

Graham Cagney, A., O'Mahony, A., Cordie, L., Cagney, K., & Greppmair, A-C.. (2021). Business model development and transfer in the context of internationalisation: Lessons learned of German VET providers. In C. Nägele, N. Kersh, & B. E. Stalder (Eds.), *Trends in vocational education and training research, Vol. IV. Proceedings of the European Conference on Educational Research (ECER), Vocational Education and Training Network (VETNET)* (pp. 81–87). <https://doi.org/10.5281/zenodo.5170857>

Black Tiles and Silence: Going Digital. Voices from a Further Adult Vocational Education (FAVE) Interdisciplinary Community of Practice (CoP)

Graham Cagney, Anne

agraham@wit.ie, Waterford Institute of Technology, Ireland

O'Mahony, Anne

anne.omahony@postgrad.wit.ie Waterford Institute of Technology, Ireland

Cordie, Leslie

lesliecordie@auburn.edu Auburn University, USA

Cagney, Kieran

Kieran.cagney@gmail.com National College of Ireland, Ireland

Buckley, Mary

mbuckley@ncirl.ie National College of Ireland, Ireland

O'Neill, Conor

cponeill@wit.ie Waterford Institute of Technology, Ireland

Yelverton-Halpin

cyelverton-halpin@wit.ie Waterford Institute of Technology, Ireland

Clarke, Rory

roryclarke@kwetb.ie Kildare and Wicklow Education and Training Board, Ireland

Abstract

Context: Since March 2020 and the global pandemic, our 'new normal' is comprised of emerging COVID-19 variants, intermittent national lockdowns, restricted social interactions, and a continuation of remote online teaching and working from home. FAVE professionals have engaged with digital technologies, and related pedagogies and practices, in response to the need to deliver of their programmes through Emergency Remote Online (ERO) teaching.

Approach: This qualitative case study examined the perspectives of an online Community of Practice comprised of eight FAVE educators. The study took a methodological approach where each participant served as a case, representing a unique aspect of the 'remote' digital educator experience.

Findings: The experience of creating and sustaining ERO teaching as described by the participant-researchers is both challenging and rewarding. Findings establish the importance of developing an educator digital mindset that is proactive, rather than reactive; and characterised by particular behaviours and attitudes that are agile, collaborative, curious, and "tech savvy". Finally, relational learning and the importance of a supportive online CoP can be useful not only



to FAVE teachers and trainers, but also to other educational and training organisations promoting remote and online digital teaching and collaborations.

Conclusions: Challenges to developing an educator digital mindset and an identity as a digital practitioner arose from unexpected and difficult ‘online’ workplace relationships and demands, in addition to the unexpected impacts on boundary management between work-life and home-life. When the unexamined assumptions and frames of reference were brought into question, they resulted in disorienting dilemmas. The online supportive CoP relationships provided a safe space where critical reflection and dialogue could occur. Current understandings of the influence of ERO teaching on practitioner engagement with digital technologies, provide a contextualized understanding of how to support and facilitate the creation and development of these educator digital mindsets. This research has implications for developing digital teaching-learning environments (dTLEs) in FAVE programmes. Further research is required to provide a deeper understanding of how FAVE educators engage with digital technologies and develop an educator digital mindset.

Keywords

personal engagement, perspective transformation, identity self-states, digital mindsets,

1 Introduction

European research on digital education identified tensions between the needs of various stakeholders, specifically teachers, learners, educational organisations, employers, industry and society. Furthermore, institutional barriers included: (1) the digitisation of education and industry; (2) changing assessment and examination approaches and regulations; and (3) lag times with textbooks, materials and available technologies (Deitmer et al., 2018). FAVE educators worldwide have been adapting to and engaging with new pedagogical responses to a rapidly emergent digital transformation in the delivery of their programmes. Evidence that these ‘new’ digital pedagogical responses were effective are limited (Zilka et al., 2019; Cagney et al., 2020).

In response to the recent pandemic, FAVE educators have been tasked with delivering their programmes as ERO classes. An examination of these experiences is relevant to FAVE educators and trainers, but also to other educational and training organisations promoting remote and online digital teaching and collaborations. Two questions guided this study:

1. How do FAVE teachers describe their experiences in providing ERO digitalised teaching-learning environments (dTLEs)?
2. How do FAVE teachers develop and maintain an evolving professional identity as critically reflective digital practitioners?

The answers to these questions help provide an understanding of how individuals engage with digital technologies and develop an educational digital mindset. This study adds to the current knowledge base on the nature of an evolving FAVE educator digital mindset and teacher identity as critically reflective digital practitioners.

2 Literature

First, we draw on the literature related to the psychological conditions of personal engagement and disengagement at work (Kahn, 1990); transformational learning that identifies and challenges underlying assumptions, prompting changed perspectives leading to new roles and actions (Mezirow, 1997); and identity self-states that incorporates ‘possible’ and ‘ideal’ selves’ theory (Markus & Nurius, 1986). Thus, this literature highlights the importance of and interrelation of notions of identity, concept, emotion and agency (Beauchamp & Thomas, 2009;

Beijard et al., 2004; Rodgers & Scott, 2008; Hamman et al., 2010). Exploring these processes will inform how an online FAVE CoP impacted on professional identity and agency (Cranton, 2006; Boylan et al., 2018; Cagney, 2020).

Second, the study draws on extant literature that identifies three competencies that are fundamental to developing and supporting a digital mindset (Benke, 2013). Jansen et al. (2009) refer to digital knowledge as comprising: (1) differentiation (a breadth of knowledge about ICT, internet, media, information and digital literacy); and (2) integration (how that knowledge is absorbed or included into an existing life context). Digital skills include operational and technical competencies, in addition to strategic ICT skills that enable the achievement of more specific professional and educational goals rather than just for personal entertainment (van Dijk, 2005; van Deursen & van Dijk, 2009; Ilomäki et al., 2011; Ferrari, 2012). Digital attitudes are based in the affective domain and are strongly influenced by cognitive, emotional and behavioural elements.

In summary, little is known about how FAVE educators' engagement in their online teaching role influences their knowledge of digital technology and their use of digital technology skills. With this overall lack of empirical attention, the purpose of this study was to contribute to current knowledge of the impact of the ERO teaching-learning environment on the development of FAVE educators' digital mindsets and identity.

3 Methodology

The realities of an ongoing pandemic and extended shutdown severely impacted on the CoP and their availability to continue with the study as originally planned. The study was re-designed as a qualitative case study (Simons, 2009). Each participant in this study served as a case, representing a unique aspect of the 'remote' digital educator experience. Using this design, we collaborated as participant/researchers, and sought to answer the research questions through in-depth and online interaction and communication.

Methods included: online focus group sessions via Zoom; collaborative idea-generation using Padlet; and individual reflective papers/notes uploaded and shared via Padlet for the group to read and add comments, ideas and reflections.

Consistent with qualitative methodology, the data were analysed using a combination of inductive and concept coding (Saldana, 2016, pp. 40, 153). This approach enabled a holistic examination of individual experiences and facilitated a comparison of experiences across the data set. This hybrid approach allowed us to capture moments of importance and patterns that were driven by the data and to relate the data systematically to the research questions and theoretical framework, which became significant for the discussion section below.

4 Analysis of Findings

The experience of creating and sustaining ERO teaching as described by the participant-researchers is both challenging and rewarding. Specific to understanding how individuals engage with digital technologies and develop an educational digital mindset, our analysis generated two primary themes to explain how ERO teaching provided FAVE professionals with an opportunity to accommodate the development of an evolving educator digital mindset. They were: (1) coping with personal and professional change; and (2) pre-existing and emerging digital mindsets.

4.1 Coping with Personal and Professional Change

Anxiety emerged from the data that reflected the shock and horror at the devastation of the COVID-19 pandemic, combined with a realisation that national and international lockdowns, and online teaching were inevitable and necessary, at least in the short term. The seismic mid-

semester shift in March 2020 from a traditional face-to-face and blended learning context to a completely ERO teaching-learning environment was disorienting for the members of the CoP.

Identity, role and status emerged with a particular focus on professional competency, boundary management and headspace. One participant shared their feelings related to competency as a teacher in the new environment: ‘I have learned to talk to the wall [of black tiles that indicate participants’ cameras are turned off]’. Professional priorities were identified: ‘We push ourselves to be as professional as we can be . . . the show must go on . . . the show must go on’. Boundary management emerged from the data in a variety of ways. Online working from home experiences were described as: ‘Digital Groundhog Day of days, weeks, weekends, no separation – morphed together while trapped in an online world.’ For another person, their changed circumstances started with: ‘Wake up. Dress. Make Coffee. Walk to Home Office. Repeat’. All members reported working from home had fundamentally changed with a corresponding unwelcome invasion of the home and life world: ‘This [home office] was my space, my sanctuary. Now it is my portal to the outside world, a door that others enter, daily, in a succession of meetings and collaborations, of work and play that affords no respite or relief.’

Social and technical support, and changed working practices also featured. The normal day-to-day social interactions of a physical work environment were gone. The online CoP replaced these with opportunities for sharing professional experiences with other educators in a supportive environment. Technical support was provided in many ways including Zoom and Teams training and consultation sessions, and self-help videos on organisational learning platforms like Moodle and Blackboard. However, some individuals found that they were left very much on their own in sourcing and accessing online information to assist them in learning and understanding how to use the various technologies.

Changes in working practices moved meetings online and compounded the perception of increased demands, irritation and stress. Some staff were under pressure to ‘look busy’ and a culture of ‘management by meetings’ and monitoring ‘online time’ became a reality. One stated: ‘I truly believe that my schedule and workload has exponentially increased, with multiple, daily video meetings and emails that require responses in less than usual time.’

4.2 Pre-existing and Emerging Digital Mindsets

Prior knowledge and previous experience of digital technologies and openness to new digital knowledge and approaches were articulated in various ways within this group.

First, behaviour and attitudes to digital technologies changed from a personal freedom of choice and pace, to an organisationally imposed ‘no choice’. One said: ‘. . . people were forced to use these technology platforms which provided, in the main, some exceptionally good experiences for some people, but I have talked to people that have had some bad experiences’.

Second, challenges and concerns related to the volume of technological choices and information: ‘New frontiers – Sucked into the digital data vortex – information overload’ and ‘Apps Apps and more Apps’. For another: ‘The multitude of media and platforms is discombobulating. More than once (sometimes more than once) a day I am in the “wrong room”. Platform panic ensues. Someday, I am sure, I will end up in Hogwarts – it’s as real as anything else on my screen’. Concerns regarding privacy, data information, storage and access, GDPR, and cost all featured in various posts. Also, concerns were expressed regarding the potential for digital technological knowledge and competence to influence opportunities in education careers and progression. Self-consciousness and vulnerability were expressed in relation to being seen and seeing themselves on screen while working and teaching. Finally, exposure of the home world (private life and family) combined with new ways of working caused significant concern and uncertainty for all, including where this online experience was going and what it would mean for future work contexts and demands.

Third, digital competencies formed an important category of the data set. Knowledge of digital technology consisted of: (1) breadth of knowledge, which for most participants was general rather than specific; and (2) integration of knowledge, which was reported only in relation to professional contexts. Coming to terms and making sense of new language and information was difficult for both those with pre-existing and emerging knowledge of digital technologies. Use of digital technology skills featured only in relation to operational and technical competencies in the achievement of professional and educational goals. For one participant, challenging the ‘black box’ syndrome was experienced as: ‘Now you see me, now you don’t; now you hear me, now you don’t.’ For another, ‘Beam me up Scotty’ became a mantra when sending students to Zoom break-out rooms for groupwork. Another perspective on the use of digital technology skills was: ‘what was innovative in online teaching/support is now common place and day to day, so now we have a new mountain to climb - not sure where it is or how big it is, but it's not the same mountain we climbed this past year’.

5 Discussion

Being an education professional requires ongoing development of oneself as an adaptable, self-reliant learner on the one hand; while at the same time having a commitment to supporting and facilitating a high quality learning environment for one’s students. All participants created opportunities to learn, collaborate and pursue (online) professional opportunities in order to provide the best contexts they could for their students and colleagues. For some, the learning curve was a steep and frightening one: learning to teach in an online environment while also learning how to use the technology is a little bit like designing the plane while flying it.

Those with pre-existing or better developed digital knowledge and skills, found it easier to explore new options, increase their knowledge and skills, and take chances with new tools and software. They also tended to have more pre-existing and established relationships with other digitally orientated educators. However, even for these participants it was not always plain sailing. Evidently, ERO teaching is a highly individualised experience.

Participants identified that interactions between members within the CoP determined the quality of learning for the individual and the knowledge produced by the group (Imel, 1999). The organic and emergent CoP on which this research paper is based was created at a specific time, and in response to a mutual need to create knowledge collaboratively. While individual motivations may have differed, the group continued the process of learning and working together (Hansman & Mott, 2010) and in this way worked to ‘learn from and with one another as they pursue interests, opportunities, and challenge’ (Watkins & Marsick, 2010, p.66). Thus, this framework underpins the core focus of the study by providing a guiding lens to understand how an online CoP was sustained and how members developed as critically reflective digital practitioners, in their common need to navigate a pathway through a completely online and remote educational landscape.

6 Conclusions

Challenges to developing an educator digital mindset and an identity as a digital practitioner arose from unexpected and difficult ‘online’ workplace relationships and demands; ‘black tiles and silence’ of disengaged participants during online classes; and the demands of founded and unfounded expectations of organisational support and resources. Additionally, there were unexpected impacts on boundary management between work-life and home-life. When the unexamined assumptions and frames of reference were brought into question, they resulted in disorienting dilemmas. Changed relationships in all aspects of life during shutdown led to disorienting dilemmas, but it was through relationships that participants were able to begin to make sense of their experiences.

This research has implications for the future directions of online teaching provision and the development of digital teaching-learning environments (dTLEs). Findings establish the importance of developing an educator digital mindset that is proactive, rather than reactive; and characterised by particular behaviours and attitudes that are agile, collaborative, curious, and “tech savvy”. Finally, relational learning and the importance of a supportive online CoP can be useful not only to FAVE teachers and trainers, but also to other educational and training organisations promoting remote and online digital teaching and collaborations.

Further research is required to provide a deeper understanding of how individuals engage with digital technologies and develop an educator digital mindset.

References

- Beauchamp, C., & Thomas, L. (2009). Understanding teacher identity: An overview of issues in the literature and implications for teacher education. *Cambridge Journal of Education*, 39(2), 175–89. <https://doi.org/10.1080/03057640902902252>
- Beijaard, D., Meijer, P. C., & Verloop, N. (2004). Reconsidering research on teachers’ professional identity. *Teaching and Teacher Education*, 20, 107–28. <https://doi.org/10.1016/j.tate.2003.07.001>
- Benedek, A., Dobozy, G., & Orosz, B. (2018). Open learning resource structures in the activation of VET learners. In C. Nägele & B. E. Stalder (Eds.), *Trends in Vocational Education and Training Research. Vol. I. Proceedings of the European Conference on Educational Research (ECER), Vocational Education and Training Network (VETNET)* (pp.70–78). <https://doi.org/10.5281/zenodo.1319718>
- Benke, V. (2013). *The digital mindset: A theoretical discussion*. (Master thesis). Retrieved from Aalborg University Project Library. [https://projekter/en/studentthesis/the-digital-mindset\(0077e56a-de26-4800-9a76-f0de2869e0fd\).html](https://projekter/en/studentthesis/the-digital-mindset(0077e56a-de26-4800-9a76-f0de2869e0fd).html)
- Boylan, M., Coldwell, M., Maxwell, B. & Jordan, J. (2018). Rethinking models of professional learning as tools: A conceptual analysis to inform research and practice. *Professional Development in Education*, 44(1), 120–139. <https://doi.org/10.1080/19415257.2017.1306789>
- Cagney, A., G. (2020). I am what I do... professional voices from the field of further education and training. In J.A., Gammel, S.L. Motulsky, & A. Rutstein-Riley (Eds), *Identity and lifelong learning in Higher Education, Vol. I. I am what i become: Constructing identities as lifelong learners* (pp.151-74). Information Age Publishing, <https://www.infoagepub.com/products/Identity-and-Lifelong-Learning-in-Higher-Education>
- Cagney, A.G., O’Mahony, A., Cordie, L., Cagney, K., Buckley, M., O’Neill, C., O’Toole, M., Ververton-Halpin, C., & Hearne, R. (2020). Developing an educational digital mindset: Voices from an inter-disciplinary community of practice. In C. Nägele & B. E. Stalder (Eds.), *Trends in vocational education and training research, Vol. IV. Proceedings of the European Conference on Educational Research (ECER), Vocational Education and Training Network (VETNET)* (pp.62-78). <https://doi.org/10.5281/zenodo.4008068>
- Cranton, P. (1996). Types of group learning. *New Directions for Adult & Continuing Education*, 71, 25-32. <https://doi.org/10.1002/ace.36719967105>
- Cranton, P. (2006). *Understanding and promoting transformative learning: A guide for educators of adults*. Jossey-Bass.
- Deitmer, L., Heinemann, L., & Müller, W. (2018). New forms of learning and teaching and organisational change – a case study at the building industry. In C. Nägele & B. E. Stalder (Eds.), *Trends in vocational education and training research. Vol. I. Proceedings of the European Conference on Educational Research (ECER), Vocational Education and Training Network (VETNET)* (pp.131–38). <https://doi.org/10.5281/zenodo.1319650>
- Hamman, D., Gosselin, K., Romano, J., & Bunuan, R. (2010). Using possible-selves theory to understand the identity development of new teachers. *Teaching and Teacher Education*. 26(7), 1349–361.
- Jansen, B. J., Booth, D. & Smith, B. (2009). Using the taxonomy of cognitive learning to model online searching. *Information Processing and Management*, 45(6), 643–663. <https://doi.org/10.1016/j.ipm.2009.05.004>
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692–724. <https://doi.org/10.2307/256287>
- Markus, H., & Nurius, P. (1986). Possible selves. *American Psychologist*. 41(9), 954–969. <https://doi.org/10.1037/0003-066X.41.9.954>
- Mezirow, J. (1997) Transformative learning: Theory to practice. *New Directions for Adult and Continuing Education*, 74, 5-12. <http://dx.doi.org/10.1002/ace.7401>
- Redecker, C., & Punie, C. (2017). *European framework for the digital competence of educators: DigCompEdu*. Publications Office. Retrieved from <https://doi.org/10.2760/159770>
- Rodgers, C.R. & Scott, K.H. (2008). *The development of the personal self and professional identity in learning to teach*. In M. Cochran-Smith, S. Feiman-Nemser, J.D. McIntyre, & K.E. Demers (Eds), *Handbook of research*

- on teacher education: Enduring questions in changing contexts (pp. 732-55). Routledge. <https://doi.org/10.4324/9780203938690>
- Saldaña, J. (2021). *The coding manual for qualitative researchers*. Sage.
- Simons, H. (2009). *Case study research in practice*. Sage.
- van Deursen, A. J. A. M. & van Dijk, J. A. G. M. (2009). Using the internet: Skill related problems in users' online behaviour. *Interacting with Computers*, 21(5-6), 393–402. <https://doi.org/10.1016/j.intcom.2009.06.005>
- van Dijk, J. (2005). *The deepening divide: Inequality in the information society*. Sage. <https://doi.org/10.4135/9781452229812>.
- Watkins, K. E. & Marsick, V. J. (2010). Group and organizational learning. In C. E. Kasworm, A. D. Rose, & J. M. Ross-Gordon (Eds), *Handbook of adult and continuing education* (pp. 59-68). Sage.
- Zilka, A., Grinshtain, Y., & Bogler, R. (2019). Fixed or growth: Teacher perceptions of factors that shape mindset. *Professional Development in Education*, 1–17. <https://doi.org/10.1080/19415257.2019.1689524>

Biographical notes

Dr Anne Graham Cagney is Senior Lecturer in Adult Education, Waterford Institute of Technology, Ireland. She is a Fulbright Scholar, RSA Fellow and President of the Irish Fulbright Alumni Association. Anne has over 30 years' experience in higher education. Her background includes professional learning and development, adult education, Human Resources/Organisation Development, and qualitative research methodologies.

Anne O'Mahony is a PhD student in Waterford Institute of Technology. She has been an FET tutor with Cork Education & Training Board (Ireland) as well as having experience of a variety of education and training contexts over the last 20 years. Her research interests include professional development in the FET sector.

Dr Leslie Cordie is Associate Professor at Auburn University, USA. She has over 25 years combined experiences in higher education, government and military, and corporate America. Her background includes distance learning, adult education, training, instructional design, program and professional development, and healthcare.

Mr Kieran Cagney is studying at National College of Ireland. He has over 30 years in ICT, systems development and data analytics in customer service organisations, public sector, railway signalling design, automotive and IT/systems consulting.

Ms. Mary Buckley, is the Librarian at NCI. Following an early career as a secondary school teacher she now manages the NCI Library. She has extensive knowledge and experience of supporting adult learners and library management and data systems.

Mr. Conor O'Neill is an eLearning specialist, Waterford Institute of Technology, Ireland. Following an early career in the manufacturing sector he has extensive knowledge and experience of supporting faculty with eLearning, instructional design and technical support.

Dr Carol Yelverton-Halpin, is a Lecturer in Early Childhood Education, Waterford Institute of Technology, Ireland. Her post-doctoral research is in critical education theory with a specific focus on power, social disadvantage and education and their impact on the 'self'.

Mr. Rory Clarke, is a tutor with Kildare and Wicklow Education and Training Board. He is carpenter by trade and teaches Woodwork, Mathematics and Technical Drawing.