptualised in 2014 and empirically validated between 2015 and 2017 via a sample of undergraduate students by adopting a mixed-methods approach (Donald et al., 2018; 2019). Their findings showed that human capital comprises six dimensions: social capital, cultural capital, psychological capital, scholastic capital, market-value capital, and skills. Informed by this research and several other key conceptual models, Cole and Eade in 2020 developed the learning centred and integrated Employability Redefined Taxonomy (cited in Cole & Coulson, 2022). The taxonomy aids thinking around a more holistic and nuanced view of what education should be addressing for all learners. Both the model and taxonomy can act as scaffolding to support educators and students in shifting their thinking and subsequent narrative about the combination of crucial areas of learning needed for the future of work and beyond. Specifically, whilst 'skills' are part of the challenge for all graduates, the acquisition and operationalisation of a wider set of resources can facilitate career sustainability (Nimmi et al., 2021) by acknowledging the interactions of person, context, and time (De Vos et al., 2020). This includes an awareness of labour market constraints and the need for graduates to be capable of signalling the true depth of their employability to prospective employers. Concurrently, the structured inequalities in education, society, and the workplace need to be addressed to provide a context that embraces diversity, equity, and inclusion (Byrne, 2022).

3. The Role of Higher Education Institutions

Jakubik (2020) calls for higher education institutions to create value for work and society by fostering deeper collaborations with organisations to extend human capital beyond university boundaries. The adoption of authentic assessment, effective approaches to developing reflective practice, and greater recognition of the importance of lifelong and lifewide learning are all important to support learning for employability in the curriculum in practice. Crucially, the approach we are advocating is designed to reach all students and can relieve concerns that students who need access to careers guidance the most are often those least likely to seek or receive it (Donald et al., 2018). The model and taxonomy discussed here can create a frame of reference for learning and curriculum design that will support consistency at an institutional level yet can still provide flexibility at a course level and personalisation at the individual level.

4. Conclusion

We believe that a greater focus is urgently needed on moving beyond the narrow and restrictive lens of skills alone (Byrne, 2022), shifting the narrative towards an understanding and language for learning that embraces a more diverse range of outcomes for graduates. This can empower educators to enhance their current approaches and graduates to take ownership of their careers, both committing to and recognising the importance and value of lifelong and lifewide learning to promote career sustainability in preparation for the future world of work and life beyond.

References

- Byrne, C. (2022). What determines perceived graduate employability? Exploring the effects of personal characteristics, academic achievements and graduate skills in a survey experiment. *Studies in Higher Education*, 47(1), 159-176. <https://doi.org/10.1080/03075079.2020.1735329>
- Cole, D., & Coulson, B. (2022). Through and beyond COVID-19, promoting whole person, lifelong and lifewide learning. *Journal of Innovation in Polytechnic Education*, 4(1), 81-90.
- Cole, D., & Hallett, R. (2019). The language of employability. In J. Higgs, G. Crisp, & W. Letts (Eds.), *Education for employability: The employability agenda* (pp.119-130). Rotterdam: Brill Sense.
- De Vos, A., Van der Heijden, B., & Akkermans, J. (2020). Sustainable careers: Towards a conceptual model. *Journal of Vocational Behavior*, 117, 103-196. <https://doi.org/10.1016/j.jvb.2018.06.011>
- Donald, W. E., Ashleigh, M. J., & Baruch, Y. (2018). Students' perceptions of education and employability: Facilitating career transition from higher education into the labour market. *Career Development International*, 23(5), 513-540. <https://doi.org/10.1108/CDI-09-2017-0171>
- Donald, W. E., Baruch, Y., & Ashleigh, M. J. (2019). The undergraduate self-perception of employability: Human capital, careers advice and career ownership. *Studies in Higher Education*, 44(4), 599-614. <https://doi.org/10.1080/03075079.2017.1387107>
- Jakubik, M. (2020). Enhancing human capital beyond university boundaries. *Higher Education, Skills and Work-Based Learning*, 10(2), 433-446. <https://doi.org/10.1108/HESWBL-06-2019-0074>
- Nimmi, P. M., Kuriakose, V., Donald, W. E., & Nowfal, M. (2021). HERO elements of psychological capital: Fostering career sustainability via resource caravans. *Australian Journal of Career Development*, 30(3), 199-210. <https://doi.org/10.1177/10384162211066378>

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Soft skills assessment and enhancement: A call for contextualisation

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We are living in a world in which many cultures coexist. This requires a shared effort and the common goal to co-construct a society where individual differences are an added value for the whole of humanity (Mignolo & Escobar, 2013; Odrowąż-Coates, 2017). While globalisation offers great economic development opportunities, it still perpetuates further norms and values that are sometimes disrespectful of the local tradition (Ashenfelter et al., 2018; Hughes, 1994; Mittelman, 2017). If we believe this assumption is valid, it becomes necessary to explore a critical evaluation of the implications of the utilisation of western constructs, theories, or methods in different contexts and at various locations.

Even in the field of soft skills enhancement and assessment, inclusivity should be promoted by fostering practices that recognise the unity of human experience by seeking synergies among the global and local contexts (Olson & Peacock, 2012). The construction of new knowledge through more respectful engagement with a plurality of cultural systems may foster the creation of a bottom-up process of generalisation of new theories and practices that is more inclusive (Ekuma, 2019; Mittelman, 2017; Shizha & Makuvaza, 2017).

From the cognitive sciences, we know that the development of individuals occurs in the process of their participation in the life of their cultural communities. Culture is the set of all the beliefs, behavioural patterns, and knowledge that collectively and normatively regulate people's way of life in their communities (Rogoff, 1990, 2003; Rogoff et al., 2018). Culture affects cognitive development by shaping people's views of the world and the way they interact with it. Adults in a society pass to children the cognitive tools that help them interpret, experience, and face problems. While interacting with family or community members, children are introduced to the various cultural practices and contribute to their development and modifications (Bronfenbrenner, 2013). Vygotsky (1978) emphasised how children internalise what is external to them, but the theorists of the participation view (Rogoff et al., 2018) see this framework as too limited; the person and the cultural context are intertwined, mutually cooperating in the constitution of the various aspects of life (Rogoff, 1990, 2003). According to Rogoff (2003), child development is the process of growth that happens while participating in the community; it is a transformation process through participation. That is why she argues that cognitive development can only be understood in the light of cultural practices, as cognitive functions develop differently depending on cultural circumstances. She also asserts that cultural practices

change over time and that individuals are often concurrent members of multiple cultural groups, meaning that cognitive development can never be assumed to progress in a similar way across—or even within—cultures.

Rogoff (1990) highlights a myriad of cultural practices that can influence cognitive development, including the relative importance of independence versus interdependence—or cooperation versus competition—within a society and the norms surrounding discipline and child-rearing. From her perspective, the person participating in events is not external to them. In this way, individuals establish a relationship of interdependence with the external world since they transform and are transformed by external events. This goes far beyond a mere process of bringing something that is outside the person to the inside. In this perspective, cognitive development cannot be detached from the cultural aspects that become essential to understanding children's experiences; understanding people requires a mutually constitutive approach to understanding the culture (Rogoff et al., 2018).

Rogoff (2003) concludes that cultural processes are of crucial importance in human development. She argues that cognitive development not only involves skills and knowledge at an individual level but also it is a collective and collaborative endeavour involving other people who are part of the person's immediate environment. She describes learning as a process of guided participation shared by the child and other adults in the community. Cross-cultural psychologists have observed differences between cultures in terms of the willingness of students to distinguish themselves from others (Philips, 1992), the interpretations of problems that need to be solved and the proper methods for solving them (Goodnow et al., 1976), and the definition of what constitutes intelligence (Wober, 1972).

Education being a cultural process, it is likely that fostering cognitive skills through education differs between cultures. In this, the fundamental role in the discovery, use, and teaching of soft skills is played by language, which is indeed one of the fundamental means of communicating culture (Duranti, 1997; Luriiia, 1976; Ong, 1982).

Starting from this, it should be crucial to investigate and question how enhancement and assessment of soft skills in the non-western world are designed for appropriate contextualisation and cultural sensitivity. In sub-Saharan Africa, for instance, several authors (Grosser & Lombard, 2008; Madondo, 2018; Schendel, 2016), have highlighted the importance of starting from the local understanding of a skill for developing and measuring it through relevant and context-sensitive strategies. Nevertheless, only a few studies have investigated the local understanding of these skills before assessing them, and they have not served to deepen appreciation of the influence of cultural differences (Giacomazzi et al., 2022). The lack of attention to the local interpretation of what needs to be assessed and how it relates to culture and language results in the acquisition of assessment tools and pedagogical strategies that do not consider the cultural nuances (Giacomazzi et al., 2022). Most of the attempts of empirical studies to assess soft skills in medium- and low-income contexts relied solely on assessment instruments imported from other cultural contexts (Schendel & Tolmie, 2017), generating problems of comparability, an absence of normative groups and a lack of familiarity in adaptation and validation processes.

All in all, I believe that the process of globalisation—though unavoidable—should be built on modalities that promote intercultural competency (Deardorff, 2006) through inclusive dialogue, a plurality of epistemological beliefs and worldviews, and sensitivity to specific contexts (Assié-Lumumba, 2016; Lee, 2017).

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References

- Ashenfelter, O., Engle, R. F., McFadden, D. L., & Schmidt-Hebbel, K. (2018). Globalization: Contents and discontents. *Contemporary Economic Policy*, 36(1), 29–43. <https://doi.org/10.1111/coep.12237>
- Assié-Lumumba, N. T. (2016). The making of culture and definition of cultural spheres and boundaries in post-colonial Africa: The role of education in acquiring and exercising agency. *Knowledge Cultures*, 4(4), 18–32.
- Bronfenbrenner, U. (2013). Ecology of the family as a context for human development: Research perspectives. *Adolescents and Their Families: Structure, Function, and Parent-Youth Relations*, 22(6), 1–20. <https://doi.org/10.1037//0012-1649.22.6.723>
- Deardorff, D. K. (2006). Identification and assessment of intercultural competence as a student outcome of internationalization. *Journal of Studies in International Education*, 10(3), 241–266. <https://doi.org/10.1177/1028315306287002>
- Duranti, A. (1997). *Linguistic anthropology*. Cambridge University Press. <https://doi.org/10.1017/CBO9780511810190>
- Ekuma, K. (2019). Postcolonialism and national HRD: understanding contemporary challenges to skills development in sub-Saharan Africa. *Human Resource Development International*, 22(4), 321–342. <https://doi.org/10.1080/13678868.2019.1612651>
- Giacomazzi, M., Fontana, M., & Camilli Trujillo, C. (2022). Contextualization of critical thinking in sub-Saharan Africa: A systematic integrative review report. *Thinking Skills and Creativity*, 43, 100978. <https://doi.org/10.1016/j.tsc.2021.100978>
- Goodnow, J. J., Young, B. M., & Kvan, E. (1976). Orientation errors in copying by children in Hong Kong. *Journal of Cross-Cultural Psychology*, 7(1), 101–110. <https://doi.org/10.1177/002202217671008>
- Grosser, M. M., & Lombard, B. J. J. (2008). The relationship between culture and the development of critical thinking abilities of prospective teachers. *Teaching and Teacher Education: An International Journal of Research and Studies*, 24(5), 1364–1375. <https://doi.org/10.1016/j.tate.2007.10.001>
- Hughes, R. (1994). Legitimation, higher education, and the post-colonial state: A comparative study of India and Kenya. *Comparative Education*, 30(3), 193–204. <https://doi.org/10.1080/0305006940300303>
- Lee, M. (2017). HRDI, colonization, and post-truth politics. *Human Resource Development International*, 20(5), 350–360. <https://doi.org/10.1080/13678868.2017.1329384>
- Luriá, A. R. (1976). *Cognitive development: Its cultural and social foundations*. Harvard University Press.
- Madondo, M. M. (2018). A requiem too soon or a landing strand too far? Teacher-centred pedagogy versus teaching for critical thinking in the Zimbabwe curriculum framework 2015-2022. *Zimbabwe Journal of Educational Research*, 30(1), 1–14.
- Mignolo, W. D., & Escobar, A. (2013). *Globalization and the decolonial option*. Routledge.
- Mittelman, J. H. (2017). Decolonizing the postcolonial university? Possibilities and exigencies with evidence from Uganda. *Journal of Poverty Alleviation & International Development*, 8(1), 1–47.

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- Odrowąż-Coates, A. (2017). Revisiting power and supremacy in the post-colonial world. Globalization as a refined phase of colonization. In A. Odrowąż-Coates & S. Goswami (Eds.), *Symbolic violence in socio-educational contexts* (pp. 13–23). Wydawnictwo Akademii Pedagogiki Specjalnej.
- Olson, C., & Peacock, J. (2012). Globalism and Interculturalism: Where Global and Local Meet. In D. K. Deardorff, H. de Wit, J. Heyl, & T. Adams (Eds.), *The SAGE Handbook of International Higher Education* (pp. 305–322). SAGE Publications.
<https://doi.org/10.4135/9781452218397.n17>
- Ong, W. J. (1982). *Orality and literacy: The technologizing of the word*. Methuen & Co. Ltd.
- Philips, S. U. (1992). Colonial and postcolonial circumstances in the education of Pacific peoples. *Anthropology & Education Quarterly*, 23(1), 73–78.
- Rogoff, B. (1990). *Apprenticeship in thinking: Cognitive development in social context*. Oxford University Press.
- Rogoff, B. (2003). *The cultural nature of human development*. Oxford University Press.
- Rogoff, B., Dahl, A., & Callanan, M. (2018). The importance of understanding children’s lived experience. *Developmental Review*, 50, 5–15. <https://doi.org/10.1016/j.dr.2018.05.006>
- Schendel, R. (2016). Adapting, not adopting: Barriers affecting teaching for critical thinking at two Rwandan universities. *Comparative Education Review*, 60(3), 549–570.
<https://doi.org/10.1086/687035>
- Schendel, R., & Tolmie, A. (2017). Beyond translation: Adapting a performance-task-based assessment of critical thinking ability for use in Rwanda. *Assessment & Evaluation in Higher Education*, 42(5), 673–689. <https://doi.org/10.1080/02602938.2016.1177484>
- Shizha, E., & Makuva, N. (2017). *Re-thinking postcolonial education in sub-Saharan Africa in the 21st century: Post-Millennium Development Goals*. Brill | Sense.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Wober, M. (1972). Culture and the concept of intelligence: A case in Uganda. *Journal of Cross-Cultural Psychology*. <https://doi.org/10.3200/AEPR.109.4.21-32>

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Direct Outcomes and Win-Win Relationships Between University Careers Advisors and Graduate Recruiters

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Abstract

The purpose of our paper is to apply the state progress checklist from direct outcomes theory to a new domain of the university-to-work transition to mediate a dyadic win-win relationship between university careers advisors and graduate recruiters. The state progress checklist incorporates three endeavour elements - (i) potential, (ii) agendas, and (iii) effects; and nine themes - (i) resources, (ii) motivations, (iii) interactions, (iv) assumptions, (v) scenarios, (vi) plans, (vii) actions, (viii) outcomes, and (ix) reuses. The endeavour elements and themes are systematically applied to help envision, pursue, and achieve mutually beneficial relationships between both parties. The application of direct outcomes theory as a mediator of the relationship between university careers services and graduate recruiters offers synergy effects for both parties and helps overcome pre-existing barriers to collaboration and communication. Our paper applies the state progress checklist from direct outcomes theory to a new domain of the university-to-work transition to bridge research agendas across the education, vocational behaviour, and human resource management literature. We identify opportunities for university careers services and graduate recruiters to foster a win-win relationship by aligning their objectives and through the provision and receiving of support. These benefits subsequently transcend additional stakeholders, including university students, universities, and organisations. Moreover, Appendix 1 provides a summary sheet offering some potential questions for each of the nine themes across the three endeavour elements. These example questions are not meant to be an exhaustive list. Their purpose is to act as a starting point for discussion and action. The university careers advisors and graduate recruiters could initially work through this sheet separately before working through the sheet a second time collaboratively.

Keywords: Direct Outcomes Theory, State Progress Checklist, University Careers Advisors, Graduate Recruiters, Careers

1. Introduction

The COVID-19 pandemic as a global chance event means that university students and graduates need to manage increased levels of uncertainty as they seek to enter a highly competitive global labour market (Mok et al., 2021). Graduate Recruiters (GRs) representing organisations continue to face challenges as the increased volume of applicants makes it difficult to identify quality candidates and promote social mobility and diversity agendas (Tomlinson, 2021). The pandemic has also led to challenges for University Careers Advisors (UCAs), who often lack the personnel and resources to meet the increased demand for their services (Donald et al., 2021). This presents an opportunity for collaboration between GRs and UCAs as actors operating within a career ecosystem to enhance the competitiveness and performance of both parties (Gribling & Duberley, 2021).

Yet, traditional partnerships between GRs and UCAs have not always focused on win-win outcomes. Collaborative approaches have tended to be ad-hoc, temporary and focused on short-term gains within the current academic year or recruitment cycle making it difficult to establish sustainable relationships (Vick & Robertson, 2018). Communication can also be challenging as the same terminology is used by GRs and UCAs inconsistently (Craps et al., 2021). This has often led to universities and organisations attempting to ‘do their own thing’ despite sharing broadly the same objectives of securing employment for their graduates and securing early careers talent for their organisation, respectively (Donald et al., 2021). In response, the purpose of this paper is to apply the state progress checklist from direct outcomes theory (Buckholtz, 1995; 1996; 2011a) to a new domain of the university-to-work transition to mediate the dyadic win-win relationship between UCAs and GRs. We also respond to calls to capture and explore the relationship between universities and organisations as part of a reconceptualisation of the transition from education into the labour market (Dougherty, 2022).

The strategic benefits from the two parties working together can translate to all actors within the career ecosystem, including students, graduates, universities, and organisations. Students and graduates benefit from increased levels of career guidance, and support can help them acquire personal resources and the associated outcomes of employability and sustainable life wellbeing (Kirves, 2014; Nimmi et al., 2022). Increased perceptions of employability can offer a sustainable alternative to job security during one’s career and increase the chances of securing ‘graduate level’ employment (Bernstrøm et al., 2019; Nimmi et al., 2021).

Universities benefit because neoliberalism views education as a private rather than a public good, with students positioned as customers who take on education costs via student debt (Busch, 2017). This has led to the marketisation of higher education, whereby universities need to attract prospective students to secure tuition fees as part of the funding for the institution (Mintz, 2021). A principal method of attracting prospective students and associated revenue streams is via league table rankings, despite concerns of over-simplification and obfuscation of the data involved in calculating such rankings (Christie, 2017). Moreover, performance metrics continue to be skewed towards extrinsic graduate outcomes (Jackson & Bridgstock, 2018) despite empirical evidence of the complementary value of intrinsic graduate outcomes (Jackson & Tomlinson, 2019). This places a greater emphasis on the role of UCAs operating within a university careers service to improve the career outcomes of their students and graduates (Praskova et al., 2015). This is particularly crucial since the perceived gap between the benefits and the costs of participation in higher education continues to narrow (Donald et al., 2018).

Furthermore, the benefits of collaboration between UCAs and GRs transcend to organisations that rely on talent management strategies for competitive advantage, performance, and sustainability (Ab Wahab & Tatoglu, 2020; Illes et al., 2010).

Our focus now moves to the theoretical framework of direct outcomes theory before systematically introducing and applying the state progress checklist to the UCA-GR relationship. The paper concludes with implications and directions for future research.

2. Theoretical Framework: Direct Outcomes Theory

Direct outcomes theory was popularised a decade ago via a book titled ‘Create Crucial Insight: Use Direct Outcomes Checklists. Think Well. Do Great’ (Buckholtz, 2011a). However, aspects of what would become direct outcomes theory were published before this (Buckholtz, 1995; 1996). Direct outcomes theory offers a tool to help individuals develop insights, make decisions, and implement these decisions effectively. Checklists facilitate the development of goals and plans, the identification and acquisition of relevant resources, and the ability to ‘think well’ and ‘do great’. The notion of ‘thinking well’ refers to the use – by resources, such as people and systems - of data, assumptions, and intuition to develop and evaluate possible goals, scenarios, and plans. The notion of ‘doing great’ refers to using resources and plans to achieve fruitful results and the potential for application to broader purposes.

Direct outcomes can be used in various business and non-business contexts ranging from the personal to societal levels. This is because, unlike some checklists (e.g. prescriptive airline pilot checklists), the direct outcomes checklists are open-ended and invite creative thinking specific to a given situation. Direct outcomes can therefore help to answer questions such as ‘have we considered an adequately diverse set of options?’, ‘have we considered an adequately diverse set of information?’ and ‘are we ready to make an informed decision?’. The outcomes include opportunities to improve effectiveness (e.g., gain impact), to improve efficiency (e.g., save time), and to habituate patterns of effective thinking and action (e.g. think well, do great). These outcomes can be highly beneficial in contexts where work or collaboration happens in a haphazard and unstructured way since direct outcomes do not stifle thought or discussion. Instead, direct outcomes offer a shared space for haphazard and procedural thinking whereby people can develop new frameworks or optimise existing ones. This can help to facilitate discussion, build mutual understanding, secure buy-in from various stakeholders, and establish criteria for identifying successful outcomes.

In this paper, direct outcomes theory is applied to a new context of the university-to-work transition. The approach responds to calls for a critical exploration of the relationship between school and work (Dougherty, 2022). We specifically focus on the dyadic relationship between UCAs and GRs and the opportunity for direct outcomes to create and disseminate value for students and graduates, leading to benefits for universities, organisations, and broader society. Our paper responds to calls by Donald et al. (2021) to use the COVID-19 pandemic as a global chance event to foster new opportunities for collaboration between UCAs and GRs. Direct outcomes can offer a framework to characterise, analyse, and envision changes (Buckholtz, 2011a). This can help UCAs and GRs achieve shared goals and adopt broader perspectives.

For example, the UCAs approach to graduate employability often encompasses three aims: (i) securing short-term graduate outcomes, (ii) fostering professional readiness, and (iii) facilitating graduates to carry out productive and meaningful work across their lifespans (Bridgstock & Jackson, 2019). The GRs aim to attract, hire, and retain early careers talent focusing on diversity, social mobility, and quality (Tomlinson, 2021). Therefore, direct outcomes can mediate the dyadic UCA-GR relationship leading to increased league table rankings for universities (Spence, 2019) and enabling organisations to differentiate themselves via early career talent management strategies (D'Armagnac et al., 2021). Moreover, UCAs and GRs often operate with limited resources and a high turnover of personnel which makes it difficult to establish meaningful relationships and work towards long term strategic goals (Donald et al. 2018; 2021). Direct outcomes can address these challenges by offering synergy effects via enhancing mutual understanding, sharing resources, and providing an audit trail to facilitate the continuity of a shared strategic vision over time.

3. Method: The State Progress Checklist

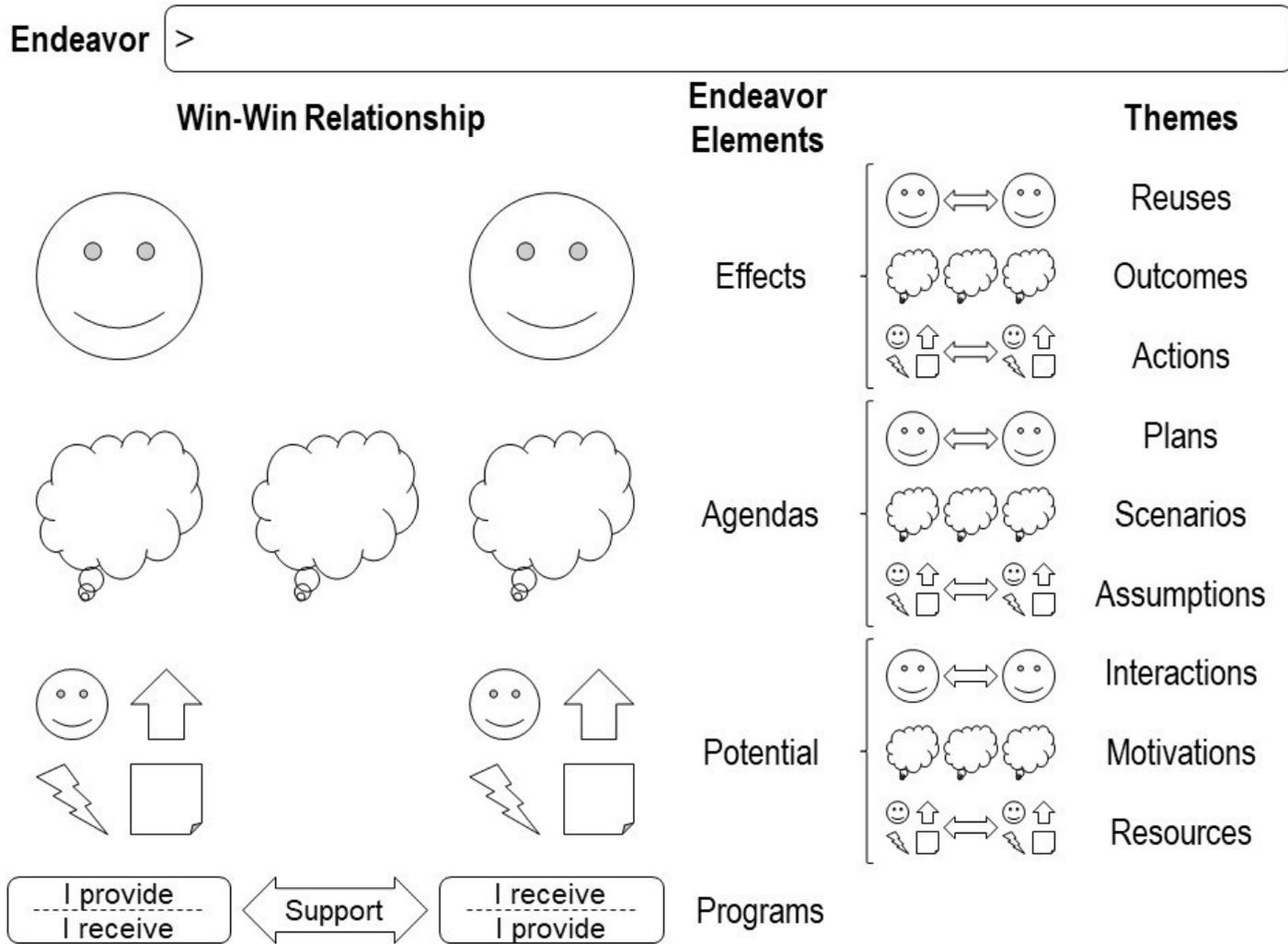
Figure 1 (next page) evidences the state progress checklist, which is applied systematically as the method for this paper (Buckholtz, 2011, p. 98).

We propose that the state progress checklist can help envision, pursue, and achieve working relationships between UCAs and GRs. The flexibility of the checklist enables one to work systematically either from a 'bottom-up' approach or from a 'top-down approach'. This paper focuses on the 'bottom-up' approach for endeavour elements moving from 'potential' to 'agendas' to 'effects'. However, when pragmatically applying the state progress checklist, an iterative process may likely be employed whereby as one works up through the endeavour elements and themes, new insights emerge that help to reframe earlier endeavour elements and themes.

The UCAs and GRs can initially work through the state progress checklist independently of one another to frame their respective notions of success, desired outcomes, and associated metrics for their programs (Buckholtz, 2011b). Once this phase is completed, the UCAs and GRs can work collaboratively to connect their endeavour elements and themes. This helps identify areas where support can be provided and received to foster a win-win relationship via process improvement and synergy effects.

For each of the three endeavour elements and the associated nine themes, we offer insights into the challenges that UCAs and GRs currently face and the opportunities for collaboration to lead to enhanced outcomes for both parties. Furthermore, we suggest questions that UCAs and GRs may wish to consider when using the state progress checklist. A summary of these questions is presented in Appendix 1 as a stand-alone resource for practitioners.

FIGURE 1. STATE PROGRESS CHECKLIST



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Source: Reproduced with permission from Buckholtz (2011, p. 98).

4. Endeavour Element I: Potential

When adopting the ‘bottom-up’ approach to the state progress checklist, the first endeavour element is ‘potential’. This consists of three themes termed ‘resources’, ‘motivations’ and ‘interactions’.

4.1. Theme I: Resources

Donald et al. (2021) explain how UCAs and GRs often lack the resources that they need to support individuals to prepare for and subsequently undertake the university-to-work transition. Their paper describes how the problem has been exacerbated due to the COVID-19 pandemic as increasing numbers of students and recent graduates seek careers support. High Fliers (2021) agrees with these findings and reports that half of the leading graduate recruitment companies cut their graduate recruitment budget during the COVID-19 pandemic.

These challenges offer UCAs and GRs an opportunity to work collaboratively to see if sharing their resources can lead to synergy effects, augment luck, and lead to successful outcomes, as suggested by direct outcomes theory (Buckholtz, 2011a). However, both parties should recognise that during their collaborative efforts, there will be occasions where one party uses their resources to provide a service whilst the other party uses their resources to give the action (e.g. a university careers fair whereby the UCA offers the service, and the GR provides the action). Moreover, direct outcomes theory suggests that UCAs and GRs should also consider opportunities to develop a network of resources beyond their dyadic relationship (Buckholtz, 1995). For example, can managers from the organisation provide support during the attraction and selection process? Can lecturers support their students by utilising their networks of industry contacts?

Therefore, UCAs and GRs may wish to consider what resources do we currently have? What resources do we currently lack? What resources does the other party have that could improve our situation? What resources do we have to help the other party improve their situation? What resources exist beyond the dyadic relationship? How can both parties make the best use of the available resources?

4.2. Theme II: Motivations

The UCAs are motivated to help their students and recent graduates secure employment after graduation since this reflects positively on the careers service and the university (Bridgstock & Jackson, 2019; Spence, 2019). Providing career counselling services to students is crucial since those who interact with UCAs have increased perceived employability compared to those students who do not, and the perceived gap between the benefits and costs of participation in higher education continues to narrow (Donald et al. 2018; 2019). Therefore, the UCAs seek to produce students who are prepared for the university-to-work transition (Nimmi et al., 2022) and capable of signalling their abilities to prospective employers during the application and selection process (Tomlinson & Anderson, 2021).

The GRs seek high-quality applicants since talent acquisition can offer a sustainable competitive advantage (Ab Wahab & Tatoglu, 2020; D’Armagnac et al., 2021). However, the UK’s top graduate employers received an average of 41% more job applications from graduates in 2020-2021 compared to 2019-2020, the highest year-on-year increase recorded to date (High Fliers, 2021). An increased volume of applicants makes it challenging to identify high-quality

talent and risks exacerbating existing diversity and mobility issues (Tomlinson, 2021). This is problematic since three critical priorities for GRs are achieving their ethnic diversity targets, gender diversity targets, and social mobility targets (High Fliers, 2021).

The UCAs and GRs should consider what the motivations for collaboration are? What are the issues that need to be addressed? What help is required from the other party? What support can be provided to the other party? How do their respective motivations align?

4.3. Theme III: Interactions

Fostering collaboration between UCAs and GRs within a career ecosystem can increase both parties' competitiveness and performance (Gribbling & Duberley, 2021). Yet, UCAs and GRs often use the same terminology to mean different things leading to confusion and sub-optimal interactions (Craps et al., 2021). This is compounded by the perception of slow response times often driven by a lack of personnel and high levels of turnover within the careers service or HR teams (Donald et al., 2021). Direct outcomes theory can address these aspects by helping both parties to agree on clearly defined terminology, roles, and responsibilities. The interaction between UCAs and GRs can be enhanced by acknowledging that whilst the motivations for the outcome may differ, the desired outcome is broadly the same. Both parties want to produce employable graduates capable of signalling their employability to secure graduate employment (Tomlinson & Anderson, 2021). Documentation can also help by providing an audit trail of the interactions that underpin decisions and metrics to offer continuity despite turnover in personnel (Buckholtz, 1996; 2011b).

The UCAs and GRs need to consider how regularly interaction should occur between the two parties? What are feasible and reasonable response times? What are the preferred methods for communication? Who is responsible for scheduling meetings and writing minutes? How can existing levels of interaction be optimised or enhanced? How can documentation help manage the challenges of high personnel turnover rates?

5. Endeavour Element II: Agendas (Think Well)

The second endeavour element when adopting the 'bottom-up' approach to the state progress checklist is 'agendas'. This consists of three themes termed 'assumptions', 'scenarios' and 'plans' and captures the 'Think Well' dimension of direct outcomes theory.

5.1. Theme IV: Assumptions

The theme of assumptions builds on the resources, motivations, and interaction themes to ensure that both parties are aligned in their thinking (Buckholtz, 1995). Specifically, this theme captures the notion of providing insights to overcome the risks associated with assumptions to reduce the chances of sub-optimal outcomes for both parties (Buckholtz, 2011a). For example, UCAs may incorrectly assume that GRs know the benefits that employing graduates from a specific university or course can offer the organisation. This leaves UCAs confused when employers focus their resources on other universities, leading to sub-optimal outcomes for the university, their graduates, and the organisation. Similarly, GRs may incorrectly assume that students and recent graduates clearly understand their application and selection process. Yet, students and recent graduates may be telling their UCAs the opposite and asking for more guidance from GRs to facilitate their transition from university into the workplace. These examples suggest that information sharing between UCAs and GRs can help identify, challenge,

and overcome assumptions increasing the likelihood of successful outcomes (Craps et al., 2021).

The UCAs and GRs may wish to ask themselves, what are the existing issues in the dyadic relationship? Have these issues been communicated to the other party? Is the other party aware of the challenges being experienced? Have working assumptions been clearly articulated? What actions can address untoward or unstated pre-existing assumptions or capitalise on valid mutual assumptions?

5.2. Theme V: Scenarios

When both parties consider possible scenarios and share their findings with the other party, this can lead to proactive and strategic planning whilst reducing reactive behaviours (Buckholtz, 1995). In the context of the UCA and GR relationship, this means considering what current challenges exist and what future challenges may occur in preparing and supporting individuals to undertake the university-to-work transition. However, UCAs and GRs should remain vigilant to unpredictable and unplanned chance events and how these might impact themselves, university students and graduates (Bright et al., 2005; Rice, 2014). For example, the COVID-19 pandemic as a global chance event showed that not all possible scenarios could be considered ahead of time. Attraction and selection activities had to move online, the volume of applicants and demand for jobs dramatically increased, students and graduates sought additional careers guidance putting pressure on UCAs, and challenges with assessment and onboarding saw GRs having to withdraw offers of employment (Donald et al., 2021).

Moreover, two-fifths of employers who participated in virtual careers fairs described the events as not very successful (High Fliers, 2021). The UCAs and GRs thus need to consider the various scenarios of in-person, online, or hybrid interactions with students and applicants to identify the benefits and limitations of each approach. However, scenario planning needs to be an iterative process, particularly in the context of the COVID-19 pandemic, due to external factors such as evolving government policies, guidelines, and regulations.

The UCAs and GRs may wish to consider what are the current challenges faced? What are possible future challenges that may occur? What steps can be taken to minimise the negative impacts of these challenges? What opportunities exist for proactive and strategic planning to reduce the reliance on reactive behaviours? Has an adequately diverse set of options been considered? Has a sufficiently diverse set of information been considered? Can an informed decision now be made?

5.3. Theme VI: Plans

The next theme involves developing plans for innovation and optimisation underpinned by the outcomes from themes I-V (Buckholtz, 2011a). The UCAs and GRs can focus on the motivations to encourage interactions, driven by different scenarios and underpinned by clearly articulated assumptions to use resources effectively (Buckholtz, 1995). The plans should address short-term goals that can be achieved quickly and relatively easily as well as medium-term goals for the next one to two recruitment cycles and academic years. Additionally, plans for long-term goals should look for opportunities to be proactive and strategic to pre-empt and navigate future challenges. Together, these plans can offer a strong vision, create an

environment that fosters success, and facilitate UCAs and GRs to achieve their potential for the benefit of universities, organisations, students, and graduates.

Themes I-VI can help UCAs and GRs to understand the existing context of their relationship and identify opportunities to act and strive for innovative and sustainable outcomes (Buckholtz, 2011a). Short-term, medium-term, and long-term plans should be documented, underpinned by a clear rationale, and accompanied by metrics for determining success (Buckholtz, 1996; 2011b). These documents should be re-visited and updated regularly, perhaps after each academic year and recruitment cycle. The choice of how regularly documents are updated should be agreed upon between both parties, and the process of updating the documents can serve as an opportunity to develop and foster working relationships between UCAs and GRs.

The UCAs and GRs should consider what documentation is required? How often should this documentation be updated? Who is responsible for updating each section of the document? What is the process for agreeing on metrics to measure successful outcomes? Who is accountable for signing off the plans? Who is responsible for monitoring the plans? How can continuity of the plans be maintained? What events should automatically trigger all parties to re-visit the plans at the earliest opportunity?

6. Endeavour Element III: Effects (Do Great)

When adopting the ‘bottom-up’ approach to the state progress checklist, the final endeavour element is ‘effects’. This consists of three themes termed ‘actions’, ‘outcomes’ and ‘reuses’ and captures the ‘Do Great’ dimension of direct outcomes theory.

6.1. Theme VII: Actions

The theme of actions addresses implementing the plans identified in theme VI (Buckholtz, 2011a). The UCAs and GRs each take ownership of their respective parts of the plans whilst monitoring progress and sharing updates with the other party (Buckholtz, 2011b). This step allows practical and proactive action to facilitate UCAs and GRs to achieve their individual and collaborative goals. Issues that occur during the action phase should be recorded and discussed between the two parties. This should happen immediately if the problem is time-sensitive and requires immediate action or at the next scheduled review point if the issue can offer a learning outcome for the future. The action phase should improve the lives of UCAs, GRs, students, and graduates by implementing innovative strategies to accomplish activities and desired outcomes that would be less feasible without UCA and GR collaboration (Buckholtz, 2011a). This recognises the interconnected and interdependent nature of UCAs and GRs operating within a career ecosystem (Gribling & Duberley 2021).

The UCAs and GRs may wish to ask themselves what resources are needed to operationalise the plan? Who is accountable for implementing each part of the plan? When does each of the actions need to be taken? How will progress be communicated between the two parties? Who has overall accountability for the operationalisation of the plan?

6.2. Theme VIII: Outcomes

The outcomes of the actions should link back to the motivations for undertaking a collaborative approach. The UCAs are seeking to prepare their students and recent graduates for the university-to-work transition (Nimmi et al., 2022) by supporting them to enhance their employability and be capable of signalling their abilities to prospective employers (Tomlinson & Anderson, 2021). The desired outcome for UCAs is increased numbers of graduates from the university securing graduate employment, reflecting positively on the careers service and leading to increased league table rankings for their university (Bridgstock & Jackson, 2019; Spence, 2019). The GRs seek innovative ways to manage a high volume of applicants whilst simultaneously meeting their ethnic diversity targets, gender diversity targets, and social mobility targets (High Fliers, 2021; Tomlinson, 2021). The desired outcome for GRs is to secure high-quality applicants from diverse backgrounds since talent acquisition offers a sustainable competitive advantage (Ab Wahab & Tatoglu, 2020; D'Armagnac et al., 2021). Theme VIII considers to what extent the outcomes of the collaborative actions have facilitated the UCAs and GRs to realise results that reflect their goals. Ideally, both parties benefit through synergy effects leading to win-win outcomes (Buckholtz, 2011a).

The UCAs and GRs should ask themselves, have the results been realised? What benefits have occurred? Has there been a win-win focus for both parties? Were the methods for recognising and measuring outcomes appropriate? What learning opportunities exist for future process improvement? Where would funding and time be best invested in the future?

6.3. Theme IX: Reuses

The final theme addresses the actions that individuals took and the outcomes that they achieved, coupled with the opportunities for the reuse of direct outcomes theory in alternative contexts to create new insights and foster additional win-win outcomes (Buckholtz, 2011a). For example, the operationalisation of direct outcomes theory via the state progress checklist between UCAs and GRs could offer knowledge-sharing opportunities via success stories and lessons learned. This may include webinars, workshops, conference sessions, or articles in specialist magazines or journals. However, the desire for UCAs to knowledge share with other UCAs at different universities or for GRs to knowledge share with other GRs at various organisations may be limited due to competition for league table positions and the war for early careers talent (Donald et al., 2021). Instead, it is more likely that UCAs from the specific institution reuse this approach with GRs from different organisations, and GRs from specific organisations reuse this approach with UCAs from various universities. However, the high personnel turnover within the UCA and GR roles would suggest that the benefits would be disseminated as individuals move to different universities and organisations and offer their experiences and ideas for enhancing best practices. Additionally, direct outcomes and the state progress checklist could be extended to other dyadic relationships (e.g. UCAs and students, UCAs and their managers, GRs and students, GRs and their managers, graduates and their managers or mentors).

The UCAs and GRs may wish to consider what actions were taken and what outcomes were achieved by using the state progress checklist? What other opportunities exist to create new insights using direct outcomes to foster win-win scenarios?

7. Discussion

7.1. Theoretical, Policy, and Practical Implications

This paper systematically applied the state progress checklist from direct outcomes theory (Buckholtz, 2011a) to a new domain of the university-to-work transition, offering opportunities for a dyadic win-win relationship between UCAs and GRs. The state progress checklist incorporated three endeavour elements (i) potential, (ii) agendas, and (iii) effects; and nine themes (i) resources, (ii) motivations, (iii) interactions, (iv) assumptions, (v) scenarios, (vi) plans, (vii) actions, (viii) outcomes, and (ix) reuses. This offers a straightforward and clear framework for developing meaningful and sustainable relationships and is summarised in Figure 1.

Our paper responds to calls by Donald et al. (2021) to use the COVID-19 pandemic as a global chance event to foster new opportunities for collaboration between UCAs and GRs. We also respond to calls by Dougherty (2022) to critically explore how universities and organisations can best prepare graduates for entry into the labour market. The application of direct outcomes theory as a mediator between UCAs and GRs also overcomes the challenges of the conflicting use of terminology (Craps et al., 2021). This can help to bridge research agendas across the education, vocational behaviour, and HRM literature that have often tended to develop in parallel. For example, strategic and shared approaches between universities and organisations can offer innovative ways to educate university students and prepare them for the world of work (Jackson & Bridgstock, 2018). These approaches can encompass the three aims of UCAs: (i) securing short-term graduate outcomes, (ii) fostering professional readiness, and (iii) facilitating graduates to carry out productive and meaningful work across their lifespans (Bridgstock & Jackson, 2019). Engagement is crucial because students who access career counselling support during their university studies have higher perceived employability levels than their peers who do not (Donald et al., 2019). Higher levels of perceived employability have been linked to enhanced employment outcomes (Bernstrøm et al., 2019), offering opportunities to address the narrowing gap between benefits and costs of participation in higher education (Donald et al., 2018). The process of career support can also equip students and graduates to navigate the evolving workplace context across their careers, capturing the ‘person’, ‘context’, and ‘time’ dimensions of career sustainability (De Vos et al., 2020).

Subsequently, HRM policy can focus on differentiation from competitors via talent management strategies (D’Armagnac et al., 2021). Direct outcomes can facilitate the defining and achieving of goals concerning diversity, social mobility, and quality agendas (Tomlinson, 2021) as predictors of organisational sustainability (Ab Wahab & Tatoglu, 2020; Illes et al., 2010). The graduate and organisational benefits also transcend to universities via higher league table rankings, leading to increased revenue streams from the attraction of future talent and benefiting wider society via innovation and increased tax revenues for investment in public services and infrastructure (Mintz, 2021; Spence, 2019). This captures how direct outcomes can facilitate win-win scenarios for all actors operating within a career ecosystem (Baruch & Rousseau, 2019), which has not always been the case.

The UCAs and GRs can also use direct outcomes individually and collectively to underpin policy agendas with clearly defined terminology that focuses on developing early careers talent capable of undertaking the university-to-work transition (Craps et al., 2021). Direct outcomes offer a shared space for haphazard and procedural thinking, which can help to facilitate

discussion, build mutual understanding, and identify success criteria for the benefit of all stakeholders (Buckholtz, 2011a). The initial focus on resources, motivations, and interactions helps UCAs and GRs to collaborate and identify the potential benefits of adopting the state progress checklist. These include optimising limited resources and proactive strategic approaches to address pre-existing and future challenges with the desire for win-win outcomes. Subsequently, an awareness of assumptions, scenarios, and plans can help both parties to establish clear agendas and think well. The final endeavour element operationalises the agendas through actions, outcomes, and reuses to capture the notion of doing great. Direct outcomes theory and the state progress checklist thus offer a pragmatic and flexible approach that can help UCAs and GRs to enhance their value to students, universities, organisations, and broader society.

7.2. Directions for Future Research

This paper discusses some of the many possible uses of the state progress checklist as a facet of direct outcomes theory. The fifty questions in Appendix 1 offer a stand-alone guide for practitioners as a catalyst for initial discussion when adopting the state progress checklist underpinned by direct outcomes theory. Future research may consider asking UCAs and GRs to adopt the approach proposed in this paper and subsequently provide their feedback via focus groups or interviews. This could help refine the process, develop additional questions to complement those offered in Appendix 1, and respond to calls by Vick and Robertson (2018) to foster collaboration for knowledge transfer between universities and industry.

Additionally, longitudinal research could track individuals through the university-to-work transition. One cohort of students could be compared whereby UCAs and GRs use this paper's application of direct outcomes theory to prepare them for entry into the labour market, with another cohort of students acting as a control group. However, it should be noted that employability as being capable of undertaking a job is distinct from employment whereby one has a job (Holmes, 2013; Vanhercke et al., 2014). This distinction is often missed when compiling university league table rankings, whereby employability outcomes are predominantly determined via employment metrics (Bridgstock & Jackson, 2019; Christie, 2017; Donald et al., 2019; Jackson & Bridgstock, 2018; Jackson & Tomlinson, 2019). Moreover, the competition between universities for league table positions can act as a barrier to collaboration and knowledge sharing between universities (Donald et al., 2021). Future research needs to look at this issue and propose alternative ways to report data whereby prospective students can understand how their degree at a specific university can enhance their employability whilst removing knowledge-sharing barriers between universities.

Additionally, by departing from league table rankings to determine target universities for talent identification and acquisition, GRs can increase their chances of meeting diversity and social mobility targets rather than accessing and hiring the same demographic of graduates from the same core universities each recruitment cycle. Graduates would gain more equal access to opportunities in the workplace and organisations because diverse early careers talent can offer a competitive advantage and organisational sustainability (Ab Wahab & Tatoglu, 2020; Illes et al., 2010; Tomlinson, 2021). An investigation of the impact of GR targets such as 'performance of hires', 'retention rates of hires', or 'the potential contribution to the organisation's success by graduate hires' could also be considered in the context of relationship dynamics between GRs and other stakeholders.

Finally, future research could consider other applications of direct outcomes theory within the university-to-work space in keeping with theme IX of reuses. For example, the state progress checklist could be used to foster the dyadic relationship between UCAs and their students or recent graduates. This could respond to calls by Donald et al. (2018; 2019; 2021) for students to take ownership of their careers and actively seek career guidance during their university studies, particularly in the light of the COVID-19 pandemic as a global chance event. Alternatively, direct outcomes could be applied in the workplace in the relationship between early career talent and their manager or mentor or between UCAs or GRs and their managers. This could respond to calls by Veld, Semeijn and van Vuuren (2015) to adopt an interactionist perspective when considering the responsibilities of organisations and employees in determining accountability for an individual's career progression and sustainability. Other possibilities for the future application of direct outcomes theory include managing the relationship between UCAs from different universities and GRs from various organisations.

8. Conclusion

Our paper has applied the state progress checklist from direct outcomes theory to a new domain of the university-to-work transition to mediate a dyadic win-win relationship between UCAs and GRs. We believe that our paper offers a framework for bridging research agendas across the education, vocational behaviour, and human resource management literature. We also believe that our paper has pragmatic and practical applications offering benefits to UCAs, GRs, students, graduates, universities, organisations, and broader society.

References

- Ab Wahab, M., & Tatoglu, E. (2020). Chasing productivity demands, worker well-being, and firm performance: The moderating effects of HR support and flexible work arrangements. *Personnel Review*, 49(9), 1823-1843. <https://doi.org/10.1108/PR-01-2019-0026>
- Baruch, Y., & Rousseau, D. M. (2019). Integrating psychological contracts and ecosystems in careers studies and management. *Academy of Management Annals*, 13(1), 84-111. <https://doi.org/10.5465/annals.2016.0103>
- Bernström, V. H., Drange, I., & Mamelund, S-E. (2019). Employability as an alternative to job security. *Personnel Review*, 48(1), 234-248. <http://doi.org/10.1108/PR-09-2017-0279>
- Bridgstock, R., & Jackson, D. (2019). Strategic institutional approaches to graduate employability: Navigating meanings, measurements, and what really matters. *Journal of Higher Education Policy and Management*, 41, 468-484. <https://doi.org/10.1080/1360080X.2019.1646378>
- Bright, J. E. H., Pryor, R. G. L., & Harpham, L. (2005). The role of chance events in career decision making. *Journal of Vocational Behavior*, 66(3), 561-576. <https://doi.org/10.1016/j.jvb.2004.05.001>
- Buckholtz, T. J. (2011a). *Create crucial insight: Use direct outcomes checklists. Think well. Do great.* California: Buckholtz & Associates.
- Buckholtz, T. J. (2011b). Metrics that matter: Measuring and improving the value of service. In H. Dermirkan, J. C. Spohrer & V. Krishna (Eds.), *Service systems implementation* (pp. 211-221). Berlin: Springer Science + Media.
- Buckholtz, T. J. (1996). *Evaluating the CEO: Computerworld leadership series.* New York: IDG Enterprise.

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- Buckholtz T. J. (1995). *Information proficiency: Your key to the information age*. New York: Van Nostrand Reinhold.
- Busch, L. (2017). *Knowledge for sale: The neoliberal takeover of higher education*. London: The MIT Press.
- Christie, F. (2017). The reporting of university league table employability rankings: a critical review. *Journal of Education and Work*, 30(4), 403-418. <https://doi.org/10.1080/13639080.2016.1224821>
- Craps, S., Pinxten, M., Knipprath, H., & Langie, G. (2021). Exploring professional roles for early career engineers: a systematic literature review. *European Journal of Engineering Education*, 46(2), 266-286. <https://doi.org/10.1080/03043797.2020.1781062>
- D'Armagnac, S., Al Ariss, A., & N'Cho, J. (2021). Talent management in turbulent times: Selection, negotiation, and exploration of strategies for talent management in aeronautics and space industries. *The International Journal of Human Resource Management*. Advance online publication. <https://doi.org/10.1080/09585192.2021.1879205>
- De Vos, A., Van der Heijden, B. I. J. M., & Akkermans, J. (2020). Sustainable careers: Towards a conceptual model. *Journal of Vocational Behavior*, 117, a103196. <https://doi.org/10.1016/j.jvb.2018.06.011>
- Donald, W. E., Ashleigh, M. J., & Baruch, Y. (2021). The university-to-work transition: Responses of universities and organizations to the COVID-19 pandemic. *Personnel Review*. Advance online publication. <https://doi.org/10.1108/PR-03-2021-0170>
- Donald, W. E., Ashleigh, M. J., & Baruch, Y. (2018). Students' perceptions of education and employability: Facilitating career transition from higher education into the labor market. *Career Development International*, 23(5), 513-540. <https://doi.org/10.1108/cdi-09-2017-0171>
- Donald, W. E., Baruch, Y., & Ashleigh, M. J. (2019). The undergraduate self-perception of employability: Human capital, careers advice and career ownership. *Studies in Higher Education*, 44(4), 599-614. <https://doi.org/10.1080/03075079.2017.1387107>
- Dougherty, M. (2022). Reconceptualising the transition from post-secondary education to work. *Journal of Education and Work*. Advance online publication. <https://doi.org/10.1080/13639080.2022.2048251>
- Gribbling, M., & Duberley, J. (2021). Global competitive pressures and career ecosystems: contrasting the performance management systems in UK and French business schools. *Personnel Review*, 50(5), 1409-1425. <https://doi.org/10.1108/PR-05-2019-0250>
- High Fliers (February 1, 2021). *The graduate market in 2021*. Retrieved March 27, 2022, from https://www.highfliers.co.uk/download/2021/graduate_market/GM21-Report.pdf.
- Holmes, L. M. (2013). Competing perspectives on graduate employability: Possession, position, or process. *Studies in Higher Education*, 38(4), 538-554. <https://doi.org/10.1080/03075079.2011.587140>
- Illes, P., Preece, D., & Chuai, X. (2010). Talent management as management fashion in HRD: Towards a research agenda. *Human Resource Development International*, 13(2), 125-145. <https://doi.org/10.1080/13678861003703666>
- Jackson, D., & Bridgstock, R. (2018). Evidencing student success and graduate employability in the contemporary world-of-work: Renewing our thinking. *Higher Education Research and Development*, 37(5), 984-998. <https://doi.org/10.1080/07294360.2018.1469603>
- Jackson, D., & Tomlinson, M. (2019). Career values and proactive career behaviour among contemporary higher education students. *Journal of Education and Work*, 32(5), 449-464. <https://doi.org/10.1080/13639080.2019.1679730>

-
- Kirves, K., Kinnunen, U., De Cuyper, N., & Mäkikangas, A. (2014). Trajectories of perceived employability and their associations with well-being at work. *Personnel Psychology*, 13(1), 46-57. <https://doi.org/10.1027/1866-5888/a000103>
- Mintz, B. (2021). Neoliberalism and the crisis in higher education: The cost of ideology. *American Journal of Economics and Sociology*, 80(1), 79-112. <https://doi.org/10.1111/ajes.12370>
- Mok, K. H., Xiong, W., & Ye, H. (2021). COVID-19 crisis and challenges for graduate employment in Taiwan, Mainland China and East Asia: a critical review of skills preparing students for uncertain futures. *Journal of Education and Work*, 34(3), 247-261. <https://doi.org/10.1080/13639080.2021.1922620>
- Nimmi, P. M., Joseph, G., & Donald, W. E. (2022). Is it all about perception? A sustainability viewpoint of psychological capital and life wellbeing of management graduates. *Higher Education, Skills and Work-Based Learning*, 12(2), 384-398. <https://doi.org/10.1108/HESWBL-01-2021-0004>
- Nimmi, P. M., Kuriakose, V., Donald, W. E., & Nowfal, M. (2021). HERO elements of psychological capital: Fostering career sustainability via resource caravans. *Australian Journal of Career Development*, 30(3), 199-210. <https://doi.org/10.1177/10384162211066378>
- Praskova, A., Creed, P., & Hood, M. (2015). The development and initial validation of a career calling scale for emerging adults. *Journal of Career Assessment*, 32(1), 91-106. <https://doi.org/10.1177/1069072714523089>
- Rice, A. (2014). Incorporation of chance into career development theory and research. *Journal of Career Development*, 41(5), 445-463. <https://doi.org/10.1177/0894845313507750>
- Spence, C. (2021). 'Judgement' versus 'metrics' in higher education management. *Higher Education*, 77(1), 761-775. <https://doi.org/10.1007/s10734-018-0300-z>
- Tomlinson, M. (2021). Employers and Universities: Conceptual dimensions, research evidence and implications. *Higher Education Policy*, 34(1), 132-154. <https://doi.org/10.1057/s41307-018-0121-9>
- Tomlinson, M., & Anderson, V. (2021). Employers and graduates: the mediating role of signals and capitals. *Journal of Higher Education and Policy Management*, 43(4), 384-399. <https://doi.org/10.1080/1360080X.2020.1833126>
- Vanhercke, D., Cuyper, N., Peeters, E., & De Witte, H. (2014). Defining perceived employability: A psychological approach. *Personnel Review*, 43(4), 592-605. <https://doi.org/10.1108/PR-07-2012-0110>
- Veld, M., Semeijn, J., & van Vuuren, T. (2015). Enhancing perceived employability: an interactionist perspective of responsibilities of organizations and employees. *Personnel Review*, 44(6), 866-882. <https://doi.org/10.1108/PR-05-2014-0100>
- Vick, T. E., & Robertson, M. (2018). A systematic literature review of UK university-industry collaboration for knowledge transfer: A future research agenda. *Science and Public Policy*, 44(5), 579-590. <https://doi.org/10.1093/scipol/scx086>

Appendix 1: State Progress Checklist Example Questions

Appendix 1 provides a summary sheet offering some potential questions for each of the nine themes across the three endeavour elements identified in Figure 1. These example questions are not meant to be an exhaustive list. Their purpose is to act as a starting point for discussion and action. The University Careers Advisors and Graduate Recruiters could initially work through this sheet separately before working through the sheet a second time collaboratively. Please note that whilst the nine themes are presented linearly, they can be applied iteratively as subsequent questions and ideas emerge.

Endeavour Element I: Potential

Theme I: Resources

1. What resources do we currently have?
2. What resources do we currently lack?
3. What resources does the other party have that could improve our situation?
4. What resources do we have to help the other party improve their situation?
5. What resources exist beyond the dyadic relationship?
6. How can both parties make the best use of the available resources?

Theme II: Motivations

7. What are the motivations for collaboration?
8. What are the motivational issues that need to be addressed?
9. What help is required from the other party?
10. What support can be provided to the other party?
11. How do their respective motivations align?

Theme III: Interactions

12. How regularly should interaction take place between the two parties?
13. What are feasible and reasonable response times?
14. What are the preferred methods for communication?
15. Who is responsible for scheduling meetings and writing minutes?
16. How can existing levels of interaction be optimised or enhanced?
17. How can documentation help manage the challenges of high personnel turnover rates?

Endeavour Element II: Agendas (Think Well)

Theme IV: Assumptions

18. What are the existing issues in the dyadic relationship?
19. Have these issues been communicated to the other party?
20. Is the other party aware of the challenges being experienced?
21. Have working assumptions been clearly articulated?
22. What actions can be taken to address untoward pre-existing assumptions or to capitalise on applicable mutual assumptions?

Theme V: Scenarios

23. What are the current challenges faced?
24. What are possible future challenges that may occur?
25. What steps can be taken to minimise the negative impacts of these challenges?
26. What opportunities exist for proactive and strategic planning to reduce the reliance on reactive behaviours?
27. Has an adequately diverse set of options been considered?
28. Has an adequately diverse set of information been considered?
29. Can an informed decision now be made?

Theme VI: Plans

30. What documentation is required?
31. How often should this documentation be updated?
32. Who is responsible for updating each section of the document?
33. What is the process for agreeing on metrics to measure successful outcomes?
34. Who is accountable for signing off the plans?
35. Who is accountable for monitoring the plans?
36. How can continuity of the plans be maintained?
37. What events should automatically trigger all parties to re-visit the plans at the earliest opportunity?

Endeavour Element III: Effects (Do Great)

Theme VII: Actions

38. What resources are needed to operationalise the plan?
39. Who is accountable for implementing each part of the plan?
40. When does each of the actions need to be taken?
41. How will progress be communicated between the two parties?
42. Who has overall accountability for the operationalisation of the plan?

Theme VIII: Outcomes

43. Have the results been realised?
44. What benefits have occurred?
45. Has there been a win-win focus for both parties?
46. Were the methods for recognising and measuring outcomes appropriate?
47. What learning opportunities exist for future process improvement?
48. Where would funding and time be best invested in the future?

Theme IX: Reuses

49. What actions were taken, and what outcomes were achieved using the state progress checklist?
50. What other opportunities exist to create new insights using direct outcomes to foster win-win scenarios?

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Are young graduates ready for the job market of the future? The study of the Italian case

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Abstract

The current paper presents the Italian results of the Project Erasmus + “21st Century Skills: Changing the Approach to Teaching in Higher Education” funded by the European Commission. The paper is aimed at presenting the work of Smarthink Ltd, as project partner, providing definitions, current research, and the best practices for teaching the ‘so-called’ soft skills among university students and fresh graduates in Italy, and to understand the employers’ perception of the owned and desired competencies among young employees. The study design was twofold. Firstly, desk research where major documents, national and international, were collected on the topic in Italy, and secondly, market research where a sample of entrepreneurs was interviewed in order to gather additional information on the level of development of these skills among young graduates and employees. Findings revealed that in Italy 21st Century Skills developed by young graduates are still few and that there are only a few examples of best practices to develop these competencies at the university level. In addition, employers testified that, while young graduates are usually well prepared in terms of the level of knowledge acquired during their studies, on the other side, they regularly lack practical skills and soft skills required by the marketplace. In conclusion, there is a broad and general need in Italy to improve these skills in order to make young people more employable, giving priority to skills such as critical thinking, collaboration, and self-direction. For this reason, the role of institutions like universities becomes crucial in order to reach this goal.

Keywords: 21st century skills, soft skills, higher education, young graduates, employees, employers

1. Introduction

The main purpose of this paper was to provide an outlook on the current situation regarding 21st Century Skills in Italy and its further development in the years to come since there is a

paucity of literature regarding the development of these skills in the country. The initial part of this work aimed to analyse the actual competitive landscape in the country, with special attention to key definitions and main contributions made by local and governmental authorities with “skills-related” projects and researchers. In the paper are reported several Italian best practices concerning 21st Century Skills; this section serves as an introduction for obtaining a general overview, and it will be followed by a market research study. This work was particularly important because it enables the reader to understand what is the current state of the art in Italy in relation to the development of soft skills while adding perspectives from representatives of both the university and the corporate world. The second part of the study presented additional reflections that emerged during the interviews carried out online and face-to-face, together with possible limitations. In the light of the above, our aim was to identify the skills perceived as key for recruiters and academicians, so as to figure out if and how students were able to meet these expectations and what could eventually be done in order to reach this goal. The two key research questions of the study were:

- 1) What competencies and skills do business representatives seek for hiring university graduates? Why?
- 2) Which qualifications should the university's graduates have in order to meet the needs of the labour market? Why?

In an attempt to respond to these research questions, we highlighted the differences between soft and hard skills, taking into account that sometimes they were equally requested from recent graduates. Also, ideas coming from the digital evolution are discussed.

2. Review of the current situation in Italy concerning the development 21st Century Skills: The state of the art

Before discussing the topic of 21st Century Skills, it is important to give a broad definition of them, considering that, in this report, they will also be referred to as soft skills, or the so-called transversal skills, required today across different subjects and disciplines in order to become market-ready.

OECD (2018a) report discusses 21st Century Skills in these terms:

“Learning to form clear and purposeful goals, work with others with different perspectives, find untapped opportunities and identify multiple solutions to big problems will be essential in the coming years. Education needs to aim to do more than prepare young people for the world of work; it needs to equip students with the skills they need to become active, responsible, and engaged citizens” (p. 4).

More in detail, the organization identifies the skills of the future as follows:

“Students will need to apply their knowledge in unknown and evolving circumstances. For this, they will need a broad range of skills, including cognitive and meta-cognitive skills (e.g. critical thinking, creative thinking, learning to learn and self-regulation); social and emotional skills (e.g. empathy, self-efficacy and collaboration); and practical and physical skills (e.g. using new information and communication technology devices)” (p. 5).

With reference to the topic of 21st Century Skills and soft skills in general, Italy has introduced a series of challenging reforms to improve the performance and responsiveness of the labour market. These interventions are also aimed at improving the capacity of the education system to develop and identify students’ skills while encouraging individuals to grow skills beyond

school. In addition, recent reforms that promote innovation and digitalization are part of a long-term view that includes the development and improvement of skills policies that respond to the unique national and regional conditions of the country. In the case of Italy, various stakeholders, such as universities, are interested in the topic of soft skills development as they play an important role in this sector and sometimes offer targeted training (Cinque, 2016).

The Ministry of Education, University and Research (Ministero dell'Istruzione, dell'Università e della Ricerca, MIUR) allocates funds to schools and universities and is responsible for the governance of the education system by setting nationwide minimum standards and central principles. Part of the responsibility for education is shared between the central government and regions, but the majority of schooling decisions in lower secondary education are taken at the central and school levels (OECD, 2017a). From a general point of view, Italy's education spending for improving education itself has risen in recent years. In fact, according to the OECD, the education spending as a share of total government spending in Italy is around 22 per cent (Di Matteo, 2019).

On the other side, Italy's poor skills performance has contributed to its economic slowdown. Skill mismatch is a pervasive phenomenon in Italy and it emerges when workers are over-skilled for their current jobs because they are not ready to fully use the abilities required for their tasks, or when they result as underskilled (OECD, 2017b).

The OECD Survey of Adult Skills (PIAAC), is a useful tool to measure adults' proficiency in processing skills and to gather information and data on how adults use their skills at home and at work. It gives proof that Italian workers have below-average levels of cognitive skills and are less inclined to use certain cognitive skills that are significant drivers of workers' and companies' performance. (OECD, 2018b). The same report outlines that around 12 per cent of Italian workers are over-skilled, and 8 per cent are underskilled. These inadequacies are found even among university graduates.

In countries with the highest youth unemployment rate, skill gaps can be considered as one of the main reasons for causing this issue. Indeed, it should be taken into consideration that if students are not gaining the skills that employers are seeking, it is because the three players (students, employers, and educators) are not collaborating in the right way to achieve a common goal. In this scenario, the MIUR supports resumes that depend on results in terms of learning and evidence since they sustain four key skills: namely social and civic competencies, learning how to learn, the spirit of initiative and entrepreneurship (MIUR, n.d.).

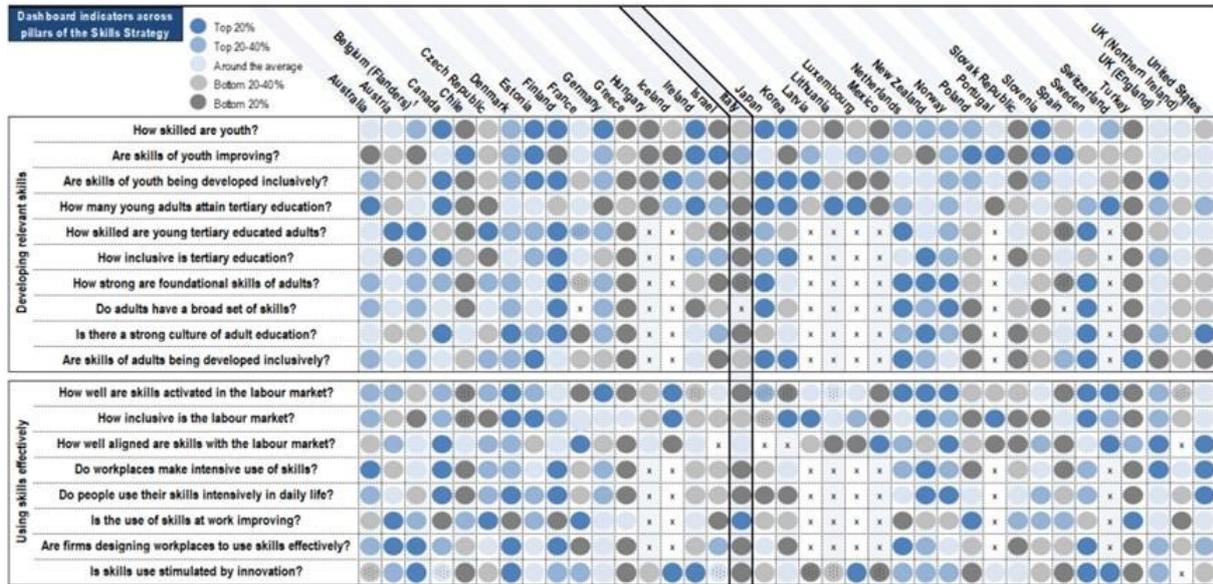
Furthermore, university students, as shown in a series of surveys conducted within different countries, among which Italy, consider their degree not successful enough to meet the current labour market needs (Ricchiardi & Emanuel, 2019). To confirm this, in the OECD (2019) National Skills Strategy Diagnostic Report - Italy underlies that, despite the growth in employment rates and productivity, these levels have not reached the desired values yet.

Finally, the OECD (2019) recognizes that Italy has presented an ambitious plan aimed at sustaining the economic growth with the contribution of an adequate level of competencies: the so-called Industry 4.0 Plan is intervening in every aspect of the digital transformation (MIUR, 2017) and it represents an opportunity for becoming market-ready and for creating a competitive network.

The newly developed PNRR document, which is an acronym for National Recovery and Resilience Plan (Piano Nazionale di Ripresa e Resilienza), and part of the Next Generation EU program (NGEU) launched in July 2020 during the COVID-19 Pandemic. A central role in this paper is played by competencies, conceived as a crucial objective to be reached by the plan and

a strategic asset to rely on in the near future. Civil servants' soft and digital skills will be at the core of the innovation, with the need to develop an integrated platform for recruiting purposes and the aim of enhancing each individual's abilities and professional career (Sismondi, 2021).

FIGURE 1. OECD SKILLS STRATEGY DASHBOARD:
SUMMARY INDICATORS OF SKILLS PERFORMANCE



Source: OECD (2019)

Shifting back to the OECD report, the figure reported above shows the summary indicators of skills performance adopted by OECD (2019). Reflecting on the Italian data, it is evident that the majority of the indicators are marked by a bottom level of around 20-40 per cent, with an exception for the values corresponding to the parameter connected to the increasing use of skills in the workplace and the improvement of skills among youngsters. Some other indicators are just around the average compared to the rest of the European countries, such as those related to the skills alignment with the labour market. Hence skills performance indicators for Italy are still very low.

3. Summary of key research conducted at a national level concerning 21st Century Skills development

According to the research conducted at a national level on 21st Century Skills, university professors and experts had previously deepened the topic and had also contributed by adding their perspectives.

One main example is ‘Earnings Inequality and Workers’ Skills In Italy’ (OECD, 2019), a study focused mainly on discovering whether the rise in earnings inequality could be linked to education and skills development. Several previous studies started from the idea that the increase in inequality is a consequence of the processes that occur in the labour market, leading to a decrease in skills development.

To reach their objective and better understand the role of education as a driver of earnings inequality, researchers divided workers into three subgroups according to their highest

educational accomplishment, and then they measured the relative size of inequality within the three educational groups.

Finally, the researchers reported that increasing wage inequality in Italy over the last two decades depends on higher skill-premia only to a very limited extent. To reach this conclusion, they considered the influence of several variables able to capture non-observable skills, the return to education and the share of wage inequality.

An additional study that should be reported is ‘Getting Skills Right: Italy’ (OECD, 2017c). In addition to a general view on the topic of soft skills and skill mismatches, the study introduces the role of ANPAL, the national agency for Active Labour Market Policies (ALMPs), which constituted a major change in the Italian approach to labour market challenges. Together with other initiatives, ANPAL was set to assist schools and help students find suitable work-based learning opportunities. The ANPAL has been designed to provide renewed incentives and support for the unemployed to retrain and upskill in order to meet the needs of the marketplace.

Another important research of the OECD that is focused on the Italian situation regarding employability and soft skills is the ‘Skills Strategy Diagnostic Report’ (OECD, 2017d), a project produced from the collaborative effort of the OECD and the Government of Italy, with the support of the European Commission. The central theme of this report is the creation of the right skills to help countries improve their economic prosperity and social cohesion; the main observation is that, in order to achieve these results, the skills systems need to be strengthened.

The last publication that should be taken into consideration at this stage is the work of Zanazzi (2018). The article aims to describe the situation of low-educated and low-skilled workers in Italy and the impact of the economic crisis on this particularly vulnerable group. The most important outcome of the research report is that lifelong learning, as well as active labour market policies, should be a priority in Italy, where educational attainment is comparatively very low and the labour market extremely inefficient.

4. Best practice in Italy on 21st Century Skills development

In this part of the paper, a series of projects are presented, which are implemented in Italy concerning the topic of 21st Century skills, especially at the educational level.

From a national perspective, in the secondary school sector, the ‘Good School Reform’ (MIUR, 2018) contains several actions aimed at improving skills results, implementing school management practices, recognising the important role of teachers, and dealing successfully with students’ transition from school to work. The reform introduces the ‘National Plan for Digital Education’ which is a pillar that includes an operative governmental perspective with reference to the key innovation challenges in the public sector.

Another important component of the reform is the *AlternanzaScuolaLavoro* (ASL) (OECD, 2018b): this project has the main objective of introducing several measures in order to make traineeships mandatory during the last three years of upper secondary education; this will also be considered as a prerequisite for students’ admission to the secondary school leaving examinations. Implementing these actions requires the reinforcement of trust and dialogue between these players and may be able to strengthen incentives for education providers.

‘Making Learning and Thinking Visible in Italian Secondary Schools’ (INDIRE, n.d.) is a project created by Harvard Project Zero and INDIRE (Istituto Nazionale di Documentazione, Innovazione e RicercaEducativa) with the aim of experimenting a new way of teaching in Italian secondary schools. These two institutions cooperated to create a new educational and

innovative model able to enhance competencies and abilities such as critical, creative, and decisional thinking.

In the university sector, a set of measures have been taken to improve the scenario both within private and public universities. One example is the Bicocca University in Milan which created two projects called iBicocca and BBetween, aimed at helping their students to develop entrepreneurial and soft skills respectively.

Another best practice that should be taken into consideration, is the active role of METID (Methods and Innovative Technologies for Learning), a university department located at the Politecnico University in Milan that started a few national and international projects to foster innovation and employability through MOOCs.

A good project example in which METID is involved is the European project ‘eLene4work’ (METID, n.d.), created with the objective of helping students and young entrepreneurs to develop transversal competencies and soft skills required by the labour market and helping companies to exploit the digital talents of their young workers.

The “Didattica per competenze” (De Santis et al. 2019) (“Competency-based” learning and teaching) project, activated at the University of Modena and Reggio Emilia, was a three-year project started in 2016 with the idea that it was necessary to rethink the teaching strategies to influence the development of soft skills among students successfully. The project began with the training of professors and tutors who were asked to select the key skills and the most suitable teaching methodology for redesigning the structure of their own courses.

Moreover, in some Italian universities, parallel curricula regarding the process of learning soft skills have been created as part of the university education. For example, at the Insubria University in Varese, a curriculum called “Competenzedigitali e Soft skills” (Digital competencies and Soft Skills) has been introduced in parallel to the most traditional plan of studies among the third-year students (Università degli Studi dell’Insubria (2021).

Some other universities have created special departments focused on the role of soft skills, and one best practice in this field is the “Competency Centre” founded by Ca’ Foscari University in Venice, with the mission of conducting research, training and consulting activities in the area for the development and assessment of behavioural competencies (Cà Foscari University of Venice, n.d.).

In conclusion, several studies discussed above demonstrate how Italy still lacks key skills for its future workforce, at secondary school and university levels. However, some interesting initiatives like those promoted by MIUR addressing the Digital Transformation 4.0 in schools and by some other local universities as discussed above, reveal that some concrete actions are taking place in order to address this important need. A significant aspect to remember is that Italian workers are considered to have below-average levels of cognitive skills and are less inclined to use certain cognitive skills that are significant drivers of workers’ and companies’ performance (OECD, 2018), and this constitutes a challenge that our study may partially attempt to address.

5. The research study

One of the reasons for the existence of universities is to train qualified personnel needed by the job market. For this reason, the question of whether universities can educate or actually educate graduates with the qualifications required by the marketplace is crucial. When examining the literature, it was evident that studies able to answer this question were not sufficient, and this situation creates a gap at the Italian level. Therefore, the aim of this study is to fill this gap

partially. It is clear that in order to answer this question, we need to learn the perspective of both academics and employers. In other words, to hear their voices. This study aims to understand the 21st-century proficiency levels of university graduates also through business representatives and faculty members in Italy. More specifically, it seeks to answer the following questions:

1. What competencies and skills do business representatives seek when hiring university graduates? Why?
2. Which qualifications should the university's graduate students have to meet the needs of the labour market? Why?

6. Methods

The qualitative research method was used to answer the two previous research questions. For this purpose, semi-structured interviews were conducted with specific individuals coming mainly from companies and with one view only coming from the academic world.

6.1. Participants

In relation to Italy, the sample of participants was composed of five Human Resources Managers or CEOs of companies located in Italy and one Researcher/Academician. In total, there were four males and two females in the selected sample; detailed information about demographic variables is given in Table 1.

TABLE 1. DEMOGRAPHIC INFORMATION ABOUT RESEARCH PARTICIPANTS

	P1	P2	P3	P4	P5	P6
Gender	Male	Male	Male	Female	Female	Male
Role	CEO	CEO	CEO	CEO	HR manager	Researcher/ Academician
Field	Commercialisation of air-conditioning	Commercialisation of glasses	Funerary services	Textile	Search and selection of personnel	Didactic innovation and e-learning in Academic/Research institutions
Sector/University experience	27 years	20 years	30 years	40 years	27 years	15 years
Nationality	Italian	Italian	Italian	Italian	Italian	Italian

Source: Own compilation, based on personal interviews (2020)

The age of participants ranged from 32 to 60 years, and the work experience of respondents from the business sector varied between 6 years and 33 years.

6.2. Data collection tool and process

Data were collected through semi-structured interviews piloted and agreed upon among the project partners. Two interview protocols were developed: the first one was used for HR managers and company CEOs, and the other one for Academicians. Before starting the interview, participants were sent an “Informed Consent Form” that they had to sign in order to agree for the interview to take place. All our interviews took place online via Skype, and consent forms were received in advance. Only one interview with the HR manager was held face-to-face.

Research participants were selected randomly from some known companies. The interviews lasted approximately 30-50 minutes for each participant. Semi-structured interviews contained both a set of initial demographic questions and then 10 (for academicians) to 14 open-ended questions (for HR managers and CEOs). For confidentiality reasons, codes such as P1 and P2 were assigned to each participant.

6.3. Data analysis

The thematic analysis approach (Alhojailan, 2012) has been used to capture key themes and concepts from the interview. Sub-themes were extracted from codes, and they were collated into different themes based on similarities and differences among them.

During the interview, notes were taken and transcribed immediately into the interview protocol. The interviewer summarized the answer to the respondent in order to make sure the concept was clear and approved by both parties.

7. Findings

7.1. The results of thematic analysis

The thematic analysis of the interviews with CEOs, HR managers, and one research/academician showed different types of results. Considering the academician, we have identified three main themes, namely the introduction of micro-credentials in the university context, the increasing importance of ICT skills, and the growing connection between soft and digital skills. On the other side, the five interviews with CEOs and HR managers showed key themes such as soft skills, deepness & passion, and academic practicality. Table 2 groups the results of the overall thematic analysis.

TABLE 2. THEMES RESULTED FROM THE QUALITATIVE INTERVIEWS OF ACADEMICIANS AND CEO/HR MANAGERS

MAIN THEMES From Researcher/Academician	MAIN THEMES From CEO/HR Managers	SUB-THEMES
University Micro Credentials	Soft Skills	Communication, Listening, Critical thinking, Teamwork, Self Direction
ICT Skills	Deepness & Passion	/
Soft Skills/Digital Skills	Academic Practicality	/

Source: Own compilation, based on personal interviews (2020)

7.2. Researcher/Academician's themes

We decided to create different sections for the analysis of themes that emerged from various types of interviews, especially between Researcher/Academician and CEO/HR manager; this is mainly because we only had the chance to interview one Academician and this contribution cannot be considered so representative of the overall Italian Academicians sample. In this section, the themes that emerged during the Researcher/Academician's interview are described.

7.2.1. University micro-credentials

The first theme that emerged from the interview with the researcher was university micro-credentials. Basically, micro-credentials (Deaking, 2017) are considered as a system coming mainly from US and Australia that tends to issue credits or credentials to an individual based on the competencies matured rather than on knowledge acquired in the university context (CBEN, 2018). Micro-credentials are also defined as:

“Mini-qualifications that demonstrate skills, knowledge, and/or experience in a given subject area or capability.” (Deakin, 2017, Online).

The researcher explains how universities can create training through micro-credentials that could be recognized afterwards as a formal pathway for students, although this has not been fully implemented yet in the Italian context.

This possible journey can help the student build the necessary skills and competencies required by the marketplace while attending more formal university training. An example of this project is the European MOOC Consortium (EMC; n.d.), from Holland, where they are trying to connect the European Qualification Framework together with the European Vocational one in order to create an overall new credentialing framework.

7.2.2. ICT skills

This is the second theme that emerged from the interview. What emerged from the discussion was that technical and ICT skills were the key ones for students to own for their first approach to the job market. Usually, their graduates have these skills, and they easily find a job because of them. 100% of graduates from this institution, especially engineers, find a job while they are still enrolled at the university. In Italy, the request for these graduates is higher than the number of graduates currently available on the market, and these graduates are normally employed whatever degree of soft skills they may have in comparison with the ICT ones.

7.2.3. Soft skills/digital skills

What employers value very much is the fact that graduates also own important soft skills, and Table 3 explains what they are and how they are important for the marketplace. We will explore the table further later on.

The researcher highlights how soft skills are today combined with the digital ones, especially those related to “being able to communicate in a chat”, or “on social network” for example. Hence soft skills are also defined here as those skills that allow you to use ICT and digital competencies in alignment with the company's needs. For example, Politecnico University is organizing MOOCs on soft and digital skills called POK (POK, n.d.) for both students accessing and leaving courses. Coursera is another example of an institution providing short courses to students as micro-credentials, for developing specific competences, in order to find a job.

The researcher reported how companies see young graduates have some difficulties to move from theory to practice so they rely very much on knowledge rather than on skills while accessing the marketplace. Another important point made by the researcher was that while in the university environment we tend to emphasize teamwork skills, inside the company it usually

prevails the individual performance. As a result, graduates tend to forget the added value of any teamwork activity. In addition, one project reported at the university level in Italy is Elene4Life (Elene4Life, n.d.), aimed at developing students' soft skills through teachers' training, being a project funded by European Commission with an Erasmus + action.

The key point here is mainly how digital skills are becoming crucial nowadays if connected with the soft ones since while the former tend to become obsolete quite quickly, the latter remains a key pillar of the performance of workers in the marketplace. In addition, at the university level, the initial introduction of micro-credential can become a new and important incentive for young graduates to undertake future skills development.

7.2.4. The soft skills level rating

In one of the interview questions, participants were asked to rate from 1 to 10 in order of importance the 21st Century Skills presented and coming mainly from OECD's work on soft skills (OECD, 2018a). Table 3 shows the researcher's ratings of 21st Century Skills.

TABLE 3. THE RESEARCH/ACADEMICIAN RATINGS OF 21ST CENTURY SKILLS IN TERMS OF THEIR IMPORTANCE FOR THE MARKETPLACE

21st Century Skills list	Human Resources managers from different sectors									
	1	2	3	4	5	6	7	8	9	10
Critical Thinking									X	
Collaboration									X	
Communication									X	
Creativity and Innovation									X	
Self-Direction									X	
Making Global and Local Connections									X	
Using Technology as a Tool for Learning									X	

Source: Own compilation, based on personal interviews (2020)

Table 3 highlights how the researcher interviewed rated all the 7 given skills as important with a value corresponding to 9, where 1 is a very low level of importance and 10 is the maximum one. He already described his perspective on technical and soft skills as explained in the above section, but he provided the same overall degree of importance to all the listed 21st Century Skills.

7.3. CEO/HR Managers themes

In this subsection, we will describe the themes that emerged from the CEO/HR Managers' interviews, and we will discuss these themes one by one.

One of the key questions of the interview is "What were the most important skills required by companies today". Answers were different and varied. Companies' CEOs reported several times that this depended very much on the professional role the candidate had to cover. However, we identified the following key skills for companies that can be defined as soft skills, based on the definitions already provided in the sections above.

7.3.1. Communication

In this case, communication is considered not only the capacity to well explain something to someone but as the skill that helps individuals to enter into a constructive relationship with somebody else. This skill has been cited by nearly all the interviewees. It is a key skill when workers are selling something for example or supporting their customers for a specific service. Communication is also related to being able to properly communicate what they are selling because this is a way to understand customers' needs. This connects with critical thinking and listening skills as well, since companies are able to communicate with their customers in a good way only when they properly listen to them and they understand what customers' needs are while using a critical approach. This quotation from P3 is interesting:

"It is hard for them (young graduates) to deal with people, they are not able to understand the particular moment people are facing and they deal with people with detachment. Instead, they need to understand the moment people are facing, they need to be able to learn how to communicate inside a relationship with them". (P3)

and P1:

"The individual should be prepared in relation to the product he/she has to sell, however it is also important to know how to face the market and how to deal with it, he/she needs to pay attention...he/she needs to be able to communicate and he/she needs to well know what he/she is going to sell...he/she should have also some critical thinking skill in order to make a customer buy the product." (P1)

7.3.2. Listening

Listening is another key soft skill that emerged during the interview, cited by P4 mainly. They identify this skill as the capacity to understand others better in order to establish a relationship with them. Without listening, it is hard to be able to get into a relationship with others and understand what they want. Listening is intended here also as the "pay attention" action to the other individual.

7.3.3. Teamwork

P4 also reported how teamwork is another key skill required by companies today. Teamwork is defined as the skill of being able to work together as a team with colleagues and accomplish tasks together.

7.3.4. Self-Direction

Self-direction as being able to carry out our tasks and activities in an autonomous way is a key skill for P5:

"Being able to work in an autonomous and self-directed way, having initiative, taking our own responsibilities, having more and more autonomy... solve problems is key because in this way the entrepreneur has to solve less and fewer problems" (P5).

Self-Direction also implies for P5, being able to adapt oneself according to the market needs and changes.

7.3.5. Critical thinking

This is a key skill highlighted mainly by P3, and it is defined as the capacity to think in a different way in order to solve a problem and in order to understand customers' needs.

7.3.6. Deepness & passion

Deepness has been cited mainly by P4. It is defined as the skill of being able to go deeper into things rather than remaining on their surface, and this relates both to personal and professional life. Especially participant 4 described how young graduates lack the capacity to go deeply into things and how at the same time, they are not fully aware of this.

“Lack of the capacity of going deeply into things, they tend to use a surface approach to work; they tend to give to work less commitment than required, they start already with a less level of commitment than the one required by the company itself. They tend to give the same value to both professional and spare time commitments while the working life usually requires more time and efforts than the extra-work life” (P4).

Passion is also another important trait sought by employers in young graduates, but it is usually something they lack about. Here, passion is intended as the passion for our work and for what we do. Both P4 and P2 named this as an important trait of young graduates and that's the reason why often young people around 28 years old with some kind of professional experience, are preferred instead of older ones.

7.3.7. Academic practicality

All respondents agreed that universities should provide more “practical” training to young graduates because they know many things, but they do not know how a company works, how to do some tasks in concrete, where to find things, and so on. Nearly all of the CEOs of the companies we have interviewed started with basic roles and tasks in the company, and they have learned to do anything in the same company years after years. This helped them afterward to better understand how a company works and how to accomplish all its tasks. *“When graduates arrive in the company from university, they are completely outside the market place and they really do not have any idea of how the work works in general terms, the individual is not professionally prepared” (P1).*

P3 added that: *“Universities have a key role today in preparing graduates on the practical aspects...young graduates today are not able to learn what they are doing, they need somebody who has to tell them what they need to do...” (P3).*

P4 provided an interesting perspective stating how the practical university stage should help young graduates to identify their real and key skills. Moreover, the key University role should be the one of “Educere” to promote these skills among young people so that they can become fully aware of them.

An interesting suggestion for universities also came from P2:

“In Italy, we are not able to create a good bridge between universities and companies, we need to exchange more information between the twos, we need graduates to spend more time inside the company, on the ground, in order to fully understand the workplace experience” (P2).

TABLE 4. THE CEOs AND HR MANAGERS RATINGS OF 21ST CENTURY SKILLS
IN TERMS OF THEIR IMPORTANCE FOR RECRUITMENT

21st Century Skill List	CEO and HR from different companies					Mean	Order of importance
	P1	P2	P3	P4	P5		
Critical Thinking	8	10	8	10	9	9	1
Collaboration	10	9	8	10	8	9	1
Communication	8	7	10	10	7	8.4	4
Creativity and Innovation	9	6	7	10	7	7.8	5
Self-Direction	6	10	8	10	10	8.8	2
Making Global and Local Connections	8	9	3	1	8	5.8	6
Using Technology as a Tool for Learning	10	10	7	7	9	8.6	3

Source: Own compilation, based on personal interviews (2020)

Table 4 displays the interviewed CEOs and HR Managers' ratings of 21st Century Skills in terms of their importance for recruitment. As shown in this table, critical thinking and collaboration were highlighted as essential skills. They were followed by Self-Direction. The third position was occupied by Using Technology as a Tool for Learning. Similarly, the fourth position was for Communication. These were followed by Creativity and Innovation and by Making Global and Local Connections, which were the fifth and sixth skills, respectively, on the list. From this analysis, it is important to note that, although the communication skill has been cited by several interviewees, it was not marked by a high value in the grid since the mean was approximately 8.4 in contrast with means equal to 9, 8.8, or 8.6 associated to other skills.

7.3.7. Critical thinking

As seen in Table 4, critical thinking skill has one of the highest mean scores, with a value corresponding to 9 out of 10; indeed, from the results collected, all of the interviewees attributed high importance to this skill. Critical thinking can be defined as the ability to analyze complex problems, investigate questions for which there are no clear-cut answers, evaluate different points of view or sources of information, and draw appropriate conclusions based on evidence and reasoning; it is a combination of problem-solving, analytic thinking, reasoning and concluding. CEOs and HR managers stated how this skill is fundamental because when they hire someone in the company, this individual should bring something new to the company to improve an already existing practice. For example, it is an exchange of experience between the company and the hired person since they should bring new ideas, and novelty. P4 states how:

“It depends very much on the professional role, but critical thinking is very important ... Very often it is difficult to hire people with experience in the same sector and for the same task because they tend to have their own old approach to solve things. On the other side, those coming from different sectors have another, a new approach performs better, so it depends very much on the type of individual, for leaving the old for doing something new. The enthusiasm, the will of doing is important, the skill of performing on different tasks, flexibility, versatility are very important” (P4).

P5 also states how critical thinking is essential because it involves the reasoning and ability to identify differences and being able to make choices. This applies to any professional role.

7.3.8. Collaboration

Collaboration has the same highest score as critical thinking, with a mean equal to 9. All respondents reported how collaboration is an added value and a key skill for them, and it basically refers to teamwork. It pulls together all the company work and helps the company to progress rather than making everyone progress individually on different routes. P5 again adds:

“It is absolutely necessary because an individual who does not have this skill can become a big problem for the company because it creates an obstacle to the capacity of others to express themselves. The individual who wants to shine in the middle of the team and who does not want to work as a team prevents other people’s self-expression” (P5).

On the other side, P4 stated that working in a team is also difficult because people are different from each other in their strengths and weaknesses.

According to the mean score rating for essential skills in recruiting, self-direction, with an average score of 8.8 had the second-highest result. Self-direction is very required by employers today, and it is considered mainly as the skill that demonstrates the ability to be an autonomous worker. P2 explains how companies can not pretend that a 30-year-old employee is 100 per cent self-directed even though some of them are, and when firms have these individuals, the company becomes stronger. Usually, lack of motivation, according to P4 point of view, is the reason why young graduates lack self-direction. P5 adds:

“Self-direction is important for any professional role and level. Because although someone may own some repetitive or in-chain roles, if there is no sense of responsibility and They do not understand how the role/job works, they become a real danger/problem for the company” (P5).

P1 interestingly adds that if you have skills such as collaboration, critical thinking, communication, creativity and so on, self-direction becomes a key skill and consequence of those discussed above.

7.3.9. Using technology as a tool for learning

Using technology as a tool for learning was the skill placed in the third position according to CEOs and HR managers’ ratings. All interviewees think that if today you are not able to use technologies and integrate them into the company’s daily activities, you are kept apart from the company itself and you will become isolated. So, having at least a basic level of technical skill is really key. Young generations are particularly good at this, and they fully own this skill. P5 is still the one providing a more expanded view on the topic:

“This is a very important skill because if you have not a bit more than a basic level of technological skills, such as how to use a PC or a smartphone, Internet and so on, you are kept apart... for example in the majority of companies there are WhatsApp groups where people communicate with each other, in real time, to discuss any kind of problem and this is a real advantage for the business and for the people. Those who are not able to deal with these types of technologies become a problem for the company and themselves because they remain isolated” (P5).

7.3.10. Communication

Communication registers the fourth highest mean score with 8.4 out of 10 on the scale provided. However, we have to say that 3 interviewees out of 5 rated this as less important than the other skills cited at the top of the list. On the other side, we noticed that the skill becomes more

important based on the type of role covered by the employee in the company. So, for example, being able to communicate becomes key for a seller or for employees who have to deal with bereavements and funeral services because they should be able to make people at their ease through good communication. P1 also states:

“If someone is not able to pass on to somebody else what he/she wants to do or to say, is not someone who can make a difference. For example, for the commercial person, communication is the basis of everything. When an individual has to express him/herself and has to communicate what he/she needs to know and how to say and this becomes a problem if you are not able to transfer to a potential customer what you do and your message” (P1).

7.3.11. Creativity and innovation

For CEOs and HR managers creativity and innovation are important but not as much as for the other skills discussed above, at least not for all of them. Nearly all respondents reported how the creativity and innovation skill depends very much on the role played in the company by a specific employee. For example, in a company delivering funeral services to people, there is not much new to invent, so for some roles, this skill does not become an added value, and it is not perceived as needed. On the other side, when you carry out some tasks in the production process, creativity is unnecessary, while innovation might become a real added value.

7.3.12. Making local and global connections

Last on the list is the skill (making local and global connections) according to CEOs and HR managers' ratings with 5.8 mean scores. Usually, employers do not value this skill if they do not sell their products abroad. In this case, they may value primarily local connections considered as the capacity to get in touch and to connect with other Italian networks, stakeholders, and customers. If, on the other side, the company in question does not sell to an international market, making more global connections becomes useless. That is probably the reason why it has been placed as the last item on our list of skills.

8. Conclusion

This study made an attempt to answer the following two research questions, namely:

1. What competencies and skills do business representatives seek for hiring university graduates? Why?
2. Which qualifications should the university's graduates have in order to meet the needs of the labour market? Why?

Before answering each research question, it is important to note how none of the CEOs and HR managers interviewed by Smarthink Ltd during the study knew the meaning of 21st Century Skills initially. On the other side, this meaning was quite clear to the interviewed Researcher/Academician.

Moving forward, the answer to Research Question 1, also based on the interview results presented here above, highlights how in Italy, businesses value soft skills such as critical thinking, collaboration, self-direction, digital skills, and communication, more than any other soft skills. However, this is done in combination with key technical skills that each individual should possess in connection with a specific professional role/activity. Moreover, although the communication skill was discussed quite often by participants when they were required to list the provided skills in order of importance, critical thinking and collaboration skills appeared to be those with the highest rate. In addition to the skills listed by the research team in the study,

research participants also included the ability to “Listen” to others in order to better establish a relationship and connect, and the ownership of “Deepness and Passion” in new young candidates. These two were particularly important for employers since they favorably advantage candidates who feel the desire to go deeper into their professional daily tasks rather than remaining on the surface and those who have passion for what they do since this leads to motivation and the development of all the other above key soft skills.

Another important aspect sought by companies nowadays in young candidates is the one we called “Academic Practicality” skill. With this last, we refer to the individual ability to put the knowledge acquired in the university context into practice since, very often, recent graduates do not know where to start if placed in a company, and they need to be clearly told what to do in order to complete a given task.

More key information answering the Research Question 1, has been collected thanks to the interview of the Researcher/Academician. Although he valued all the given 7 skills in the same way with a score equal to 9, he discussed how soft skills connected with digitalization are becoming more and more important. They are applied to digital skills such as how to communicate through social media platforms, with a smartphone, and so on. Value is also given to ICT skills since, in Italy, the demand on the market for candidates with these skills exceeds the available graduates. These students find a job when they are already studying at university regardless of the soft skills they may or may not possess.

Hence in connection with Research Question 2 asking for what kind of qualifications graduates should have in order to meet the requests of the job market, we can state how the engineering and ICT fields are currently some of the key ones with the highest request from the marketplace in Italy.

Interestingly, here in Italy, universities are experimenting with new ways of delivering certifications, using for example micro-credentials as recognition of specific skills and competencies (rather than knowledge) gained differently and in various institutions through different pathways. In this way, young graduates can prove how and what kind of specific employability skills they have developed and can have these pathways recognized by a formal institution. Although this last process is still unclear and under discussion, it may represent a new way for universities to deliver qualifications connected with the development of 21st Century Skills.

References

Alhojailan, M. I. (2012). Thematic Analysis: A critical review of its process and evaluation. *West East Journal of Social Sciences*, 1(1), 39-47.

Cà Foscari University of Venice, (n.d.). *Cà Foscari CompetencyCenter*.
<https://www.unive.it/pag/31173/>

CBEN. (2018). *Competency Based Education*.
<https://www.cbenetwork.org/competency-based-education/>

Cinque, M. (2016). Lost in translation. Soft skills development in European countries. *Tuning Journal for Higher Education*, 3(2), 389-427. <https://doi.org/10.18543/tjhe>

De Santis, A., Sannicandro, K., Bellini, C., Cecconi L., & Minerva T. (2019). Valutazione e soft skills nell'adidattica universitaria. In P. Lucisano & A. M. Notti (Eds.), *Training actions and evaluation process*. (pp. 493-502). Pensa Multimedia Editore.

DeakinCo. (2017). *What are micro-credentials and how can they benefit both businesses and employees?* <https://www.deakinco.com/media-centre/news/Benefits-of-micro-credentials-for-business-and-employees>

Di Matteo, L., & Barbiero, T. (2019). Spend Less, Get More? Explaining Health Spending and Outcome Differences Between Canada and Italy. *Review of Economic Analysis*, 12(2020), 403-438.

Elene4Life, (n.d.), *eLene4Life – Learning and Interacting to Foster Employability*. <http://elene4life.eu>

EMC. (n.d). *European MOOC Consortium*. <https://emc.eadtu.eu>

Franzini, M., & Raitano, M., (2019). Earnings inequality and workers' skills in Italy. *Structural Change and Economic Dynamics*, 51, 215-224. <https://doi.org/10.1016/j.strueco.2019.09.004>

INDIRE. (n.d.). *Making Learning and Thinking Visible in Italian Secondary Schools*. <http://www.indire.it/progetto/making-learning-and-thinking-visible-in-italian-secondary-schools/>

METID. (n.d.). *E-Lene for Work Project*. <https://www.metid.polimi.it/en/portfolio/elene4work/>

MIUR. (2017). *Presentato al MEF il volume 'OECD National Skills Strategy Diagnostic Report – Italy'*. <https://www.miur.gov.it/web/guest/-/presentato-al-mef-il-volume-oecd-national-skills-strategy-diagnostic-report-italy>

MIUR. (2018). *Piano Nazionale Scuola Digitale*. <https://www.miur.gov.it/web/guest/scuola-digitale>

MIUR. (n.d.). *Indicazioni nazionali e nuovi scenari*. Ministero dell'Istruzione, dell'Università e della Ricerca, Comitato Scientifico Nazionale per le Indicazioni Nazionali per il curricolo della scuola dell'infanzia e del primo ciclo di istruzione. <https://www.miur.gov.it/documents/20182/0/Indicazioni+nazionali+e+nuovi+scenari/>

OECD. (2017a). *Education Policy Outlook – Italy*. <http://www.oecd.org/education/Education-Policy-Outlook-Country-Profile-Italy.pdf>

OECD. (2017b). Enhancing employability and skills to meet labour market needs in Italy. *OECD Economics Department Working papers*. <https://doi.org/10.1787/260deeb4-en>

OECD. (2017c). *Getting Skills Right: Italy*. <https://doi.org/10.1787/9789264278639-en>

OECD. (2017d). *Skills Strategy Diagnostic Report Italy*. <https://doi.org/10.1787/9789264298644-en>

OECD. (2018a). *The future of Education and Skills: Education 2030*. [https://www.oecd.org/education/2030/E2030%20Position%20Paper%20\(05.04.2018\).pdf](https://www.oecd.org/education/2030/E2030%20Position%20Paper%20(05.04.2018).pdf)

OECD. (2018b). *OECD Skills Strategy Diagnostic Report: Italy*. <https://doi.org/10.1787/9789264298644-en>

OECD. (2019). *OECD Skills Strategy 2019: Italy. Skills to shape a better future*. <https://www.oecd.org/italy/Skills-Strategy-Italy-EN.pdf>

POK. (n.d.). *Polimi Open Knowledge*. <https://www.pok.polimi.it>

Ricchiardi, P., & Emanuel, F. (2019). Soft Skill Assessment in Higher Education [Valutare le soft skill in Università]. *Journal of Educational, Cultural and Psychological Studies*, 18, 21-53. <http://dx.doi.org/10.7358/ecps-2018-018-ricc>

Università degli Studi dell'Insubria. (n.d.). *Competenze digitali e soft skills*.
<https://www.uninsubria.it/ugov/degreecourse/148827>

Zanazzi, S. (2018). Investing in skills to overcome the crisis? Low-skilled workers in Italy: European strategies, policies and structural weaknesses. *International Journal of Lifelong Education*, 37(2), 216-233. <https://doi.org/10.1080/02601370.2017.1406542>

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Proposal for an assessment model of the congruence between people and work skills

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Abstract

Rapid changes in the skill set needed in a profession make it easier to differentiate jobs and employment opportunities by the skills required. From this point of view, people's point of contact with organisations is their skills, not professions. Therefore, what matters is people's skills, competencies needed to get the job done, and people's potential in terms of skills development. In this sense, the present proposal aims to establish a framework to identify congruences between the skills mastered by people and the necessary skills in the work context and how to bridge the gap between them. For this purpose, a set of propositions are made: i) competences are the people's point of contact with the organisation; ii) skills do not shape people, people shape their skills, iii) professions can be defined through associated skills, iv) people more easily acquire skills that are closer to those they already possess. Based on these premises, a skills model is postulated, which can be named Person-delivery Environment-work Context (PEC). This model is interested in the fluidity of a person's skills and the autonomy over the development of these skills. To put it into practice, this model needs the following five steps: i) identify the most common skills in the labour market, ii) classify the skills identified to make exploration possible, iii) identify the representation and frequency of a given skill in each profession and the labour market, iv) create a methodology for identifying and measuring personal skills, v) create a way to calculate proximity between the person's competences (P) and the work context (C). In the proposed model, there are two observable data: the existence of competence in the universe of the work context and the presence of competence in a person. It is expected that this model will make possible the identification of congruences between people and organisations and the skill development possibilities for a person. Some limitations can be listed, but the main one is that people and work are reduced to skills in this model. However, its applications can only be thought of as part of a broader career development process that considers people and their potential and the means of developing them, obtaining satisfaction, and having decent living and working conditions.

Keywords: skills assessment, model, skills gaps, career development, upskilling, reskilling

1. Introduction

In the last few decades, the labour market has dramatically changed driven by a demand for new skills (ILO, 2020). However, in The Second Machine Age, training does not evolve quickly enough to follow new skill demands (Brynjolfsson & McAfee, 2014). In this sense, there is a need for skills training, but at the same time, there is a need to identify what skills are needed in the labour market and what skills people should acquire or develop (ILO, 2020). Many efforts have been made, and many more are necessary (Andersen et al., 2021). This proposal aims to help these efforts by establishing a framework to identify congruences between the skills mastered by people and the necessary skills in the work context, and how to fill the gap between them. The text is organised into two parts. The first part is centred on the theoretical foundations of skills definition and development. The second part presents the model and a methodology proposal.

The modern debate over job skills began with McClelland (1973). The author does not directly define skills but makes references to “superior on-the-job performance” (McClelland, 1973, p.2). A skill, in this text, is a personal characteristic related to superior performance in performing a task or in a given situation. This inaugural text differentiated skills from aptitude, something more associated with a person's natural talents but that can be improved. It also differs from abilities, which would demonstrate a particular talent in practice, and knowledge, which refers to what people need to know to perform a task (Fleury & Fleury, 2001). In the following decade, Boyatzis (1982) analysed data from studies on managerial skills and identified a set of characteristics and traits that he believed to define superior performance. This notion of performance or superior performance permeates many models in the area and has imbued the idea of quality of performance per specified quality criteria (Spencer & Spencer, 1993).

Following these initial studies, skills can be thought of as a set of knowledge, skills, and attitudes (Fleury & Fleury, 2001). Skills refer to using one's knowledge effectively and readily in execution or performance (Merriam-Webster, n.d.), while competence, on the other hand, is a quality or state (Fleury & Fleury, 2001). In the original work, McClelland (1973) uses the word skill to point to competence in a specific domain (e.g., job skill, academic skill). A skill can then be seen as a stock of resources that people have to perform their tasks (Spencer & Spencer, 1993). However, most studies, especially in the 1990s and in some contexts, such as the American, aligned competencies with the needs established by the position or existing positions in organisations (Fleury & Fleury, 2001). Rankin (2002) describes competencies as the skills and behaviours that organisations expect their employees to practice in their work. In the world of work context, skill is frequently presented in the language of performance and is more associated with organisations than with people. It is argued that this form of understanding provides a common and universally understood way of describing the expected performance in many different contexts (Armstrong, 2006). Here, the concept of skill is still considered in relation to the task and the set of tasks that are relevant and belong to a job in the official descriptions adopted in many countries (ILO, 2012). However, these definitions are still based on the principles of Taylorism-Fordism and would not be the best definition for twenty-first-century competencies (Fleury & Fleury, 2001).

A different concept of skill emerged in the French literature of the 1990s and tried to go beyond concepts associated with organisations and formal qualifications. Zarifian (1999) argues that

the main changes in the world of work justify the emergence of a new model of understanding for skills. These changes, which occurred in the transition from an industrial to a postmodern society, brought instability in the paradigms and studies on careers and work (Duarte, 2013). In industrial society, there were few points of decision (Patton, 2005), but the changes that occurred in the work environment at the end of the twentieth century have permanently shaken the notion of stable and linear careers and skills (Watts, 1996). People would have a more active role in their trajectories (Patton, 2005). Work is no longer the set of tasks associated descriptively with the job, but it is associated with the individuals and the skills they must have when facing professional situations, which are increasingly changing and complex (Fleury & Fleury, 2001). Skill is not limited to a stock of theoretical and empirical knowledge held by the individual, nor is it derived from the task and the job (Fleury & Fleury, 2001). Skill can also be seen as practical intelligence applied to the work context, based on acquired knowledge and experiences (Zarifian, 1999).

1.1. Skills as a point of contact between the person and organisation

The Theory of Work Adjustment (TWA) reflects a long history of investigation and strong links with the psychology of individual differences with its emphasis on psychometry (Dawis & Lofquist, 1984). Considered a person-environment adjustment model, the TWA evolved from trait and factors models, but, although it is still described as a model of correspondences between a person and work, it also highlights personal processes (Patton & McMahon, 2014). That is, the TWA does not only focus on matches between people and their jobs but includes personal input, like personality, cognition, and behaviour.

The TWA proposes that people look for organisations and work environments that adapt to their needs. The organisation, in turn, looks for people who can fulfil the organisation's objectives. The term 'satisfaction' is used to indicate the degree that the person (P) feels satisfied in the work/organisation context (E), and satisfaction is used to designate the degree that E is satisfied with P. The most central need for P is discovering in E the needs (or reinforcers), which can be further divided into categories of psychological and physical needs that are called values. For E, however, the most central requirements are competencies, which are operationalised as dimensions that P has, and which are considered necessary in a given E (Leung, 2008).

As an adjustment theory, the TWA focuses on the process of people adapting to their work contexts, but it actually consists of two models: a predictive model and a process model (Dawis, 2005). The predictive model focuses on the variables that explain people's satisfaction within their work environments and people's capacity to have satisfactory performance or satisfactoriness (Hesketh & Griffin, 2006). This relationship, in turn, predicts the permanence of people in work contexts. The process model focuses on how the fit between people and their contexts is achieved and maintained (Swanson & Schneider, 2013). The TWA process model postulates that a person has a set of needs and values that can (or cannot) be met by rewards available in the workplace. The work environment has a set of requirements that can (or cannot) be met by the competencies and abilities that the individual has. Each of these crossings between individuals and their environments is described by the correspondence or absence of these characteristics (Swanson & Schneider, 2013).

Thus, the point of contact between people and their work, for the TWA, is, on the one hand, skills, and on the other hand, personal values and the work context (Dawis & Lofquist, 1984).

The models proposed in this theory, to some extent, move away from the trait-factor perspective, which roughly deals with the correspondence between the person and the work (Leung, 2008). Although it is still a theory focused on content and is based on the notion of correspondence and congruence (Patton & McMahon, 2014), it does not fail to consider the person's self-determination concerning their careers (Swanson & Schneider, 2013). People are not the focus of correspondence, but their skills, and these skills are formed in the interaction of their stories, contexts, personal characteristics, and behaviours (Lent, 2013).

1.2. Developing skills and approximate skills

Underlying the ideas of the TWA, there is the notion that some degree of assimilation of the person to the work context is necessary. As soon as the person is assimilated into this context and at the same time assimilates to it, in many aspects, there is no differentiation but interaction (Harren, 1979). Taking as a starting point that there is a process of assimilation in this adjustment, the definition comes close to the processes described by Piaget's Genetic Epistemology (1971). The approach is merely illustrative, but in this example, the interaction between people and the work context can be conceived as a dialectical process of assimilation, accommodation, and balance in mutual and progressive development. There are successive phases of balance and imbalance, rebalancing that aim to incorporate new content into pre-existing structures. Another fundamental concept is that adaptation occurs when the organism changes to dynamically integrate new information (Abreu et al., 2010). Therefore, the assimilation, accommodation, and balance of a new skill can be conceived as the learning process itself, through which skills become part of the person's cognitive structure based on pre-existing structures. Previous knowledge structures around specific abilities interact with new demands and the work context to generate new structures to be incorporated by people.

Piaget's ideas proved to be valid in adults (Long et al., 1979), although his work was notable for the study of children, as it encompasses the acquisition of knowledge by all people, from birth to adulthood (Abreu et al., 2010; Padua, 2009). The model corresponds to the notion of scaffolding, with origins in Vygotsky, and is associated with hints or clues for problem solving that allows the individual to better approach similar situations in the future (Bruner, 1983). The tutors, commonly cited in the field, are these scaffolds that help in building knowledge and developing new skills. In the case of adults, the role of external tutors changes and allows space for autonomy (Botti & Rego, 2008). People move in the environment towards the acquisition of those competencies that they consider relevant. This differentiation is important to understand the notion that people exercise their capacity of agency in the skills they consider relevant (Bandura, 2006).

The interaction between a person and the environment is the driver of Holland's theory (1959). The secondary constructs of the theory (i.e., congruence, identity, consistency, and differentiation) are good references in the process of vocational decision-making and interventions (Reardon & Lenz, 1999). However, the central postulate of the theory is the classification of people according to occupational characteristics, generating a typological model with six divisions: Realistic (R), Investigative (I), Artistic (A), Social (S), Entrepreneur (E), and Conventional (C)—(RIASEC). The model can be spatially represented in a circle, and the similarity among types is given by proximity within the circle. That is, R is adjacent (similar) to I, but opposite to S. The model is still considered influential (Ishitani, 2010), and the typology is widely used (e.g., Etzel et al., 2021).

Environmental models like RIASEC arise from the assumption that, just as it is possible to classify people by comparing them with personality types, it is also possible to classify environments by comparing them with environmental models (Holland, 1975). The occupational environments proposed by Holland are both real environments in which the person is located and a typology of personality. They are a style and an environment. The theory assumes that the family, social groups, school, university, and work are environments subject to classification according to career preferences. The characteristics of an environment depend on the characteristics of its members. Knowing the type of people that form a group, it is possible to deduce the environment that this group sets up (Holland, 1975). People (each with a specific type) will seek environments or environmental types that enable them to exercise their skills and abilities, express their attitudes and values, and assume roles that are consistent with their personalities (Teixeira et al., 2008). The behaviour, therefore, is determined in the interaction of personalities and environments. The proximity between these personalities and environments is called congruence and is based on the hypothesis that the types (Realistic, Investigative, Artistic, Social, Entrepreneur, Conventional) are arranged in a circle. Some works within this field of investigation have evaluated congruence through direct correspondence between types (Grandy & Stahman, 1974; Dewinne et al., 1980) or with proximity formulas (e.g., Orent et al., 2013). The study of Oren and colleagues is an example of the RIASEC circular hypothesis. More recent works (e.g., Etzel et al., 2021) are based on the circumflex model of interests, with its underlying axes—People, Things, and Data Ideas (Prediger, 1982). These works use more complex calculations with a vectorial structure but maintain the idea of circular distribution (Nagy, 2017).

The two presented theoretical premises, Piaget's genetic epistemology (1971) and Holland's model (1959, 1992), are relevant to thinking about a person's skills, above all because of the possibility of a spatial representation. The notion of assimilation, accommodation, and balance of a skill translates movement; the notion of the types of RIASEC represented spatially translates representation in a space of action. In this sense, Holland's proposal has some relation to the representation of the living space proposed by Lewin (1936, 1973). Translated adequately into the study of work skills, the combination of these forces that are set in motion can be a valid alternative to think about the set of possibilities that people have in terms of their skills.

2. The Person-delivery Environment-Context Model (PEC Model)

Until now, the ideas have briefly focused on skills in the work context, their conceptualisation, relationship with professions and the work context, and the learning process. But the underlying reasons for acquiring this or that competency involve complex reasons in a complex process. Certainly, proposals that integrate the person to their contexts, such as the socio-cognitive theory of career (Lent, 2013; Lent et al., 1994), can answer these questions. In this sense, the theories of self-concept and career development formulated by Super, and more recently by Savickas (2002), and content and process derived from the socio-cognitive perspective, such as the social learning theory of Mitchell and Krumboltz (1996), are an adequate response to the process.

However, the objectives of this proposal are to propose a framework capable of illustrating how personal skills can be associated with skills existing (or required) in the work context. This association will help people to: develop new skills in the same work context (e.g., new possibilities within the same job or a new position in the same workplace); apply their skills to

a work context (e.g., looking for a job); and apply new skills to new work contexts (e.g., changing jobs). Based on these objectives and the train of thought elaborated, it is possible to trace some lines of action which, in turn, can be converted into a set of propositions:

a) Skills are the person's point of contact with the organisation.

A skill is a set of abilities (knowledge, skills, attitudes, and values) that people mobilise to deliver something that adds value to the person and to the work context in which it is inserted (Fernandes, 2013). Skills, in this sense, are the point of contact between people and the organisation (Dawis, 2005; Fleury & Fleury; 2002).

b) Skills do not shape people; people shape their skills.

People's skills are formed by personal characteristics (values, aptitudes, needs, etc.) during the interaction and contact with a certain task. If we think about a profession without this entity, it is possible to observe with more relevance the skills that compose it and that are mobilised to create something, be it a product, service, or process. Every work activity to be done needs a series of skills. People approach every work activity through their skills. Thus, people actively use their skills, which are not traits, but malleable characteristics (Dawis, 2005).

c) Professions can be defined through associated skills.

Skills are ultimately the factor that creates clusters that allow for a more accurate differentiation of professions (Gotfredson, 2005; ILO, 2012). A similar idea is adopted in professional classifications, where the differentiation between professions in smaller groups is based on identifiable skills (ILO, 2012).

d) People more easily acquire skills that are closer to those they already possess.

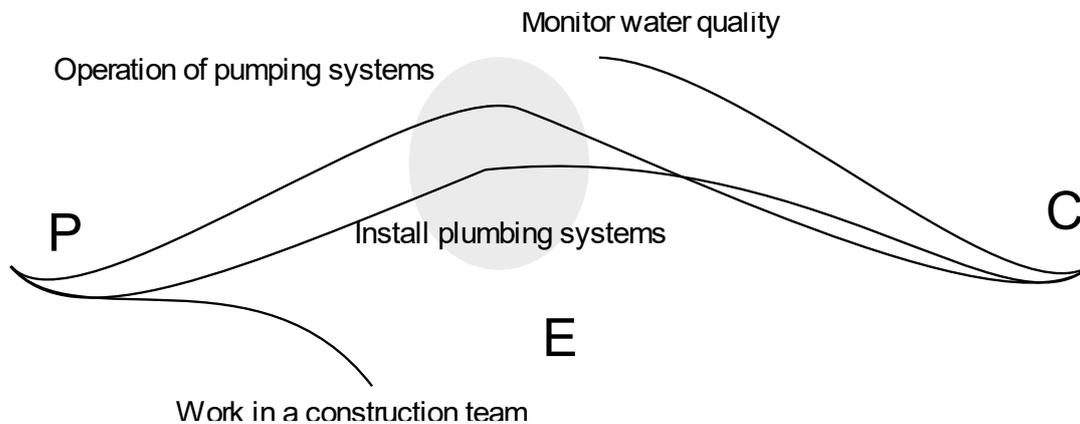
People assimilate new skills to pre-existing cognitive schemes (skills already acquired), so it can be assumed that workers have an interest in skills that are familiar to them (Abreu et al., 2010; Piaget, 1971). In the work context, whether in a new task or a new job, it can be hypothesised that people act according to this same logic. Thus, there is something like a skill development process in quantity and complexity. This proposition is in part associated with theories of learning transfer, which can be understood as the productive application of previous learning and experiences to new contexts (Hajian, 2019). This approach to context must be extrapolated from the simple change of environment to flexibility in applying a skill to different situations, which will lead to the alteration of that initial skill (Perkins & Salomon, 1989). In concrete terms, a person who knows a certain programming language receives a project to develop a new application, and in addition to deepening the knowledge of this language, should also be seeking to learn new ones (Hajian, 2019). This will create new connections with other languages, which will help them to acquire future skills in new languages.

2.1. Model proposal

Based on these premises, it is possible to postulate a skill development model, which, by the units involved, can be called Person-delivery Environment-Context (PEC) (Figure 1). This model is interested in the fluidity of a person's skills and in their autonomy over the development of these skills; therefore, the notion that people exercise the capacity of agency over their skills is implicit, as proposed in the socio-cognitive theory (Bandura, 2006). In other

words, people deliberately act on their skills because they are interested in a certain effect, that is, these skills are directed within the person's potential to obtain the desired effect.

FIGURE 1. PERSON-DELIVERY ENVIRONMENT-CONTEXT MODEL (PEC)

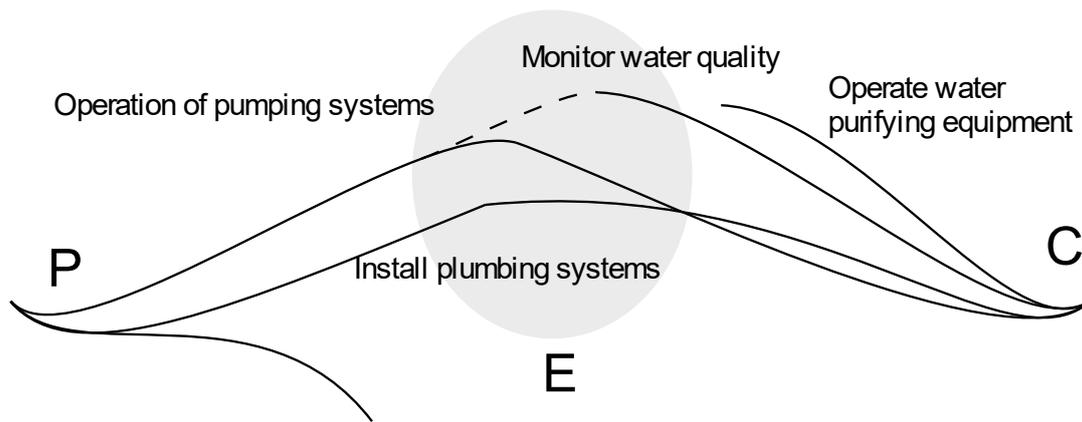


Source: Authors own elaboration.

In this model, skills are thought of as lines that connect people to the work context, which in turn has its own lines, or skills that are inherent to it. The point of contact is called delivery, since the lines (or skills) present in the work context (C) are not the skills themselves, but places to be filled by human action. The meeting point is the delivery environment (E), both of the set of knowledge, skills, and attitudes that involve a competency, as well as of the delivery of something that the same competency produces (products, services, processes,). The delivery environment (E) of something is the place of interaction between the person (P) and the work context (C). A specific skill is a line that joins the work context to generate a unique delivery. A new delivery needs to have a corresponding line; a line can come from the subject, as it can branch from another already existing in the person. The context is a matrix of endless lines, and each line represents a skill present in the labour market. People act in a small part of this multiplicity, and the lines (skills) that they manage are limited due to this complexity. But they are fruitful, malleable, and can be reordered and reconfigured by people depending on their orientation.

The work context does not need to have all the lines tied to the person. These remaining lines are necessary skills, but ones that the person can develop. They may develop because the very specific cluster of skills for that job demands it. For example, a worker, with skills in pumping systems, represented in Figure 1, can develop skills with some similarities, such as monitoring water quality systems. The dotted line in Figure 2 represents this new skill, that can bring the worker closer to other lines, such as operating water purifying equipment. The delivery points are diversified, and these points determine the set of skills that the person sees as possible.

FIGURE 2. DETAIL OF THE FORMATION OF A NEW LINE OF SKILL



Source: Authors own elaboration.

Note: The dotted line represents skills that form from the left, the person's field (P), towards the right, where the work context (C) is.

Thus, if it is possible to keep in mind the set of skills of an individual and the set of job skills available in the work context (C), it is possible to indicate a scope of possibilities for this individual. These possibilities are a function of the peoples' potential, and they are not static. What used to be considered fixed traits can be understood as skills that can be developed through guidance and instruction (Kautz et al., 2014).

In this sense, the present proposal aims to establish a minimum framework to create a system to identify congruences between the skills mastered by people and the skills necessary for a given work context. Identifying these congruences (and discrepancies) would help in at least four situations:

- i) developing skills: making new deliverables (e.g., new products and services) in the same context (e.g., same organisation).
- ii) looking for a new job: making the same deliverables (e.g., new products and services) in different contexts (e.g., another job).
- iii) looking for a new job that employs new skills: making different deliverables (e.g., new products and services) in different contexts (e.g., another job).
- iv) looking for a new position: making different deliverables (e.g., new products and services) in the same context (creating new things, a new role).

2.2. Methodology Proposal

For the presented model to be put into practice, it is necessary to complete five steps: 1) identify the most common skills in the labour market, 2) identify the representation and frequency of a certain skill in each profession and in the labour market, 3) identify a classification for the identified skills that makes exploration possible, 4) create a methodology for identifying and measuring personal skills, and 5) create a way to calculate proximity between the skills of the person (P) and the work context.

2.2.1. Listing skills

Identify the most common skills in the labour market.

Despite the differences among the several classifications, there is a need to identify, as accurately as possible, the universe of skills in the labour market, even if this identification will not be stable. An interesting example to be cited is the European Classification of Skills/Competences, Qualification and Occupation (ESCO), which is an official job classification promoted by the European Commission to be adopted in the near future by employment services in European countries. The European Commission launched the project in 2010, as part of the Europe 2020 Strategy, with an open consultation with member countries who are intimately involved in the development and dissemination of the ESCO. The framework was primarily developed to help bridge the gap between the world of education and training and the labour market. Thus, it would be possible to detect incompatibilities between the skills of unemployed workers and the needs of companies (Fernández-Sanz et al., 2017).

The ESCO framework provides a rich description of essential and optional knowledge/skills related to each included profession. It identifies and categorises skills, competences, qualifications, and occupations in a standard way, using standards and terminology in all of the languages. The database is also interesting because it is based on official classifications (ISCO). There is correspondence in the Large Groups, Sub-Large Groups, Sub-Groups, and Base Groups, but not in the professions (ESCO, 2020; ILO, 2012).

Similar jobs such as development by the US Department of Labor (National Center for O*NET Development, 2021) are a sampling of the variability that can exist in job descriptions and associated skills. International classifications like the International Standard Classification of Occupations (ISCO-08) guide studies in several countries; however, due to regional specificities, many countries have their own classifications. The top rankings, such as the top 10 groups in ISCO08, have relative stability across several countries (ILO, 2012). But the complexity and speed of the job market is possibly not covered by these descriptions; just look at the set of more than thirteen thousand skills listed by ESCO.

2.2.2. Quantifying skills

Identify the representation and frequency of a certain skill in each profession and in the labour market.

Most countries do not have comprehensive instruments to assess and quantify skills. Assessments usually involve only a few skills, even though they are extremely comprehensive and significant from the point of view of directing public policies, such as the international assessment program of adult skills (PIACC) led by the OECD (Wilson, Tarjáni & Rihova, 2016). This project uses assessments of cognitive, social, and physical skills (OECD, 2016).

In addition to traditional techniques, such as interviews and questionnaires aimed at workers and managers, the ILO, in a recent publication, has highlighted work using big data and machine learning techniques (ILO, 2020). In the last twenty years, the labour market has seen the exponential growth of job offers with the help of portals that greatly facilitated the process of disseminating information (Giabelli, et al., 2020). For some time now, this information has been considered valuable in understanding the labour market and guiding workers (CEDEFOP, 2018; Giabelli, et al., 2020; Zhang et al., 2019). Projects like the Real-time Labor Market Information on Skill Requirements: Setting up the EU System for Online Vacancy Analysis,

CEDEFOP explores online job vacancies (OJVs) as a new source of information about the job market in real-time.

2.2.3. Classifying skills

Identify a classification for the identified skills that make exploration possible.

From the thousands of divisible skills (ESCO, 2020; LinkedIn, 2020), several classifications can be distinguished, but a review of these classifications reveals that they are often confused (Javed et al., 2019). Even when new skills are identified, they may not be new skills but just renamed (Javed et al., 2019). The finding indicates that there is an overlap of skills and a lack of consensus on definitions (Burrus et al., 2013; Jang, 2016; Su et al., 2015). However, apparently, four schemes show greater coherence (Javed et al., 2019): enGauge (Cheryl, 2002), P21 (Greenhill, 2009), SCANS (1991), and the ONet* report (National Center for O* NET Development, 2021). The other commonly used systems are derived from these main ones (e.g., Ananiadou & Claro, 2009; Binkley et al., 2012; Finegold & Notabartolo, 2010).

It is necessary to make an important distinction: the classifications of professions, such as ISCO-08 (ILO, 2012), are based on the profession, its tasks, and activities. These classifications only include skills needed in the workplace and do not tie into associated skills from one profession to another. Alternatively, approaches that see the professional through the skills, not the skills through the professional, can achieve a more integrated and real view. The ESCO Platform (European Skills, Competences, Qualifications and Occupations, 2021) lists 12,000 work skills. The curriculum portal and the Social LinkedIn network lists 36,000 skills (LinkedIn, 2020). These examples show that a skill represents a real need from the labour market; making it perhaps more important than described professions. Based on this information, it is observed that there is a need to adopt classification structures in order to make possible a certain universalisation (Armstrong, 2006), or at least to provide some guidance to workers, recruiters, and organisations (Javed et al., 2019). Considering that the use of a given skill is not uniform, each profession has a quantum of use (ONET, 2021) or relevance of that skill (CEDEFOP, 2020).

2.2.4. Measuring individual skills

Create a methodology for identifying and measuring personal skills.

Professions' classifications do not represent the real skills needed, nor do they effectively recognise that professions are typically sets of skills. Thus, the skills used in any job position cannot be captured by a one-dimensional indicator (Dickerson & Wilson, 2012). In this sense, the advantages of approaches such as job requirements to measure skills is noted. These approaches measure the competencies that are used by individuals in their jobs, with information obtained from their (self-reported) responses to questions about the degree (and sometimes intensity) to which their jobs require them to perform certain tasks (Wilson, Tarjani & Rihova, 2016).

An instrument to assess a person's mastered skills must be a bit more diversified than those commonly used in national or transnational studies such as those cited (Wilson et al., 2016). The development of such a tool, in addition to using a narrowing strategy in a certain area, should make it simple to choose several areas. Possibly, it should be an interactive tool, only

possible to be simply presented, in digital format. This would create obstacles depending on the users' skills in technology, but which can be overcome with support or supervision.

2.2.5. Calculating proximities

Create a way to calculate proximity between the skills of the person (P) and the work context.

The image selected to represent the model (Figure 1) is an attempt to reflect the dynamics of the system formed by people (P) and work contexts (C). These lines are thought about within the idea that there is a dynamic interaction, and in this sense, static inferences might not be applicable at all (Saito et al., 2014). In the proposed model there are two observable data: the probability of finding a skill in the work context and the probability of finding a skill in a person, which makes room for analysis based on Bayesian inference or interpretation. In the Bayesian interpretation, probability measures the degree of belief. Bayes' theorem links the degree of belief in a position before and after considering the evidence. For example, it is believed with 50% certainty that a coin is twice as likely to come down heads. If the coin is tossed several times, the degree of belief can increase, decrease, or remain the same depending on the observed results (Maioli, 2014).

Figure 2 is a topological representation of skills, close to conceptions such as Lewin's Gestalt, considered the founder of social psychology and organisations (Doreian, 2017). Lewin (1936, 1973) proposes that the whole situation can be divided between person (P) and environment (E), and behaviour (B), in this case, acquisition or development of skills. Thus, $B = f(S) = f(P, E)$, where behaviour is a function of the person and the environment. But the main point to highlight in Lewin's proposal is the notion of Life Space, defined as the totality of possible events (Lewin, 1936, 1973). It is a vast concept, but the notion is interesting to bring here because, as a representation, it is able to indicate the position of people and objectives in certain regions, considering the location of events, relationship between neighbourhoods, limits, approaches, and setbacks, and movements of forces in certain directions (Lewin, 1973). It is precisely this notion of space that approximates Bayes' idea. In classical inference, all observed data form just one of many possible outcomes under the same circumstances. But the space of decisions (parametric space or space of states of nature) is taken as something mutable, that is, with each new repetition the probability changes. In a simple way, the presence of a certain skill ends up influencing the ones that come next. If competencies are considered spatially, it is possible to identify future contact points. In other words, it is possible to identify a space where a skill is most likely to develop. This space includes the area represented by the set of skills that an individual (P) has and the area represented by the work context (C). The contact area was called the delivery environment (E). Predicting E allows for the possibility to help the person think about their possibilities. It will not give the correspondences between the person and a profession, but the profession gives possibilities that a person has based on his skill possibilities.

These five steps are preparatory for model implementation and validation. More precisely, the PEC model would create ways to recommend which skills can be developed by calculating the proximity between the skills of the person (P) and the work context (C). Essentially, it is a formula with three variables: People skills (skills people already have), Deliver environment (skill to develop), and Context skills (skills needed in the work context). This model would enable accurate recommender systems for a flexible learning process and provide a base calculation for algorithms developed within this purpose (Horváth & Molnár, 2021).

3. Conclusion and main limitations of the model

The PEC model brings up some ideas about how people can improve or change their careers and what can be translated for upskilling or reskilling. It is possible to summarise the model's main ideas with three simple considerations: i) people tend to develop competences that are near to previous competences they already have, ii) the competences to develop are a function of people's previous competences and the context of work, iii) the potential of an individual can be measured in the environment where people will deliver their competences, by the distance among their own competences and the work context needed competences. Hypothetically, it would be possible to measure in which work context, be it a job, a profession, or an enterprise, people would develop a larger number of competences branches, or new competences. In other words, it could be possible to measure in which context people will better develop their potential.

3.1. Practical implications

It is commonplace to say that people will need to find learning opportunities throughout their lives to develop the skills needed in the work context continuously. However, lifelong learning pathways are unique for everyone, since people's career paths, including skills development, is a product of personal and contextual variables (Lent & Brown, 2013). This notion implies flexible systems for skills development. Proposals like the modular learning system or micro-credentials are possible solutions (Andersen et al., 2020), even though they are focused on certification. However, there is a trend toward extreme modularity, as seen in massive online open courses (MOOCs), and people will need some guiding strategies for skill development (Horváth & Molnár, 2021). The PEC model can be useful within these challenges through the use of tailored learning paths. Specifically, such paths indicate which skills can be developed, how, and when. A company could use a recommender system based on the PEC model to identify the upskilling gaps of a specific worker or an entire team. Workers could use the same system to identify upskilling and reskilling possibilities.

3.2. Limitations

The final idea of the proposal is very close to the ideas of John Holland, who assumes that if it is possible to classify people by comparing them to personality types, it is also possible to classify environments by comparing them to environmental models (Holland, 1975). As initially conceived, congruence refers to the notion that different types require different environments so that a type being in the right environment would find fertile ground for development (Holland, 1992, p. 5). Holland's assumption has strong empirical evidence over the 60s (Nauta, 2010), which is still in use with reformulations and adaptations (e.g., Etze et al., 2021). However, some criticisms can be made, such as Mitchell and Krumboltz (1996), who criticise the notion of congruence, pointing out the difficulties in correctly framing the person-environment. Others question the timeliness of the model, which excludes all career development experience (Miller-Tiedeman & Tiedeman, 1985; Savickas et al. 2009). Even if the congruence as proposed by the PEC model is not between the person and the environment, but between competences, the same criticisms and limitations made to Holland's model regarding the concept of congruence can be assumed. The same limitations can be extended to the presented model. People and work are reduced to competences, and it would be about seeing only the necessary tasks and not the work of art that these tasks produce, nor the artist. Additionally, skills development is a complicated learning process and the PEC model is just

illustrative, however, recent proposals, like the 6-level skill development model from Shtaltovna (2021), can shed some light on this process.

This limitation is undoubtedly not the only one but the main one. The most suitable solution for the criticism to be overcome is mainly the model's complementarity. The PEC can only be thought of and used by people who can act on their potential and develop it to obtain satisfaction and have decent living and working conditions. But it does not indicate how to reach this degree of autonomy and development, although obtaining new skills helps in this regard. The proposal must be complemented by theories that strive to understand people from their top trajectories, potentials, difficulties, and goals. Theories from career development psychology can fill these significant gaps, such as those proposed by Life Design (Savickas, et al., 2002) and by socio-cognitive career theories in their different models (Lent, 2013; Lent & Brown, 2013; Lent et al., 1994).

References

- Abreu, L. C., Oliveira, M. A., Carvalho, T. D., Martins, S. R., Gallo, P. R., & Reis, A. O. A. (2010). Piaget's genetic epistemology and constructivism. *Journal of Human Growth and Development*, 20(2), 361-366.
- European Commission, Directorate-General for Education, Youth, Sport and Culture, Andersen, T., Shapiro Futures, H., & Nedergaard Larsen, K. (2021). *A European approach to micro-credentials: output of the micro-credentials higher education consultation group: final report*, Publications Office. <https://data.europa.eu/doi/10.2766/30863>
- Ananiadou, K., & Claro, M. (2009). 21st Century Skills and Competences for New Millennium Learners in OECD Countries. *OECD Education Working Papers*, 41. <https://doi.org/10.1787/218525261154>
- Armstrong, M. (2006). *Human Resource Management Practice*. 10th Edition. Kogan Page.
- Bandura, A. (2006). Toward a Psychology of Human Agency. *Perspectives on Psychological Science*, 1(2), 164–180. <https://doi.org/10.1111/j.1745-6916.2006.00011.x>
- Binkley, M., Erstad, O., Herman, J., Raizen, S., Ripley, M., Miller-Ricci, M., & Rumble, M. (2012). Defining Twenty-First Century Skills. In: P. Griffin, B. McGaw, & E. Care (Eds.), *Assessment and Teaching of 21st Century Skills*. Springer. https://doi.org/10.1007/978-94-007-2324-5_2
- Botti, S. H., & Rego, S. (2008). Preceptor, supervisor, tutor and mentor: what are their roles? *Revista Brasileira de Educação Médica*, 32(3), 363-373. <https://doi.org/10.1590/S0100-55022008000300011>
- Boyatzis, R. E. (1982). *The Competent Manager*. John Wiley & Sons.
- Bruner, J. (1983). *Savoir faire, savoir dire: le développement de l'enfant*. (6th Edition). PUF.
- Brynjolfsson, E., & McAfee, A. (2014). *The second machine age: Work, progress, and prosperity in a time of brilliant technologies* (1st Edition). W. W. Norton & Company.
- Cheryl, L. (2002). *enGauge 21st Century Skills: Literacy in the Digital Age*. North Central Regional Educational Lab.
- Burrus, J., Jackson, T., Xi, N., & Steinberg, J. (2013). Identifying the most important 21st century workforce competencies: An analysis of the occupational information network (O* Net). *ETS Research Report Series*, 2013(2), 1–55. <https://doi.org/10.1002/j.2333-8504.2013.tb02328.x>

-
- Dawis, R. (1994). The theory of work adjustment as convergent theory. In M. L. Savikas & R. W. Lent (Eds.), *Convergence in career development theories: Implications for science and practice* (pp. 33–43). CPP Books.
- Dawis, R. V., & Lofquist, L. H. (1984). *A psychological theory of work adjustment*. University of Minnesota Press.
- Dewinne R. T. F., Overton T. D., & Schneider, L. J. (1978). Types Produce Types-Especially Fathers. *Journal of Vocational Behavior* 12, 140-144. [https://doi.org/10.1016/0001-8791\(78\)90028-3](https://doi.org/10.1016/0001-8791(78)90028-3)
- Dickerson, A., & Wilson, R. (2012). *Developing occupational skills profiles for Singapore: A methodological proposal*. Singapore: Civil Service College; Institute for Adult Learning
- Doreian, P. (2017). Networks in Social Psychology, Beginning with Kurt Lewin. In R. Alhajj, & J. Rokne (Eds.), *Encyclopedia of Social Network Analysis and Mining*. Springer. https://doi.org/10.1007/978-1-4614-7163-9_79-1
- Etzel, J. M., Holland, J., & Nagy, G. (2021). The internal and external validity of the latent vocational interest circumplex: Structure, relationships with self-concepts, and robustness against item-order effects. *Journal of Vocational Behavior*, 124, 103520. <https://doi.org/10.1016/j.jvb.2020.103520>
- European Skills, Competences, Qualifications and Occupations – ESCO (2021). *Tools & Resources*. <https://ec.europa.eu/esco/portal/download>
- European Classification of Skills/Competences, Qualification and Occupation – ESCO (2020). Esco v1.0.8.
- Fernandes, B. (2013). *Gestão Estratégica de Pessoas com Foco em Competência*. Elsevier.
- Fernández-Sanz, L., Gómez-Pérez, J., & Castillo-Martínez, A. (2017). e-Skills Match: A framework for mapping and integrating the main skills, knowledge and competence standards and models for ICT occupations. *Computer Standards & Interfaces*, 51, 30-42. <https://doi.org/10.1016/j.csi.2016.11.004>
- Finegold, D., & Notabartolo, A. S. (2010). *21st-Century Competencies and Their Impact: An Interdisciplinary Literature Review Transforming the US Workforce Development System*. Labor and Employment Relations Association.
- Fleury, M. T., & Fleury, A. (2001). Building the concept of competence *Revista de Administração Contemporânea*, 5, 183-196. <https://doi.org/10.1590/S1415-65552001000500010>
- Grandy, T. G., & Stahmann, R. F. (1974). Types Produce Types: An Examination of Personality Development using Holland's Theory. *Journal of Vocational Behavior*, 5, 231-239. [https://doi.org/10.1016/0001-8791\(74\)90036-0](https://doi.org/10.1016/0001-8791(74)90036-0)
- Greenhill, V. (2009). P21 framework definitions document. <http://www.p21.org/about-us/our-history>
- Gottfredson, G. (2005). Career Development in Organizations. In W. B. Walsh, & M. L. Savickas (Eds.), *Handbook of Vocational Psychology: Theory, Research, and Practice*. 3rd Edition. (pp. 297-318). Lawrence Erlbaum Associates.
- Hajian, S. (2019). Transfer of Learning and Teaching: A Review of Transfer Theories and Effective Instructional Practices. *IAFOR Journal of Education*, 7(1), 93-111. <https://doi.org/10.22492/ije.7.1.06>
- Harren, V. A. (1979). A model of career decision-making for college student. *Journal of Vocational Behavior*, 14, 119–133. [https://doi.org/10.1016/0001-8791\(79\)90065-4](https://doi.org/10.1016/0001-8791(79)90065-4)
- Hesketh, B., & Griffin, B. (2005). Work adjustment. In W. B. Walsh, & M. L. Savickas (Eds.), *Handbook of vocational psychology*. 3rd Edition. (pp. 245-266). Lawrence Erlbaum Associates.

-
- Hesketh, B., & Griffin, B. (2006). Minnesota theory of work adjustment. In J. H. Greenhaus, & G. A. Callanan (Eds.), *Encyclopedia of career development* (pp. 507-510). SAGE Publications.
- Holland, J. L. (1959). A theory of vocational choice. *Journal of Counseling Psychology*, 6, 35–45. <https://doi.org/10.1037/h0040767>
- Holland, J. L. (1975) Técnica de la elección vocacional: tipos de personalidad y modelos ambientales. Editorial Trillas.
- Holland, J. L. (1992). Making vocational choices: *A theory of vocational personalities and work environments*. 2nd Edition. Psychological Assessment.
- Horváth, B., & Molnár, B. (2020, Jun 17-21). *Dynamic process modeling of micro-credentials*. [Paper presentation]. Developments in Computer Science, Budapest, Hungary. http://dcs.elte.hu/wp-content/uploads/2022/01/DCS_proceedings.pdf
- ILO- International Labour Organization (2012). *International Standard Classification of Occupations: ISCO-08*. https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_172572.pdf
- ILO- International Labour Organization (2016). *ISCO-08 Structure, index correspondence with ISCO-88*. <https://www.ilo.org/public/english/bureau/stat/isco/isco08/index.htm>
- ILO- International Labour Organization (2020). *The feasibility of using big data in anticipating and matching skills needs* https://www.ilo.org/wcmsp5/groups/public/---ed_emp/---emp_ent/documents/publication/wcms_759330.pdf
- INE - Instituto Nacional de Estatística (2010). *Classificação Portuguesa das Profissões*. INE.
- Ishitani, T. T. (2010). Exploring the effects of congruence and Holland's personality codes on job satisfaction: An application of hierarchical linear modeling techniques. *Journal of Vocational Behavior*, 76, 16–24. <https://doi.org/10.1016/j.jvb.2009.06.014>
- Jang, H. Identifying 21st Century STEM Competencies Using Workplace Data. *J Sci Educ Technol*, 25(2016), 284–301. <https://doi.org/10.1007/s10956-015-9593-1>
- Kautz, T., Heckman, J. J., Diris, R., ter Weel, B., & Borghans, L. (2014). Fostering and Measuring Skills: Improving Cognitive and Non-Cognitive Skills to Promote Lifetime Success, IZA Discussion Papers, N° 8696, *Institute for the Study of Labor*.
- Le boterf, G. (1995). *De la compétence - essai sur un attracteur étrange*. Tirage.
- Lent, R. W. (2013). Social cognitive career theory. In S. D. Brown, & R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work*. 2nd Edition. (pp. 115-146). Wiley.
- Lent, R. W., & Brown, S. D, (2013). Social cognitive model of career self-management: Toward a unifying view of adaptive career behavior across the life span. *Journal of Counseling Psychology*, 60(4), 557-568. <https://doi.org/10.1037/a0033446>
- Lent, R. W., Brown, S. D., & Hackett, G. (1994). Towards a unifying social cognitive theory of career and academic interests, choice and performance. *Journal of Vocational Behavior*, 45(1), 79-122. <https://doi.org/10.1006/jvbe.1994.1027>
- Leung, S. A. (2008). The big five career theories. In J. A. Athanasou, & R. Van Esbroeck (Eds.), *International handbook of career guidance* (pp. 115-132). Springer Science.
- Lewin, K. (1936). *Principles of topological psychology*. McGraw-Hill.

-
- Lewin, K. (1973). *Principio de Psicología Topológica*. Cultrix.
- Long, H. B., McCrary, K., & Ackerman, S. (1979). Adult Cognition: Piagetian Based Research Findings. *Adult Education*, 30(1), 3–18. <https://doi.org/10.1177/074171367903000101>
- LinkedIn (2020). *Find new jobs with the skills you already have*. <https://linkedin.github.io/career-explorer/#explore>
- Maioli, M. C. (2014). *Inferência bayesiana como um procedimento de decisão*. (Tese de Mestrado, Universidade de Campinas). <https://www.ime.unicamp.br/~laurarifo/alunos/monografiaMayara.pdf>
- McClelland, D. C. (1973). Testing for competence rather than for "intelligence." *American Psychologist*, 28(1), 1–14. <https://doi.org/10.1037/h0034092>
- Merriam-Webster. (n.d.). Competence. In *Merriam-Webster.com dictionary*. <https://www.merriam-webster.com/dictionary/competence>
- Miller-Tiedeman, A., & Tiedeman, D. V. (1985). Educating to advance the human career during the 1980s and beyond. *Vocational Guidance Quarterly*, 34, 15–30. <https://doi.org/10.1002/j.2164-585X.1985.tb01098.x>
- Mitchell, L. K., & Krumboltz, J. D. (1996). Krumboltz's learning theory of career choice and counselling. In D. Brown, L. Brooks, & Associates (Eds.), *Career choice and development*. 3rd Edition. (pp. 233–280). Jossey-Bass.
- Javed, M. S, Athar, M. R., & Saboor, A. (2019). Development of a twenty-first century skills scale for agri varsities. *Cogent Business & Management*, 6(1). <https://doi.org/10.1080/23311975.2019.1692485>
- McClelland, D. C. (1973). Testing for competence rather than for "intelligence." *American Psychologist*, 28(1), 1–14. <https://doi.org/10.1037/h0034092>
- Nagy, G., Brunner, M., Lüdtke, O., & Greiff, S. (2017). Extension Procedures for Confirmatory Factor Analysis, *The Journal of Experimental Education*, 85(4), 574-596
<https://doi.org/10.1080/00220973.2016.1260524>
- National Center for O*NET Development. (2021). O*NET OnLine. <https://www.onetonline.org/>
- Nauta, M. M. (2010). The development, evolution, and status of Holland's theory of vocational personalities: Reflections and future directions for counseling psychology. *Journal of Counseling Psychology*, 57(1), 11–22. <https://doi.org/10.1037/a0018213>
- OECD - Organization for Economic Co-operation and Development (2019). *Future of Education and Skills 2030 - OECD Learning Compass 2030: A Series of Concept Notes*. https://www.oecd.org/education/2030-project/contact/OECD_Learning_Compass_2030_Concept_Note_Series.pdf
- OECD - Organization for Economic Co-operation and Development (2016). *The Survey of Adult Skills: Reader's Companion 2nd Edition*. OECD Skills Studies, OECD Publishing.
<https://doi.org/10.1787/9789264258075-en>
- Oren, L., Caduri, A., & Tziner, A. (2013). Intergenerational occupational transmission: Do offsprings walk in the footsteps of their moms or their papas, or both? *Journal of Vocational Behavior*, 83(3), 551–560. <https://doi.org/10.1016/j.jvb.2013.08.003>
- Pádua, G. L. D. (2009). A epis-temologia genética de Jean Piaget. *Revista FACEVV*, 1(2), 22-35.
- Parsons, T. (1939). *The Professions and Social Structure*. *Social Forces*, 17(4), 457–467.
<https://doi.org/10.2307/2570695>

-
- Patton, W. (2005). A postmodern approach to career education: What does it look like? *Perspectives in Education*, 23(2), 21-28.
- Patton, W., & McMahon, M. (2014). *Career development and systems theory: Connecting theory and practice*. 3rd Edition. Sense Publishers.
- Salomon, G., & Perkins, D. N. (1989). Rocky roads to transfer: Rethinking mechanisms of a neglected phenomenon. *Educational Psychologist*, 24(2), 113–142. https://doi.org/10.1207/s15326985ep2402_1
- Prediger, D. J. (1982). Dimensions underlying Holland's hexagon: Missing link between interests and occupations? *Journal of Vocational Behavior*, 21(3), 259–287. [https://doi.org/10.1016/0001-8791\(82\)90036-7](https://doi.org/10.1016/0001-8791(82)90036-7)
- Piaget, J. (1971). The theory of stages in cognitive development. In D. R. Green, M. P. Ford, & G. B. Flamer (Ed.), *Measurement and Piaget*. McGraw-Hill.
- Rankin, N. (2002). Raising performance through people: the ninth competency survey, *Competency & Emotional Intelligence*, 2–21.
- Rearson, R. C., & Lenz, J. G. (1999). Holland's Theory and Career Assessment. *Journal of Vocational Behavior*, 55, 102–113. <https://doi.org/10.1006/jvbe.1999.1700>
- Rodrigues, M. L. (2002). *Sociologia das Profissões*. 2nd Edition. Celta.
- Saito, H., Katahira, K., Okanoya, K., & Okada, M. (2014). Bayesian deterministic decision making: a normative account of the operant matching law and heavy-tailed reward history dependency of choices. *Front Comput Neurosci*. 8, 18. <https://doi.org/10.3389/fncom.2014.00018>
- Savickas, M. L. (2002). Career construction: A developmental theory of vocational behavior. In D. Brown, & Associates (Eds.), *Career choice and development*. 4th Edition. (pp. 149-205). Jossey Bass.
- Savickas, M. L., Nota, L., Rossier, J., Dauwalder, J. P., Duarte, M. E., Guichard, J., Soresi, S., VanEsbroeck R., & VanVianen, A. E. M. (2009). Life designing: A paradigm for career construction in the 21st century. *Journal of Vocational Behavior*, 75, 239–250. <https://doi.org/10.1016/j.jvb.2009.04.004>
- Scans. (1991). *What work requires of schools: A scans report for America 2000*. US Department of Labor.
- Shtaltovna, Y. (2021). Can a Skill be Measured or Assessed? 6-Level Skills Development Approach to Skill Assessment. *GiLE Journal of Skills Development*, 1(1), 12–24. <https://doi.org/10.52398/gjds.2021.v1.i1.pp12-24>
- Spencer, L. M., & Spencer, S. M. (1993). *Competence at work: Models for superior performance*. Wiley.
- Swanson J. L., & Schneider, M. (2013). Minnesota theory of work adjustment. In S. D. Brown, & R. W. Lent (Eds.), *Career Development and Counseling: Putting Theory and Research to Work*. 2nd Edition. (pp. 29–54). John Wiley & Sons.
- Su, W., Zhang, M., & Nisar, T. (2015). An integrative model for measuring graduates' employability skills—A study in China. *Cogent Business & Management*, 2 (1), 1060729. <https://doi.org/10.1080/23311975.2015.1060729>
- Watts, A. G. (1996). Toward a policy of lifelong career development: A transatlantic perspective. *The Career Development Quarterly*, 45(1), 41-53. <https://doi.org/10.1002/j.2161-0045.1996.tb00460.x>
- Zarifian, P. (1999). *Objectif compétence*. Liaisons.

GiLE Journal of Skills Development

Adaptability and problem solving as survival skills: How did student teachers learn to survive?

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Abstract

This study investigates student teachers' adaptability and problem-solving abilities during their practice teaching in a school-university partnership. The study explores how student teachers tried to adapt to the new school environments and how they overcame the obstacles they encountered. This study applied a mixed-methods design. In the quantitative part, 50 student teachers participated, and four student teachers volunteered for interviews. The results showed that student teachers used their adaptability and problem-solving skills to win stressful situations, including difficulties in teaching and learning and communication with school teachers. In addition to that, student teachers also increased their self-confidence and learned to build professional identity.

Keywords: Adaptability, problem-solving, school-university partnership, initial teacher education

1. Introduction

The changing nature of teachers' work has been seen in global education in recent years. Teachers are increasingly seen as responsible individuals for teaching and learning in classrooms and broader school activities, including participation in knowledge-creating communities and solving problems. There are many demands for teachers to build their resilience to cope with the changing society of the knowledge age. Teacher participation in social activities and collaboration within their communities and other organisations is also encouraged as teachers hold significant responsibility for shaping the country's future.

According to Wagner (2008), students of the 21st Century need seven survival skills, including (i) critical thinking and problem-solving; (ii) collaboration and leadership; (iii) agility and adaptability; (iv) initiative and entrepreneurialism; (v) effective oral and written communication; (vi) accessing and analysing information; and (vii) curiosity and imagination. To train students to have these seven survival skills, it is also essential that teachers possess

these skills to teach students and optimise their learning. Therefore, teacher training institutions need to develop these skills in pre-service teachers during their training. In this study, the two survival skills called 'adaptability' and 'problem-solving' skills were highlighted as essential skills when pre-service teachers adapted to their new environments and solved the problems they faced, especially during their practice teaching.

2. Theoretical consideration

2.1. School-university partnership and initial teacher education

According to the teacher-related policy of the European Union, teacher education is seen as a continuum of three components: (i) initial teacher education, (ii) continuous professional development and (iii) induction (Council of the European Union, 2009). According to this, teacher education cannot be seen separately because the three components/areas are interconnected and embedded. School-university partnership can be seen in all of these three Teacher Education continuums. Moreover, schools and educational departments collaborate in these three areas to promote teacher learning and professional development (Baumfield & Butterworth, 2007).

A partnership between schools and universities has emerged as a significant interest worldwide to enhance initial teacher education quality (Tsui et al., 2009). In the late 20th Century, the call for school-university partnership in initial teacher education became the primary factor in reforming the education system. In the past, the initial teacher training tended to focus more on the university-led training, where the prospective teachers learned the theory of education and how-to-teach knowledge. Because of the criticism of teacher education during the 1990s and less emphasis on school-based training, educational experts reflect on universities' teacher training. Many people started believing that schools should also be involved in the training of future teachers with the acknowledgement that practical training is different from theory-based training.

With the evolvement of work-integrated or school-based learning, universities started fostering collaborations with schools within their teacher training programs. Following this, the research on school-university collaboration for initial teacher training came alive, and the work of the expert researchers proved the advantages and significant benefits of partnerships between universities and schools for student-teacher training. Scholars like Zeichner (2010) discussed the gap between the campus and school-based teacher education and the communities where the schools and universities communicate for the initial teacher training in the United States.

Underlying innovative programs based on collaborative resonance is the assumption that conjoined efforts to prepare new teachers create learning opportunities that are both different from and richer than the opportunities either the school or the university can provide alone (Cochran-Smith, 1991, p. 109).

Many scholars, including Cochran-Smith, declared that the preparation of student teachers is much more effective when there is a collaboration between universities and schools throughout the training processes. Cochran-Smith (1991) mentioned three collaboration-encouragement approaches for inventing student teaching. These three approaches favour the balance between university-based and school-based training approaches. All of her three approaches showed that the qualities of student teachers would be improved more if the schools and the teacher training universities collaborated in the teaching of prospective teachers.

According to the literature, there is a general agreement that the education of prospective teachers is more enhanced when there is a triadic partnership supported by a cohesive

school/tertiary network (Smedley, 2001). In the context of this study, school-university partnership plays a significant role in providing opportunities for student teachers to discover their adaptability and problem-solving skills when they face challenging situations during their two weeks practice teaching experiences. In other words, school-university partnerships can be a learning space for student teachers to practice their teaching, improve learning, and discover hidden skills.

2.2. The importance of problem solving and adaptability in initial teacher education

As mentioned above in the introduction section of this article, to train students for the challenges of the 21st Century, teachers also need to learn specific skills and abilities to teach those students. Among these essential skills of the 21st Century, problem-solving skills and adaptability play a significant role in surviving challenging situations and an unpredictable future as a teacher in this knowledge age.

As teachers have significant responsibilities for developing these skills in students, they are also expected to develop these skills during the initial training period to become qualified teachers (Kinay & Bagececi, 2016). One of the situations where the student teachers can develop these skills, namely adaptability and problem-solving abilities, is to experience practice teaching where they encounter real classroom situations and challenges in communication with school teachers and students. Kinay & Bagececi (2016) mentioned that as a 21st Century teacher, problem-solving skills are essential as it helps individuals to reflect on their environment while handling the problems. Furthermore, by providing training in problem-solving activities, individuals can discover their hidden talents by using their knowledge and thoughts. Therefore, the authors noted that problem-solving creates opportunities to discover hidden talents (Kinay & Bagececi, 2016). In addition, Heppner & Baker (1997) observed that individuals need specific competencies to solve problems and difficult situations. These competencies include (i) the ability to cope with both problem-oriented and emotion-oriented situations, (ii) identifying problems and thinking alternatives about them, (iii) cognitive process, and (iv) self-confidence in problem-solving (Heppner & Baker, 1997). By experiencing these difficult situations and trying to solve them, student teachers can also develop these four competencies to improve their teaching and learning. Moreover, research findings have shown a positive correlation between student teachers' problem-solving abilities and self-efficacy beliefs. The authors concluded that student teachers with high problem-solving skills could provide more student engagement and use different classroom management strategies and instructional strategies to optimise students' learning (Cansoy & Turkoglu, 2017).

Another area that pre-service teachers encounter during their training period is adapting to a new environment and culture. As student teachers do their practice teaching in real classrooms as their first experiences, the school environment and school culture are new environments and challenging situations for them. According to Varah et al. (1986), this situation was described as a 'sink or swim' situation for student teachers as they have to struggle to adapt to the new conditions; otherwise, they will not be able to survive. One of the common issues student teachers face while adjusting to the new environments is constructing a professional identity. According to Korthagen (2004), during this identity construction period, student teachers examine and reflect on their professional beliefs and goals with the actual situations. The gap between reality and pre-assumed professional life or expectation occurred as student teachers struggled to cope and adapt to the situations (Flores, 2004). By balancing these reality and

expectation experiences, student teachers gradually grow their new professional beliefs and confidence as qualified and experienced teachers.

Besides growing self-efficacy through adaptation to the school culture and environment, they can also influence student teachers' learning and professional development. For example, school environments with encouraging, informative and supportive leadership led to positive experiences for student teachers at school (Flores, 2004). Therefore, in parallel with adaptation to the new situations, student teachers are also learning for their professional development. This study showed that the school culture and environment impact student teachers' learning and professional development.

3. Methodology

3.1. Research design

A mixed-methods design is applied in this study as the aim is to overcome the limitations of using a single approach. A convergent parallel mixed methods approach draws on quantitative data via survey questionnaires and qualitative data via interviews.

3.2. Participants

Fifty student teachers from the University of Education who had two weeks of practice teaching experiences participated in the quantitative data collection stage. The total response rate was 100 per cent. From the initial fifty student teachers, four were interviewed for the qualitative part of the study. Four student teachers volunteered to participate in the interview. All four student teachers did their practical teaching in different schools where the university allocated them. They all did their practice teaching in different urban schools in the same region; specifically, their respective teaching subjects at schools are English, Chemistry, Mathematics, and Physics.

3.3. Instruments

The questionnaire was developed to examine student teachers' learning, and it mainly focused on their learning within the context of school-university partnerships. As this study focuses on student teachers' problem solving and adaptability during practice teaching, only one question, which included nine items, was applied in this quantitative part. The question asked the student teachers' opinions about obstacles or challenges which impede their learning and collaboration with schools. Nine items included in the question asked student teachers' perceptions of areas that blocked student teachers' learning and collaboration, explicitly outlining areas from lack of resources to different opinions, beliefs, and attitudes. A five-point Likert scale was used, ranging from 1='do not have a major impact' to 5='have a major impact'. When developing a questionnaire, think-aloud procedures and expert review were applied for clarity and comprehension. An interview protocol was also produced for the interview process. The questionnaire and interview questions were developed based on literature reading, discussion, and collaboration with experts through participating in the EDiTE SUP project (Barath et al., 2020).

3.4. Procedures

After expert reviews and think-aloud procedures for validity, the survey questionnaire link was sent out via messenger using Qualtrics Online Survey. Qualtrics survey was left open for a week to give participants enough time to answer the questions. After a week, the survey was closed. Interviews were carried out through messenger video calls. Interview questions were sent out

to participants one week before the interviews started. Each interview took 30-60 minutes. The researcher took notes while interviewing, and all were transcribed.

3.5. Data analysis

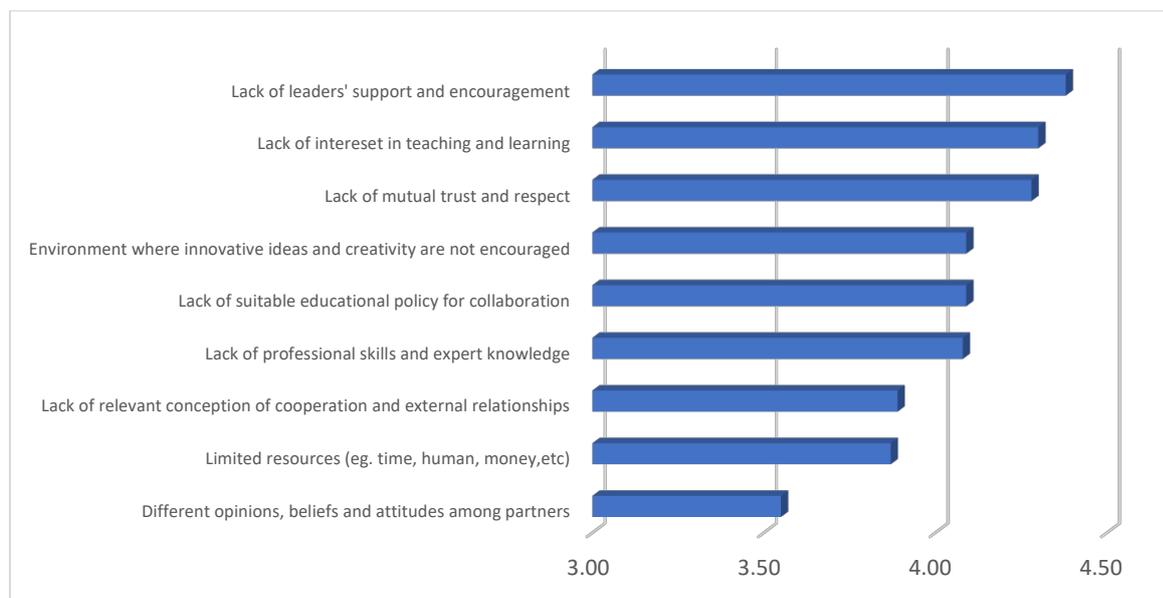
The quantitative study was statistically analysed using SPSS software, whereas the qualitative interviews were manually analysed from the transcriptions of the interviews. All transcripts were member-checked through discussion with participants. Themes were developed, and the codebook was created and left open for adding if related codes emerged.

4. Findings

4.1. Quantitative findings

The quantitative part answered the question of 'what are the areas or factors that impede student teachers' learning during practice teaching period in schools'. **Figure 1** illustrates student teachers' perceptions of nine items that impede their learning and collaboration with schools. The quantitative part examined the obstacles and challenges of student teachers during their practicum, while the qualitative part explained how the student teachers handled these obstacles.

FIGURE 1: STUDENT TEACHERS' PERCEPTION OF FACTORS THAT IMPEDE THEIR LEARNING AND COLLABORATION WITH SCHOOLS



Note: 1='do not have a major impact' to 5='have a major impact'

According to **Figure 1**, student teachers mentioned that the lack of leaders' support and encouragement was the most challenging factor for their learning and collaboration with schools. Therefore, for this item of the original questionnaire, leaders were outlined and explained by giving examples such as school principals and head of the subject/subject dean, etc., to provide a clear understanding of the context. Other factors considered difficulties for learning are lack of mutual trust and respect and lack of interest in teaching and learning of school teachers. The figure showed that these three factors were the barriers to student teachers' learning during their period of practice teaching at schools. However, different opinions, beliefs

and attitudes among student teachers and school staff did not assume an intense obstacle to their learning.

4.2. Qualitative findings

This section will discuss how the student teachers tried to adapt to the new school environments and culture and their encountered obstacles. In addition, student teachers' problem-solving strategies while adapting to new situations will be discussed.

4.2.1. Obstacles: new culture and new environment

According to one student teacher, the group of student teachers had difficulties communicating with school teachers. As the university assigned them to schools for two weeks of practicum, they had no idea or information about the school before starting their practice teaching. They have never been to this school and never met the teachers before. Therefore, the school environment and culture were new for them. They did not understand the school culture, and they had some difficulties adapting to the environment and communicating with school teachers.

The school is in the city centre, and it is a kind of elite school. The teachers were not that friendly and did not really welcome us. They minded their own business and did not communicate with us. They gave us a private room for us (we are 14 student teachers), and we felt kind of lonely and isolated. We did not have a chance to chat with them or discuss with them (Student-teacher 1).

One of the student teachers mentioned his tension with school teachers. As the school teachers did not have a good relationship or communication, it was difficult for him to collaborate with all of them. He had an emotional burden in trying to communicate with all teachers smoothly as the teachers did not have a good relationship with each other. Communication conflicts among teachers made student teachers have learning and teaching problems.

I taught one subject and this subject has three or four responsible teachers. So I had to communicate and negotiate with all teachers, which is difficult for me because they have no good communication. And the different teachers gave me different advice and I did not know which instruction I should follow. I did not want to hurt the teachers if I followed one specific piece of advice. When I communicated and discussed with one teacher, the other teacher did not like it. I was really stressed (Student-teacher 2).

In parallel to adapting to new situations in schools, one of the obstacles student teachers encountered was real classroom experiences as a teacher. Communication with school children also impacted student teachers' teaching and learning. Once a student-teacher did her practice teaching in a school, she faced some tricky situations in understanding the children from that urban school. As most of the school children in that school have learnt lessons from their private tutoring, all her teachings were not attractive enough for them. As a result, they have memorised all the classes and ignored her teaching.

I was teaching Grade 11 students. At that time, children showed no respect to me. Some stubborn kids made me disappointed on the first day of teaching. They have private tutoring, so they don't care what school teachers are teaching at schools. They have learnt all the lessons in their private tutoring classes and showed no interest in my teaching. And I asked this situation to school teachers, they all replied that "yes, these

students are like that. We also have to handle a lot of difficulties". I felt very disappointed that I even want to stop teaching (Student-teacher 3).

Another student teacher had some expectations before her practice teaching. She expected that she would be able to teach very smoothly and effectively as she prepared pretty well. And she intended to implement interactive classrooms using different teaching methods and teaching aids, etc. However, the reality shocked her, and she had to struggle in this situation.

I expected a lot like 'I won't have any difficulties and will teach very smoothly. But in reality, the age gap was not so much between the students and me, and I could not handle teaching and learning effectively. And I expected that all students would get everything I taught them. But in real classroom situations, some students didn't get as much as I gave. I was sad. And it was challenging to implement student-centred lessons that I had prepared before this practicum, as the class size was a lot bigger than I expected (Student-teacher 4).

4.2.2. *Adaptability and problem solving: How did they learn to survive?*

One of the solutions that Student-teacher 1 applied was adapting to the school culture and communicating with peers. Although he felt isolated from school teachers as they were not welcome and friendly with them, he tried two ways to adapt to the situations and solve the obstacles. First, he tried to communicate with the school teacher as far as he could whenever he needed help. Moreover, he collaborated with his peers during these two weeks of practice teaching.

As teachers were so aloof and separated from us, we tried to survive alone. But they said that we can come to their place and ask them whenever we have questions. Sometimes, we went to them and asked some questions when we needed help. We discussed with my peers and prepared lessons together most of the time. It was okay as we have each other, and we helped one another (Student-teacher 1).

For student-teacher 2, he tried to escape from this situation by modifying all the teachers' advice and adapting to his own teaching methods. In addition to that, he approached the most experienced teacher in school while struggling to be neutral among the teachers.

There was one experienced teacher in school. She is the oldest and most experienced. And she is very knowledgeable in her subject field. So, I used her advice in my teaching. It was more comfortable for me as she is the oldest and most experienced teacher in school. I tried to solve this tension by approaching her as my mentor. And another way I handled the situation was that I took all advice from all teachers, but I modified my teaching styles and implemented my new teaching strategies combining all of these suggestions (Student-teacher 2).

For student-teacher 3, the solution she found to solve the issue was inventing different teaching strategies that the school children had not learnt in their private tutoring. She tried to use different teaching methods to attract children's attention and created more interactive classrooms.

I have to rethink this issue, like "how I can arrange the lessons to attract their attention?". I did two weeks of training. First week was not okay. But in the second week, I used different teaching aids and checked the students' situation. I tried to have interactive classrooms and communicate with them. It really worked. From then on, I

am okay and my enjoyment in teaching came back. My confidence level has also increased (Student-teacher 3).

Student-teacher 4 also solved her situations. Her way of solving the issue was similar to student-teacher 3. She tried to use different teaching methods to ensure that all students were involved in the lessons and got the knowledge that she taught. In addition, she discussed with school teachers and got suggestions from them.

I asked some suggestions from school teachers to get all students involved and got what I wanted to give them. The teachers told me to study teaching methods, so I tried to figure out new teaching strategies and methods. After two weeks, I think I am satisfied with what I have tried (Student-teacher 4).

According to all interviews, student teachers learned different techniques to overcome their challenging situations by adapting the conditions, reflecting, and using problem-solving skills.

5. Discussion

According to the interview results, there are two critical situations where student teachers had to adapt to the new situations during training periods. One of them is school culture and environment. Varah and colleagues (1986) mentioned the conditions of student teachers in adapting to new school culture and environment as 'sink or swim'. This quote is reflected in this study when student teachers faced stressful situations in communication with school teachers and tried to be flexible in an uncertain and unfriendly environment. They must solve this situation by collaborating or changing their styles to 'swim' or 'survive'. However, student teachers tried to survive these situations by creating strategies to adapt to the environment.

As Heppner and Baker (1997) discussed, we can develop four competencies through solving problems in difficult situations. In this study, student teachers did develop these four competencies through adapting and problem-solving practices. Two of the most prominent areas where student teachers showed significant improvement was identifying problems and thinking alternatives about them and self-confidence in handling tough situations. In all four cases of student teachers, they showed their reflecting abilities and coping abilities. Furthermore, they knew what made them disappointed or stressed. After realising and identifying the source of the problem, they tried to see from different perspectives and came up with solutions to overcome the obstacles. This situation showed that they had developed the identifying problems and thinking alternatives to the problem abilities. In addition, to self-confidence, all student teachers had increased their confidence after finding the solutions and gained satisfaction in their performance.

Another situation where student teachers adapted to and solved the issue is the teaching difficulties where there is much difference between expectation and reality. Student teachers were confident and prepared well before their practice teaching period. Despite that, they had unexpected obstacles and challenges related to their teaching and communication with children. According to Korthagen (2004), student teachers try to build their professional identity through examining and reflecting on their professional beliefs and goals in real situations. As one student-teacher mentioned '*in reality, what I prepared was not enough. I have to think about it and create new teaching strategies and methods*'; this reality and expectation gap encourages student teachers to develop new ideas to solve the issue and help them build their professional identity by reflecting on and examining their existing situations. Therefore, student teachers are

also building their identity as teachers through adapting to new environments and solving conflicts among them.

6. Conclusion

When teachers play a significant role in promoting the country's education, it is also essential to encourage teachers' 21st Century skills. This study investigated future teachers' 21st Century survival skills to highlight the importance of cultivating and providing the necessary opportunities to gain these skills during training. Moreover, the results showed that student teachers learnt adaptability and problem-solving skills through practice teaching periods, and they also gained other competencies, including reflecting and identifying problems. Through practice teaching, they also improved their self-confidence and built their professional identity through these adaptability and problem-solving skills.

7. Limitation

As this study only investigated limited numbers of student teachers within the context of school-university partnership, it might not be generalisable for the whole population of student teachers in the country. However, school-university partnership and student teachers' 21st Century skills are an unexplored area of research. Therefore, despite the limited number of participants, this study might help and be an initial catalyst for further investigation or studies to find out more about the obstacles student teachers face and their coping abilities during their practicum.

References

- Baráth, T., Cervantes, L., Gábor, H., Kovacs, H., & Nurmukhanova, D. (2020). *School-University partnership: Insights from an international doctorate program on teacher education*. Eötvös Loránd University (ELTE) – University of Szeged, Hungarian-Netherlands School of Educational Management (SZTE, KÖVI).
- Baumfield, V., & Butterworth, M. (2007). Creating and translating knowledge about teaching and learning in collaborative school–university research partnerships: An analysis of what is exchanged across the partnerships, by whom and how. *Teachers and Teaching*, 13(4), 411–427. <https://doi.org/10.1080/13540600701391960>
- Cansoy, R., & Turkoglu, M. E. (2017). Examining the Relationship between Pre-service Teachers' Critical Thinking Disposition, Problem Solving Skills and Teacher Self-Efficacy. *International Education Studies*, 10(6), 23-35. <https://doi.org/10.5539/ies.v10n6p23>
- Cochran-Smith, M. (1991). Reinventing Student Teaching. *Journal of Teacher Education*, 42(2), 104-118. <https://doi.org/10.1177/002248719104200204>

Council of the European Union (2009, November 26). Council conclusions of 26 November 2009 on the professional development of teachers and school leaders.

[https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52009XG1212\(01\)&from=EN](https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52009XG1212(01)&from=EN)

Flores, M. A. (2004). The impact of school culture and leadership on new teachers' learning in the workplace. *International Journal of Leadership in Education*, 7(4), 297-318. <https://doi.org/10.1080/1360312042000226918>

Korthagen, F. (2004). In Search of a Good Teacher: Towards a More Holistic Approach in Teacher Education. *Teaching and Teacher Education*, 20(1), 77-97. <https://doi.org/10.1016/j.tate.2003.10.002>

Heppner, P. P., & Baker, C. E. (1997). Applications of the Problem Solving Inventory. *Measurement and Evaluation in Counseling and Development*, 29(4), 229-241. <https://doi.org/10.1080/07481756.1997.12068907>

Kinay, I., & Bagececi, B. (2016). The Investigation of the Effects of Authentic Assessment Approach on Prospective Teachers' Problem-Solving Skills. *International Education Studies*, 9(8), 51-59. <https://doi.org/10.5539/ies.v9n8p51>

Smedley, L. (2001). Impediments to Partnership: A literature review of school-university links. *Teachers and Teaching*, 7(2), 189-209. <https://doi.org/10.1080/13540600120054973>

Tsui, A., Edwards, G., Lopez-Real, F. J., & Kwan, T. (2009). *Learning in school-university partnership: Sociocultural perspectives*. Routledge.

Varah, L. J., Theune, W. S., & Parker, L. (1986). Beginning teachers: Sink or swim? *Journal of Teacher Education*, 37, 30-34, <https://doi.org/10.1177/002248718603700107>

Wagner, T. (2008). *The global achievement gap: Why even our best schools don't teach the new survival skills our children need — and what we can do about it*. Basic Books.

Zeichner, K. (2010). Rethinking the Connections Between Campus Courses and Field Experiences in College- and University-Based Teacher Education. *Journal of Teacher Education*, 61(1-2), 89-99. <https://doi.org/10.1177/0022487109347671>

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Mentorship in Higher Education: The Keys to Unlocking Meaningful Mentoring Relationships

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IE Business School

Abstract

Although mentorship in business settings is typical, its emergence as a tool in education started only recently. Consequently, this new opportunity has initiated a discussion about mentorship and its principal elements in an academic context. Aspects like the mentor profile, the relationship built between mentors and mentees, and the scope of mentorship have been constantly explored and debated by researchers in this field. All contributions are invaluable; however, the information on what the authors consider the fundamental elements of mentorship is scattered throughout many sources. This is precisely what we are attempting to do in this article; by presenting insights from a literary review and investigating the principal aspects of a successful mentorship program in Higher Education, we are answering the most fundamental mentorship-related questions – what mentorship involves; what the qualities of the ideal mentor are; what the student-mentor interaction entails; what the role of the mentor is; and what activities this interaction should include – in a single, well-organized source.

Keywords: Mentor, Mentoring, Student Mentoring, Mentoring in Higher Education, Peer-to-Peer Mentoring, Higher Education.

1. Introduction

Mentorship in the corporate world may have had somewhat of a trajectory thanks to the competitive advantage it presents. Still, the same may not be said for its adoption in academic settings. During the 90s, Jadwick (1997, pp. 53-62) acknowledged that the number of studies on the mentor-protégé relationship in Higher Education was minimal; studies both on matched and unmatched mentor-protégé relationships had just started to develop in the US in Higher Education institutions. According to Rhodes (2008, p. 124), until 2008, only 1% of the articles

discussed college students' mentoring. However, the arrival of the 21st Century would see an emergence of mentorship initiatives in Higher Education.

To better understand the status of mentorship in Higher Education as a subject of global academic inquiry, the authors searched Gale Academic OneFile and ResearchGate using the keywords “university” + “mentoring” + “program”. Gale Academic OneFile produced 233 results. ResearchGate yielded 100 articles related to mentoring in diverse fields (Business, Criminal Justice, Medical, Nursing) and regions (Africa, Asia, North America, South America, and Europe). We found that research papers were typically country- or industry-specific and rarely presented global characteristics or conclusions that Higher Education practitioners could use. Digging deeper into the subject of mentorship, we further discovered that essential information about the critical elements of mentorship was scattered among different sources. As mentoring practitioners, we identified a lack of a centralised source of the key elements of mentorship, which anyone interested in learning more or launching such a program would find helpful.

Therefore, this paper aims to compile and raise the visibility of mentorship's essential aspects and processes in Higher Education. This article consists of three sections; after exploring the context and current dialogue around the origins and concept of mentorship, we continue with addressing the mentor role and profile, the mentor-student interaction, and ultimately, the scope of mentorship, before concluding with a summary of research findings as well as considerations for educators who are interested in including such a program in the academic curriculum.

2. Current Context

Today, based on the literature reviewed, mentoring initiatives conceptualised and mentoring programs designed are part of an effort to cultivate essential skills, abilities, and mindset for the 21st century, leveraging technology and the power of networks to help students become familiar with a new environment and, ultimately, to provide them with frameworks and techniques to help them navigate a complex professional and academic landscape.

Mentorship in Higher Education has been increasingly gaining popularity. In recent years, it has come to the spotlight of academic research because, according to Noakes et al. (as cited in Raven, 2015, p. 281), “mentoring relationships are beneficial to both mentors and their mentees”. At the same time, it is an affordable tool for “recruiting, retaining, and developing students through, within, and beyond the academic lifecycle” (Ball & Hennessy, 2020, p. 19), contributing substantially to the latter's positive student experience.

Perhaps the most apparent conclusion derived from the literature review is that even though researchers have described several tasks undertaken by mentors, there is no commonly accepted definition of the term “mentorship” – an opinion with which Anderson & Shannon (1998, p. 39) agree with. In this article, we propose the adoption of the definition given by Lester and Johnson (1981, p. 50-51): “mentoring is a one-to-one learning relationship between an older person and a less experienced person (throughout this article, we will use the term “mentee”, though “protégé” has also been recorded in the literature we reviewed) based on a modeling of behavior and extended dialogue between them”. George & Mampilly (2012, p. 144) elaborate further on this definition, adding that it can be defined “as the systematic, continuous, graduated and progressive interactions [...] over and above the requisite academic exchanges”.

Empirical evidence shows that mentoring positively impacts the mentees' academic performance (Fox, Stevenson, 2006, as cited in Nimante & Baranova, p. 121). Though mentoring is fundamentally intended for the mentees, it can assist the development of the mentor, too (Caruso, 1996, as cited in George & Mampilly, 2012, p. 137), as both parties benefit greatly from their involvement in the program. During this interaction, the mentor can achieve personal growth, and the mentee receives advice, support, and knowledge from the mentor (Falchikov, 2001, as cited in Colvin & Ashman, 2020, p. 56). According to Heirdsfield et al. (as cited in Nimante & Baranova, 2019, p. 125), mentors can master leadership skills, while mentees can benefit from socioemotional support. Therefore, Burell et al. (2001, p. 25) were correct in asserting that a mentorship program should be participant-specific and designed to match both parties' needs, interests, and objectives.

3. Mentor Profile & Roles

Alleman (as cited in George & Mampilly, 2012, p. 137) defines a mentor as “a person with greater rank, experience and/or expertise who teaches, counsels, inspires, guides and helps another person to develop both personally and professionally”. For successful mentoring, it is crucial that the mentee perceive the mentor to be a “competent, reliable advisor” and that the relationship that is developed between the two parties is “personal and trusting” (Campbell & Campbell, 1997; Crisp & Cruz, 2009, as cited in Sandner, 2015, p. 228). Such a relationship requires that the mentor provide information to the mentee that the latter would otherwise not obtain or ignore (Sandner, 2015, p. 228).

3.1. Mentor Profiles

Other skills that emerged from the literature review were organisation, knowledge, attitude, and willingness to instill these qualities in the mentees. In particular, according to Burrell et al. (2001, p. 25), mentors need to be:

1. Knowledgeable. Though they do not need to know everything, they should know more than the mentees.
2. Credible. They should have “successful academic and behavioural experiences” witnessed by the mentees. Credibility is an essential trait in the mentor’s personality, as evidenced in the literature reviewed (Colvin & Ashman, 2020, p. 55). Students may not even reach out to a mentor if they do not consider them credible and helpful (Packard, 2003, as cited in Colvin & Ashman, 2020, p. 55). Collier (2017, p. 14) agrees that this relationship can get complicated if questions of expertise, legitimacy, and credibility arise. In the research conducted by Colvin and Ashman (2020, pp. 62-63), students associated credibility mainly with trust, which relates to ideas such as “belief in the mentor” and “the honesty of the mentor”, and experience, which referred to “experience, knowledge, and applicable credentials”. In summary, the researchers concluded that, in an academic setting, students often defined the credibility of a mentor as “being trustworthy and having experience” (Collier, 2017, p. 14).
3. Supportive. They should be able to “encourage, use praise, and give constructive criticism” by providing specific and formative feedback to the mentees.
4. Facilitatory. They should act as a “guide or coach, not a dictator”; mentees should be able to develop their own experiences while being guided.

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5. Available. They should be “accessible to mentees”; spending time together is vital for fostering this relationship.
 6. Empathetic. They should be able to “identify and understand the mentee’s situation, feelings, and motives”; both parties share the experience of being students in the same environment. Therefore, mentors should be able to relate to the mentee’s challenges and fears and empathise with them.

3.2. Mentor Roles

The mentor roles have been the subject of discussion by many authors. As coaches, mentors help develop their mentees’ skills, and as counsellors, they provide support and help strengthen their mentees’ self-confidence. Mentors can support their mentees through “listening, providing structure, expressing positive expectations, serving as advocates, sharing with their protégé and making it special” (George & Mampilly, 2012, p. 140). Identifying these roles can help both the mentor and the mentee manage their expectations and understand the impact they have on this relationship, as well as the way “the legitimacy and credibility of the mentor is developed by mentors and seen by mentees” (Colvin & Ashman, 2020, p. 57).

Collier (2017, p.14) has determined five specific roles that peer mentors play, which we believe are fit to be included in this study:

1. Connecting link. Mentors help mentees connect to activities and resources on campus and understand the academic environment and campus in general.
2. Peer leader. Leadership has been recognised as a necessary quality for a mentor to have. Leadership can be expressed as “setting an example, sharing personal stories, leading activities, being inspiring, and being an overall leader”.
3. Learning coach. Learning coach activities refer to “teaching learning techniques and strategies, challenging students, explaining concepts, and relating lessons to students”.
4. Student advocate. The student advocate role consists of “helping, explaining things, being a go-between, and answering questions as being a student advocate”.
5. Trusted friend. Being a trusted friend involves “caring about students, relating to them, being there to help, listen, give advice, and in general being trustworthy”.

Nachimuthu (as cited in George & Mampilly, 2012, p. 137) shares a similar opinion; according to his study, a mentor can act as a counsellor, advisor, consultant, tutor, teacher, and guru.

Cohen (1995, pp. 29-31) also studied the aspects of the mentor role. In his Principles of Adult Mentoring Scale (PAMS), he evaluated the six behavioural facets of a mentor’s role: relationship emphasis, information emphasis, facilitative focus, confrontive focus, mentor model, and student vision:

1. Relationship emphasis refers to “creating a climate of trust that allows mentees to share and reflect upon their personal experiences honestly”;
2. Information emphasis refers to “directly requesting information and offering specific suggestions to mentees”;
3. Facilitative focus refers to “guiding mentees through a review and exploration of their interests, abilities, ideas and beliefs”;

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4. Confronting focus refers to “challenging mentee’s explanations for or avoidance of decisions and actions”;
 5. Mentor model refers to “sharing life experiences as a role model to mentees to enrich and personalize the relationship”; and
 6. Student vision refers to “stimulating mentees’ critical thinking regarding envisioning their own future and developing their personal and professional potential”.

Colvin & Ashman (2020, p. 64) mention another aspect of the mentor role, setting an example, which refers to their ability to act as an example for the mentee.

Despite the benefits and rewards reported above for both parties, mentoring also comes with challenges. Therefore, as highlighted by Terrion & Leonard (2007, pp. 152-154), there are some prerequisites for successful mentoring, such as the ability and willingness to commit time, the same university experience, and the academic achievement of the mentor.

In regards to the ideal age gap, it has been suggested that the mentor should be eight to 15 years older; otherwise, the relationship could become “peer like” (Levinson et al., 1978, as cited in George & Mampilly, 2012, p. 139), opinion with which Gehrke (1988, p. 43) also agrees.

3.3. Scope of Mentorship

Gehrke (1988, p. 43) considers the mentor-mentee relationship as a “unique opportunity for personal growth”, while Anderson & Shannon (1988, p. 38) see mentorship through a set of five individual but integral processes:

1. An intentional process. The mentor fulfils their responsibilities intentionally.
2. A nurturing process. The mentee’s personal growth and development are cultivated and facilitated by the mentor.
3. An insightful process. The mentee learns from and applies the experience of the mentor.
4. A *protégéctive* and supportive process. The mentor supports and advises the mentee.
5. A role modelling process. The mentor serves as a standard of behaviour for the mentee to emulate and follow.

Ball & Hennessy (2020, pp. 22-23) have defined four core categories in which mentoring can be subdivided:

1. Aspirational mentoring refers to “converting” students, in other words, influencing their decision to accept a place at a university after receiving an offer and before enrolment.
2. Belonging, identity, and development, refer to mentors helping cultivate a sense of belonging to the university and the program of study among students.
3. Career planning refers to increasing the mentees’ professional skills and self-confidence through mentoring.
4. Professional contribution refers to mentors as experienced staff with the role of supporting students whilst on placements. Peiser, Ambrose, Burke and Davenport (as cited in Ball & Hennessy 2020, p. 22-23) emphasise how workplace mentors assist knowledge transfer “from the codified information presented in university to practical application”.

Alleman & Clarke (2002a, as cited in George & Mampilly, 2012, p.140) found that mentors use a set of specific multi-faceted activities, which contain items assessing nine activity categories:

1. Teaching the job
2. Counseling
3. Endorsing activities
4. Sponsoring
5. Protecting
6. Teaching organisational politics
7. Career helping
8. Challenging tasks
9. Friendship and demonstrating trust.

These activity categories can be further organised into three broader categories:

1. Guiding activities, which include “teach the job” activities, “challenging tasks”, and “teaching politics” activities, which refer to the mentor’s task of developing the mentee’s skills;
2. Helping activities, which include “career help,” “protecting”, and “sponsoring” activities; in other words, “the practical help provided by the mentor to enable career advancement and showcasing of the mentee”; and
3. Encouraging activities, which include “career counseling,” “friendship”, and “trust”, which refer to the mentor’s role in “developing the mentee’s confidence in themselves and colleagues”.

An important aspect of mentoring effectiveness is relationship quality (George & Mampilly, 2012, p. 141). According to Burrell et al. (2001, p. 25), indicators of an effective mentoring relationship are purpose, creativity, and personal investment.

The literature we reviewed has highlighted various benefits of interactions between a mentor and a mentee. When studying the benefits of peer mentoring, Sanders & Higham (2012, pp. 21-22) found that they could include the acquisition of skills related to “self-management, leadership and communication”– the latter is a skill that is also emphasised by Ylonen (2011, p. 807) and Hudson (2013, p. 780-781).

4. Conclusion

The purpose of this article was to collect and summarise the context and research around the most critical elements of mentorship according to the literature we reviewed. These are the definition of mentorship, the ideal mentor profile, and the scope of mentorship. These categories, definitions, and characteristics are helpful to bear in mind when designing mentorship programs and engaging in these types of activities as either a mentor or a mentee.

Mentorship programs generate outcomes and valuable benefits for mentees and mentors and provide ample support and space for individuals to learn from others. In the bigger picture, such programs help connect different alumni generations and create a circular model of knowledge-sharing and growth for both students and alumni, mentees and mentors. Making this

information available to colleagues in the educational space will hopefully trigger reflection about the origins and evolution of mentorship and proposals to enhance the students' learning experience while studying. In sharing these tools and methods, we hope to contribute meaningfully to the conversation and support our peers in their quest to build new disruptive models.

Although these outcomes might seem more apparent, the below the surface outcomes are perhaps even more impactful on a systems level. The unique and personal nature of the mentor-mentee relationship can be cultivated and create an impact not only in direct social interactions but also in a more comprehensive social system. By looking at the past and the evolution of these concepts, mentorship practitioners can better understand how to shape their own designs and begin to speculate on what could be enhanced to tackle the new challenges they will face in the future. Ideally, such programs should aim at helping mentors and mentees contribute to something much bigger than themselves. With this article, we hoped to have provided a look at the past to help understand how we can shape the future together.

References

- Anderson, E., & Shannon, A. (1988). Toward a conceptualization of mentoring. *Journal of Teacher Education*, 39, 38-42. <https://doi.org/10.1177/002248718803900109>
- Ball, E., & Hennessy, C. (2020). De-mystifying the Concept of Peer Mentoring in Higher Education: Establishing Models for Learning. In C. Woolhouse & L. J. Nicholson (Eds.), *Mentoring in Higher Education - Case Studies of Peer Learning and Pedagogical Development* (pp. 17-38). Palgrave Macmillan.
- Burrell, B., Wood, S. J., Pikes T., & Holliday, C. (2001). Student Mentors and Protégés Learning Together, *TEACHING Exceptional Children*, 33(3), 24-29. <https://doi.org/10.1177/004005990103300304>
- Cohen, N. H. (1995). The principles of adult mentoring scale. *New Directions for Adult and Continuing Education*, 66, 15-32. <https://doi.org/10.1002/ace.36719956604>
- Collier, P. J. (2017). Why peer mentoring is an effective approach for promoting college student success. *Metropolitan Universities*, 28(3), 1-19. <https://doi.org/10.18060/21539>
- Colvin, J. W., & Ashman, M. (2020). Credibility: What Role Does It Play in a Peer Mentoring Relationship? In C. Woolhouse & L. J. Nicholson (Eds.), *Mentoring in Higher Education - Case Studies of Peer Learning and Pedagogical Development* (pp. 55-74). Palgrave Macmillan.
- Gehrke, N. (1988). On preserving the essence of mentoring as one form of teacher leadership. *Journal of Teacher Education*, 39(1), 43-45. <https://doi.org/10.1177/002248718803900110>
- George, M. P., & Mampilly S. R. (2012). A model for student mentoring in business schools, *International Journal of Mentoring and Coaching in Education*, 1(2), 136-154. <https://doi.org/10.1108/20466851211262879>
- Hudson, P. (2013). Mentoring as Professional Development: 'Growth for Both' Mentor and Mentee. *Professional Development in Education*, 39(5), 771-783. <https://doi.org/10.1080/19415257.2012.749415>
- Jadwick, K. D. (1997). *The Perceptions of Effectiveness of Mentoring Relationships in Higher Education* [Doctoral dissertation, Florida Atlantic University]. ProQuest Dissertations & Theses Global.

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- Lester, V., & Johnson, C. (1981). The learning dialogue: mentoring. In J. Fried (Ed.), *Education for Student Development* (pp. 50-51). Jossey-Bass. <https://doi.org/10.1002/ss.37119811507>
- Nimante, D., & Baranova, S. (2019). Student Mentoring in the Master Programme “Pedagogy”: The case of University of Latvia. 5th International Conference on Higher Education Advances 2019 (pp. 119-126), Valencia. <https://doi.org/10.4995/HEAD19.2019.9382>
- Raven, N. (2015). The impact of mentoring reconsidered: An exploration of the benefits for student mentors. *Research in Post-Compulsory Education*, 20(3), 280-295. <https://doi.org/10.1080/13596748.2015.1063265>
- Rhodes, D. (2008). Does Mentoring Really Work for College Students? *Proceedings of the Allied Academies*, 15(2), 123-127.
- Sandner, M. (2015). The effects of high-quality student mentoring, *Economics Letters*, 136, 227-232. <https://doi.org/10.1016/j.econlet.2015.09.043>
- Sanders, J., & Higham, L. (2012). *The Role of Higher Education Students in Widening Access, Retention and Success*. Higher Education Academy.
- Terrion, J. L., & Leonard, D. (2007). A taxonomy of the characteristics of student peer mentors in higher education: findings from a literature review. *Mentoring & Tutoring: Partnership in Learning*, 15(20), 149-164. <https://datubazes.lanet.lv:4876/10.1080/13611260601086311>
- Ylonen, A. (2011). Assessing Value of Student Ambassador Scheme on the Students Involved in Supporting WP Work. *British Educational Research Journal* 38(5), 801–811. <http://www.tandfonline.com/doi/abs/10.1080/01411926.2011.583636>

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Switching to online learning: Using the flipped learning approach to deliver pre-sessional EAP remotely

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Abstract

This small-scale study investigates how the flipped approach to learning helped a UK university teaching team deliver the Pre-sessional English for Academic Purposes (EAP) course remotely during the pandemic. The study draws on the theoretical framework of the flipped approach to learning to explore the use of the approach in the Higher Education (HE) context. The study suggests that the flipped approach to learning may be helpful in the delivery of pre-sessional EAP courses remotely as it offers students opportunities to engage in communicative activities and encourages independent learning and autonomy, both of which are key practices in EAP. However, teachers may find the approach challenging if they cannot monitor students' work or connect with them while completing the flipped activities. Only a few studies have focused on this issue to date. Further research involving more teachers and students is recommended to provide additional insights on this aspect of teaching remotely.

Keywords: English for Academic Purposes (EAP), flipped learning, remote teaching, Higher Education (HE).

1. Introduction

Universities in the UK closed their classrooms to students and staff following guidelines issued by World Health Organisation in March 2020 in response to the Covid-19 pandemic (UNESCO, 2020). Many Higher Education (HE) institutions in the UK offer pre-sessional English for Academic Purposes (EAP) courses to prospective international students. The closure of the universities meant that EAP professionals faced the difficult task of developing and delivering a summer pre-sessional programme to approximately 1000 international students online. The programme required three separate five-week courses to be delivered across the summer. The pre-sessional programme aims to raise international students' language skills in reading, writing, speaking and listening to the level required for entry to their target programme of study and train them to learn effectively in a UK university context. Progression to their academic

programme depends on the outcome of their assessment of the four skills at the end of the final course.

The members of the EAP team at the focus of this study did not have online teaching experience. The team was faced with the challenge of redesigning the existing pre-sessional EAP courses for online delivery within a short time. The teachers had to convert learning materials into online resources using popular technologies such as Moodle, videos, and online quizzes (BALEAP, 2021). The EAP team, whose primary role is to support and train international students to enable them to use English effectively for their studies and research, decided to use the flipped learning approach. The (Flipped Learning Network, 2014, p. 1) define flipped learning as:

a pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter.

The flipped approach was introduced and explained to students during induction sessions. This approach allowed the students to complete some of the classroom tasks asynchronously so they could watch pre-recorded lectures and discuss and review the tasks during live sessions in pairs or groups. The synchronous sessions were delivered in 90-minute Zoom sessions from Monday to Friday; the students then had the opportunity to engage in asynchronous guided independent study using Moodle as the primary communication and learning platform. They could engage in classroom exchanges, ask questions and communicate with their tutors and peers via discussion forums. In this way, the teachers could combine asynchronous and synchronous learning using the available technologies to offer the course remotely. Activities were built into all materials to stimulate learner autonomy and independent reflection on learning.

Among the many challenges that the Covid-19 pandemic presented to universities was the inability to offer face-to-face interaction to their students, forcing lecturers to rely solely on technologies that provide opportunities for online teaching. There is no doubt that the teachers' experiences during the pandemic are varied. Their reflections may bring new and interesting insights on the use of flipped learning in a remote EAP classroom. By analysing the different experiences of the teachers in this context and the current literature on the topic, this study aims to understand how using the flipped learning approach helped an academic team deliver a Pre-sessional English course remotely during the Covid-19 pandemic.

This study investigates how the flipped approach to learning helped the English for Academic Purposes (EAP) team at the UK University deliver the pre-sessional EAP course remotely during the pandemic. This inquiry was guided by the following Research Questions (RQs):

RQ1: How did the flipped approach to learning help a teaching team at a UK University deliver the Pre-sessional English for Academic Purposes (EAP) course remotely during the Covid-19 pandemic?

RQ2: What factors influenced their decision to use the approach in their online classrooms?

RQ3: How useful was the flipped method in terms of the course delivery?

2. Literature review

Many research studies within my area of scholarship and professional practice have focused on the problem of online learning and on the very recent issue of moving to online learning during the early stages of the Covid-19 pandemic. A few researchers have considered the usefulness of the flipped approach in delivering online sessions during the pandemic. Below are the key themes that emerged from the literature, which also correspond with themes identified during the data analysis of the interviews carried out for this study.

2.1. Switching to online learning during the Covid-19 pandemic

In 2020, higher institutions worldwide had to switch to online learning quickly (Bruce & Stakounis, 2021; Rapanta et al., 2020) to enable their students to continue their academic journey (Golden, 2020; Hodges et al., 2020). According to recent studies (Bakogiannis, 2021; Campillo-Ferrer & Miralles-Martínez, 2021), this shift from classroom-based to predominantly online learning required HE institutions to take new measures to adapt to the unique situation, including downsizing classes and limiting face-to-face sessions.

Unsurprisingly, these sudden changes created new challenges for course leaders and teachers who had to coordinate and teach their courses from home, find new resources and develop new online teaching skills (Bruce & Staukonis, 2021). On the other hand, the switch to online teaching created collaboration and professional development opportunities for teachers as they experimented with new methods and approaches to online instruction (Hendrie & Tibbetts, 2021).

2.2 Delivering pre-sessional English online

BALEAP (The Global Forum for EAP Professionals), a professional organisation which supports the professional development of EAP teachers, scholars and researchers, issued a report on the impact of Covid-19 on the UK EAP sector (Bruce & Stakounis, 2021). This examined how organisations delivering EAP were affected by the pandemic and how they responded to the course delivery and operational procedures. According to the report, several institutions in the UK and worldwide were forced to stop all face-to-face EAP courses and switch to fully online courses almost instantaneously (Bruce & Stakounis, 2021). Many EAP practitioners used the opportunity to share their own experiences with this sudden switch. Antoniou (2021) and Bakogiannis (2021) provide their readers with a real sense of their online home-based classrooms by sharing their views on how their institutions responded to the situation. Antoniou (2021) and Golden (2020) identify some of the challenges that teachers and institutions faced: lack of resources, insufficient online teaching experience, and lack of experience using some of the required technologies.

As the majority of pre-sessional courses start before the summer, usually in late May or early June, the providers of pre-sessional classes were not required to switch to online learning overnight, a process known as Emergency Remote Teaching (ERT) (Golden, 2020; Hodges et al., 2020). Unlike other UK HE institutions that had to switch to online teaching immediately in the Spring of 2020, they had time to redesign their courses to adapt them to online delivery (Bozkurt & Sharma, 2020; Golden, 2020).

2.3 The Flipped approach to learning

In recent years, the flipped approach contributed to a significant shift in learning and teaching in HE. This approach creates the opportunity for students to manage their learning in a more 'proactive way' (HEA, 2017), giving them increased input and control over their learning as opposed to the more traditional teacher-centred approach (HEA, 2017; Iskhova et al., 2021; Nottingham Trent University, 2013). In a flipped classroom, students are encouraged to take responsibility for their learning (Bergmann & Sams, 2012; Reidsema, Kavanagh et al., 2017; Strayer, 2012) which indicates that the approach may help students to develop essential skills needed for university studies such as independent learning, managing their study time, and problem-solving. As Kerr (2020) suggests, the flipped approach may also appeal to teachers because students are required to complete tasks at home, thus, leaving more space for communication between teachers and students, providing a platform for discussion, problem-solving and increased interaction.

According to Hockly (2017, p. 144), flipped learning may comprise a form of blended learning as students are asked to do a specific task before their face-to-face sessions, typically by watching videos (e.g., pre-recorded lectures). However, Kerr (2020) and Bergmann et al. (2013) argue that this explanation of flipped learning assumes that listening activities take up most of a lesson is not very informative. Bergmann et al. (2013) feel that this description of flipped learning is limited as it implies that online videos are an inherent part of the lesson when, in fact, the use of technology is not always required in a flipped lesson. I tend to agree with Roehl et al.'s (2013) definition of flipped teaching when they state, as cited in Pechenkina (2017, p. 1), that in the flipped classroom:

“all or some of direct instruction is moved outside of the face-to-face environment to dedicate more in-class time to more hands-on, experimental ... activities”.

2.4 Flipping EAP lessons during the Covid-19 pandemic

Although the flipped approach to learning seemed to be a popular choice across the EAP sector, only a few studies have discussed the problem of using the approach to deliver the pre-session EAP courses during the pandemic. For example, MacDiarmid and Rolinska (2021) describe how drawing on principles of effective online learning; they flipped EAP lessons by giving the students pre-recorded lectures and asynchronous activities. In another study by Iskhova et al. (2021), a team of university teachers take a 'lighter' approach and instead of pre-recording the lectures, they introduce topics weekly by sharing slides of upcoming classes and other resources, which allows them to update and adapt the material and develop effective methods tools for communication and learning. In both cases, the institutions used the flipped approach that helped the teachers to provide the students with synchronous content to maintain communication and social interaction. They introduced an asynchronous element that gave the students flexibility and autonomy (Nordman et al., 2020).

3. Methods

3.1 Research approach

To generate qualitative data for this small-scale empirical study that enabled me to look at the problem through the eyes of the teachers, I conducted semi-structured interviews to investigate how using the flipped approach to learning helped the academic team deliver the pre-session

EAP course remotely as a response to the Covid-19 pandemic. This study also sought to understand why the teachers chose this approach and whether they saw it as a practical and helpful approach to teaching EAP remotely.

One of the reasons for choosing interviews as the research method for this study was to examine participant responses, investigate their feelings and motives, and follow up on their ideas (Bell, 2010), which is not possible when using questionnaires. I decided to use semi-structured interviews so that the participants could set the pace (Silverman, 2010) and allow myself, the researcher, and the interviewees to depart from the prepared core questions and expand on their responses.

3.2 Data collection

The data were collected from six EAP practitioners involved in developing and delivering online Pre-Sessional EAP summer courses in 2020 who volunteered to participate in the semi-structured interviews. I selected and approached this particular group of professionals for this study because I believed I could get valuable insights into their experience designing and delivering the online EAP using the flipped pedagogy, including how they felt about using this method and the challenges they faced. The insights I obtained from the participants helped to address my research objectives. The interviews took place between 26 July 2021 and 19 August 2021. The sessions took place on Zoom and were recorded and transcribed in Zoom.

During the semi-structured interviews, I focused on the course development experience, the usefulness of the flipped learning approach when it came to delivering the courses remotely, and the teachers' reflections on the experience. The semi-structured interviews allowed me to collect data by asking interview questions. The questions were developed based on existing literature. For example, questions about the teachers' familiarity with the approach and rationale for selecting the approach. This helped me compare their experiences with some general claims on aspects of flipped learning found in the literature.

3.3 Data analysis

Qualitative data were analysed via thematic analysis (Braun and Clark, 2006), which involved searching the data set to identify themes, assign codes and record repeated patterns. First, I read through the transcripts to identify recurring themes and establish which themes were relevant to my study (Bell, 2005). I also watched the recordings to interpret the participants' responses and their behaviour to validate the data to ensure that the extracted information from the interview contained sufficient detail (Silverman, 2010). The interview data were automatically generated from the recording and stored in my Zoom account.

3.4 Ethical considerations

Before the study, all participants were given a copy of the Participant Information Sheet containing detailed information about the study. All the participants had an opportunity to ask questions and discuss the details of the study with me. Throughout the study, I made sure that the identity of the colleagues I referred to in the study was not revealed, and no sensitive data was shared. In this paper, I refer to the participants as Participant 1, Participant 2, Participant 3, Participant 4, Participant 5, and Participant 6 or P1, P2, P3, P4, P5, P6, respectively.

All transcripts were anonymised and stored in compliance with the Data Protection Act. No personal data was shared with anyone beyond the researcher.

4. Findings

This section presents the findings obtained through the interview data.

4.1 RQ1: How did the flipped approach to learning help the teaching team at a UK University deliver the Pre-sessional English for Academic Purposes (EAP) course remotely during the Covid-19 pandemic?

4.1.1 Planning the flipped lessons

All the participants who took part in the interviews had prior experience teaching pre-sessional EAP and were familiar with the course material, each having taught the course before. However, as Participant 2 explained

Not all the participants were familiar with the flipped approach or had only heard of it but never used it in their classrooms.

Some of the teachers had used the approach in their face-to-face classrooms or were familiar with the flipped pedagogy to some degree.

I wasn't massively familiar with the theory in any depth...I had used flipped classrooms for other courses that are taught (P3).

The team aimed to design a course that would allow to reduce synchronous learning and offer more opportunities for asynchronous tasks. This enabled the teachers to give the students more opportunities for meaningful interaction:

...so that students would do the bulk of the reading and the processing of information and then that would allow the face-to-face time online to be much more interactive... From asking to problem-solving that kind of thing (P5).

4.1.2 Dealing with challenges

However, three teachers found converting the materials challenging in terms of making the decision on which classroom materials to deliver synchronously and which asynchronously and estimating how much time the students may need to do the tasks:

One of the issues was that what was originally live class material for a presumably 2-hour class suddenly a large chunk of that became self-study we had one-and-a-half-hour live class. But, in fact, what would have been done in the live class had been transferred into self-study and one of the issues I think was, what can I do with them [the students]? (P1).

That took into account how much time do these students have to actually be together as a team and as a class and what can we do with them in that time (P5).

...so we went through, basically, we had the course books, we went through the lesson by lesson, what would have been delivered in class what clearly would not be appropriate (P3).

Although the study participants had different roles, such as course convenors and teachers or both, they seemed to have equal input in the decision making, as pointed out by Participant 1: “everybody had their input”. Furthermore:

it's probably one of those decisions that are made as a team where it's kind of collaboratively [done] (P3).

The necessity of it actually created some really good experiences and a huge learning curve for both teachers and students, I think, even just practical things like using new platforms and using technology and taking small risks (P4).

4.2 RQ2: What factors influenced their decision to use the approach in their online classrooms?

Choosing the flipped approach seemed to be born naturally during the planning stage. Designing a pre-sessional course using the flipped approach seemed to have been an obvious choice to satisfy some of the course objectives, such as encouraging autonomy and independent learning and supporting the students' academic studies:

In the pre-sessional, it's more about... giving homework that then also prepares them for the next class (P5).

...knowing what's required [from students] and in many respects this course is very much structured to help people with the studying rather than their English (P5).

Five teachers also pointed out the importance of maximising opportunities for interaction and using the communicative approach that they usually use in their EAP classroom:

I think the flipped approach kind of lends itself to organizing the courses so that students would do the bulk of the reading and the processing of information and then that would allow the face to face time online to be much more interactive and yeah maybe have opportunities, then to process what they've learned (P5).

It aimed to maximise interaction by giving communicative activities where students can practice language, especially speaking and listening; therefore, a very strong communicative approach was taken to ensure that (P6).

4.3 RQ3: How useful was the flipped method in the course delivery?

4.3.1 Benefits

Four participants pointed out specific academic skills that the students seemed to develop during their online courses, such as autonomy and resilience. Some teachers also observed that, in the process, their students became more organised, prepared and responsible for their learning:

In terms of the benefits, I do think for some students, maybe a lot of students, are thrown into independent learning in a way that forces them to become resilient, become organised in the process (P5).

... the [flipped approach] really advanced students. I think ... it's good for them to develop their time management autonomy. They can work on the order they want, they can work with me if they want. It's up to them (P6).

All the participants considered the approach useful and believed that adopting this approach to deliver the pre-sessional classes was the right decision.

I think that the approach that was taken was the right approach (P5).

Without being able to flip stuff ... we wouldn't be able to deliver [the course] (P6).

4.3.2 Disadvantages

Despite several benefits of flipping the lessons, some teachers noticed several disadvantages of using the approach in their online classrooms. One of the drawbacks was the lack of “*face-to-face bonding*” (P5), the physical aspects of teaching that both teachers and students experience when they are in a physical space and can better “*understand their feelings*” (P5).

Three teachers also shared some scepticism about the effectiveness of the flipped approach. For example, they were not always sure if the students “*had done the work*” (P5) or “*how prepared they were*” (P5), which may suggest that the lack of face-to-face teaching sessions and physical contact with the teacher and peers was disadvantageous for the students.

5. Discussion

The results of this study suggest that the flipped approach to learning that was used by the team of pre-sessional teachers to help with the delivery of online EAP was a practical and valuable approach that enabled them not only to deliver the course remotely by allowing the teachers to balance synchronous and asynchronous activities but also provided opportunities for communication and social interaction which seemed to appeal to EAP teachers. As Kerr (2000) points out:

“one of the key objectives of the flipped approach is to “provide opportunities for communication between students during class time as they work together to solve a problem” (p. 4).

This aligns with the principles of communicative language classrooms, where students work together and actively engage in tasks and problem solving.

The flipped approach gave the students flexibility and encouraged independent learning and autonomy (Bergmann & Sams, 2012; Nordman et al., 2020; Reidsema, Kavanagh et al., 2017; Strayer, 2012). These opportunities seem to be the main factors that influenced the teachers’ decision to use the approach to deliver pre-sessional EAP remotely as they satisfied the pre-sessional EAP key objectives, such as encouraging autonomy and independent learning, also allowing the students to engage in communicative activities and develop a set of academic skills that would be required for their studies (MacDiarmid & Rolinska, 2021).

Although the flipped approach helped the teachers to deliver the course and seemed to satisfy the students’ academic and learning needs, there were specific challenges that teachers had to face during the design stage and when teaching online. For example, a lack of physical contact with the students preventing teachers from getting a sense of the students’ feelings and needs. Furthermore, the inability to monitor the students’ work and their engagement in pre-session tasks may be a limitation of the approach that could impact the delivery of the online sessions and their effectiveness in online classrooms.

The switch to online learning by the EAP team was not a typical emergency response to the situation as, unlike other UK institutions that had to adapt their face-to-face classes to online learning within a short time (Golden, 2020; Hodges et al., 2020), the EAP team had a few more weeks to complete the project. However, converting a course that had not been delivered in a blended or distance mode before was a challenging task as the teachers had to start from scratch without prior experience, and many were unfamiliar with online teaching methods and the use of certain technologies (Antoniou, 2021; Golden, 2020).

Although the flipped approach to learning seemed to be a popular choice across the EAP sector, few studies have discussed the problem of using the approach to deliver the pre-sessional EAP courses during the pandemic. Therefore, more research involving larger groups of teachers and students is needed to provide more information on this aspect.

6. Conclusion

This research aimed to investigate how the flipped approach to learning helped a team of EAP teachers deliver pre-sessional EAP remotely. In this study, I tried to view the experience of using this approach through the eyes of the teachers and gauge their feelings about using the approach in their classrooms.

As identified earlier, the study results suggest that the flipped approach to learning may help deliver Pre-sessional EAP online as it creates opportunities for active engagement in communicative activities and encourages autonomy and independent learning, which satisfies the pre-sessional EAP key objectives. However, the identified limitations, such as the lack of physical contact with the students and the inability to monitor their work and engagement outside their live sessions, may be challenging for the teachers and may impact the effectiveness of the approach. For a holistic consideration, the perspectives of a larger group of teachers and students could provide more insights into this aspect of teaching online EAP. They could also offer solutions to overcome these challenges and minimise the approach's limitations.

My EAP background and interest in using technology in the EAP classroom inspired me to look at the experiences of other EAP practitioners who, like many other teachers around the world, had to move their EAP lessons to an online environment. This, in turn, enabled me to reflect on my own practice and development.

I believe that this study has contributed to a gap in the literature on the effectiveness of using flipped learning to deliver pre-sessional EAP online.

References

Antoniou, C. (2021). Responding to the COVID-19 challenges: The case of a small EAP team and ways forward. In: L. Blaj-Ward, K. Hultgren, R. Arnold & B. Reichard (Eds.), *Narratives of innovation and resilience: Supporting student learning experiences in challenging times. BALEAP: The Global Forum for EAP Professionals*. (pp. 68-74). Renfrew.

Bakogiannis, A. (2021). Technology-enhanced dialogic feedback: Supporting feedback engagement in challenging times. In: L. Blaj-Ward, K. Hultgren, R. Arnold & B. Reichard (Eds.), *Narratives of innovation and resilience: Supporting student learning experiences in challenging times. BALEAP: The Global Forum for EAP Professionals*. (pp. 48-67). Renfrew.

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- Bell, J. (2010). *Doing your Research Project. A guide for first-time researchers in education, health and social science*. 5th Edition. Open University Press.
- Bergmann, J., & Sams, A. (2012). *Flip your classroom: reach every student in every class every day*. International Society for Technology in Education.
- Bergmann, J., Overmeyer, J., & Wilie, B. (2013). *The flipped class: Myth vs. reality*. <http://www.thedailyriff.com/articles/the-flipped-class-conversation-689.php>
- Bishop, J. L., & Verleger, M. A. (2013). *The flipped classroom: A survey of the research*. Paper presented at the 120th American Society of Engineering Education Annual Conference & Exposition, Atlanta, GA.
- Bozkurt, A., & Sharma, R. C. (2020). Emergency remote teaching in a time of global crisis due to Corona Virus pandemic. *Asian Journal of Distance Education*, 15(1), i-vi. <https://doi.org/10.5281/zenodo.3778083>
- Braun, V., & Clark, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>
- Bruce, E., & Stakounis, H. (2021). *The impact of Covid-19 on the UK EAP sector during the initial six months of the pandemic*. BALEAP.
- Campillo-Ferrer, J. M., & Miralles-Martínez, P. (2021). Effectiveness of the flipped classroom model on students' self-reported motivation and learning during the COVID-19 pandemic. *Humanities and Social Sciences Communications*, 8(2021), 176. <https://doi.org/10.1057/s41599-021-00860-4>
- Flipped Learning Network (FLN). (2014). *The Four Pillars of F-L-I-PTM*. https://flippedlearning.org/wp-content/uploads/2016/07/FLIP_handout_FNL_Web.pdf
- Golden, C. (2020). *Remote teaching: The glass-half-full*. <https://er.educause.edu/blogs/2020/3/remote-teaching-the-glass-half-full>.
- Hendrie, P., & Tibbetts, N. (2021). In-session EAP in the time of COVID: Adapting in-session EAP provision, delivering online tutorials and refining the course evaluation process. In: L. Blaj-Ward, K. Hultgren, R. Arnold & B. Reichard (Eds.), *Narratives of innovation and resilience: Supporting student learning experiences in challenging times*. BALEAP: The Global Forum for EAP Professionals. (pp. 13-22). Renfrew.
- Higher Education Academy. (2017). *Flipped Learning*. <https://www.heacademy.ac.uk/knowledgehub/flipped-learning-0>
- Hodges, C., Moore, S., Lockee, B., Trust, T., & Bond, A. (2020). *The Difference Between Emergency Remote Teaching and Online Learning*. Educause Review. <https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning>
- Ishkova, M., Loh, V., White, G., Lawton, O., Tyson, J., Fung, H., & Askovic, M. (2021). To Flip or not to Flip? Reflecting on PALPable outcomes of flipping the classroom during the pandemic. *JPAAP*, 9(2), 146-158. <https://doi.org/10.14297/jpaap.v9i2.492>
- Kerr, P. (2020). *Flipped Learning in ELT*. Cambridge University Press.
- MacDiarmid, C., & Rolinska, A. (2021). Harnessing online course development skills: A crisis-prompted but carefully planned EAP course. *JPAAP*, 9(2), 159-168. <https://doi.org/10.14297/jpaap.v9i2.490>

Nottingham Trent University. (2013). *Centre for Academic Development and Quality Guide: The Flipped Classroom*. https://www4.ntu.ac.uk/adq/document_uploads/teaching/154084.pdf

Nordmann, E., Horlin, C., Hutchison, J., Murray, J-A., Robson, L., Seery, M. K., & MacKay, J. R. D. (2020). Ten simple rules for supporting a temporary online switch in higher education. *PLOS Computational Biology*, 16(10), e1008242. <https://doi.org/10.1371/journal.pcbi.1008242>

Pechenkina, E. (2017). *Flipping diverse classrooms: Instructor experiences and perceptions*. 'Me, Us, IT!', Proceedings of the 34th International Conference on Innovation, Practice and Research in the Use of Educational Technologies in Tertiary Education (ASCILITE 2017), University of Southern Queensland, Toowoomba, Queensland, Australia, 4-6 December 2015.

Rapanta, C., Botturi, L., Goodyear, P., Guàrdia, L., & Koole, M. (2020). Online University Teaching During and After the Covid-19 Crisis: Refocusing Teacher Presence and Learning Activity. *Postdigital Science and Education*, 2, 923-945. <https://doi.org/10.1007/s42438-020-00155-y>

Reidsema, C., Kavanagh, L., Hadgraft, R., & Smith, N. (2017). *The flipped classroom: Practice and practices in higher education*. Springer eBooks.

Silverman, D. (2010). *Doing Qualitative Research*. Third Edition. Sage Publications Ltd.

Strayer, J. F. (2012). How learning in an inverted classroom influences cooperation, innovation and task orientation. *Learning Environments Research*, 15(2), 171-193. <https://doi.org/10.1007/s10984-012-9108-4>

The University of Texas at Austin. (2019). *Flipped Classroom*. Faculty Innovation Center. <https://facultyinnovate.utexas.edu/flipped-classroom>

UNESCO. (2020). *COVID-19 Educational Disruption and Response*. <https://en.unesco.org/covid19/educationresponse/>