Institution: University of Wolverhampton

Unit of Assessment: 23 Education

Title of case study: Improving Digital Learning in Poor, Marginalised, and Excluded Communities: the Cases of the UK and Palestine

Period when the underpinning research was undertaken: 2005-2020

Details of staff conducting the underpinning research from the submitting unit:

Name(s):	Role(s) (e.g. job title):	Period(s) employed by submitting HEI:
Professor John Traxler	Professor of Digital Learning	1989 to the Present
Professor Sarah Hayes	Professor of Higher Education Policy	2018 to the Present

Period when the claimed impact occurred: 2013-2020

Is this case study continued from a case study submitted in 2014? N

1. Summary of the impact

Policy discussions of learning technology and education have taken place independently of each other, creating disconnects between them and flaws in policy, practice and paradigms regarding mobile and digital learning. This is exacerbated in contexts of local disadvantage and international development. Research at the University of Wolverhampton has actively addressed these issues and has resulted in new policies on digital technology that remedy concerns. It does this in two distinct and different ways. First, our research shaped and influenced the debate on learning technology to challenge established norms, modes of thought and practices in the UK. Second, in collaboration with UNESCO and the Palestinian Higher Education providers, we influenced policies and the design and delivery of curricula and syllabi. This led to more context-relevant and inclusive educational practices, updated policies on digital technology and dedicated training materials.

2. Underpinning research

When digital technology designers and western policy makers consider the interface between technology and education, they do so with little regard one to another. This gives rise to a dominant viewpoint where technology is seen in isolation, as something in the abstract, and discussed in policy as if seamless and efficient in its functioning. These distinctly Western assumptions about technology privilege its smooth and uninterrupted operation in the West in time of peace, which obscures situations of disadvantage. These assumptions are at odds too with technology used and life lived in places like Palestine, where there is near constant violence, interruptions to service, and dual use of analogue and digital systems. Added to this is cultural bias throughout, which perpetuates the limitation of inclusive practices and perceptions of what is possible in the implementation of digital technologies in education in local UK and global contexts. Furthermore, though these cases are drawn from two very different locations, shared issues are illuminated through crises, including the COVID-19 pandemic.

Building on work funded by UNESCO and other development agencies such as IDRC (International Development Research Centre), USAID (US Agency for International Development), ITU (International Telecommunication Union), ILO (International Labour Organisation), the British Council, UNRWA (United Nations Relief and Works Agency for Palestine Refugees in the Near East) and participation in high-level working groups and official publications,

our research focuses upon local, national and international perceptions, attitudes, discourse and priorities. Our research [R] led to four distinctive findings [F], namely:

F1. Mobile technology, the default digital learning technology in disadvantaged and development contexts, was intrinsically skewed away from the values, needs, languages and culture of marginal, nomadic, indigenous and otherwise disempowered communities. The concepts and practices of digital literacy, digital learning, and learning more generally have been articulated and operationalised in terms that are implicitly specific to mainstream European culture and institutions. This is neither adequate nor appropriate outside Europe [R1] and specifically not in occupied Palestine nor amongst refugees from MENA (Middle East and North Africa) in the EU [R2]. This led to recommendations for meaningful collaborative design, user-generated content, indigenous pedagogies, inclusive research ethics and non-'edtech' technologies [R1 and R2].

F2. The relationships, transactions and interactions between global policymakers and educational researchers around digital learning for development contexts were flawed, out-dated, biased and partial. Findings challenged established paradigms of 'mobile learning' and the policy derived from them [R3] and revealed how top-down, scaled-up, North-to-South researcher-led, innovation-driven initiatives failed to match local contextual needs, values, pedagogies, technologies and institutions and perpetuated existing inequalities and hegemonies [R4].

F3. Linguistic analysis of millions of words of policy texts through corpus-based critical discourse analysis revealed a dehumanisation of HE policy rhetoric, where disadvantage is perpetuated linguistically, to serve the status quo. This critique of the control of language about digital learning in policy documents demonstrated disadvantages, especially relating to a failure to acknowledge the postdigital positionality of individuals [R5 and R6].

F4. Engineering and Physical Sciences Research Council (EPSRC)-funded research on data and disadvantage in the Black Country has taken a postdigital approach to demonstrate a deficit in regional digital skills plans, which focus largely on employability but omit important aspects of ethics, digital inclusion, attention to bias, data poverty, and digital citizenship [R6]. These factors are particularly problematic, too, among MENA (Middle East and North Africa] diasporic communities.

3. References to the research

These research outputs have all been through a rigorous peer-review process and have been points of reference beyond the original institution. For example, R1 has been cited in Business Studies and Palestinian Studies journals and R5 has been cited in *Postdigital Science and Education* and *Learning Media and Technology*. Evidence of peer-reviewed funding is below.

R1. Traxler, J. (2018) Digital literacy: a Palestinian refugee perspective, *Research in Learning Technology* Vol. 26 (2018). http://dx.doi.org/10.25304/rlt.v26.1983

R2. Traxler, J. (2009) Current State of Mobile Learning. In M. Alley (ed.), *Mobile Learning: Transforming the Delivery of Education and Training* Athabasca, AB, Canada, AU Press. pp. 9-24. ISBN 978-1-897425-43-5

R3. Traxler, J. (2016) Mobile Learning Research: the Focus for Policy-Makers, *Journal of Learning in Development* 3(2), pp7-25. Available at: https://jl4d.org/index.php/ejl4d/article/view/150

R4. Traxler, J. & Leach, J., (2006), Innovative and Sustainable Mobile Learning in Africa *WMTE '06: Proceedings of the Fourth IEEE International Workshop on Wireless, Mobile and Ubiquitous Technology in Education,* November 2006, pp. 98–102 Available at:
https://dl.acm.org/doi/10.5555/1193221.1194523.

R5. Hayes, S. (2019) *The Labour of Words in Higher Education: is it time to reoccupy policy?* Leiden: Brill. ISBN: 978-90-04-39536-7. https://doi.org/10.1163/9789004395374

(REF2 Output)

R6. Hayes, S, Jopling, M, Hayes, D and Westwood, A, Tuckett, A. and Barnett, R. (2020). Raising regional academic voices (alongside data) in Higher Education (HE) debate. *Postdigital Science and Education*. 3, pp.242-260. https://doi.org/10.1007/s42438-020-00131-6

Grant

The dialogic approach adopted in response to the policy analysis [R6] has since been used to build regional cross-sector postdigital debate in EPSRC-funded research on digital skills plans, data and disadvantage in the Black Country. EPSRC-funded Grant 'Data and disadvantage: taking a regional approach towards Human Data Interaction (HDI) to inform local and national digital skills policies' (Grant Number EP/RO45178/1), Duration 2020-21, Value: GBP11,387.94.

4. Details of the impact

The impact documented in this case study concerns instrumental policy change through shaping and informing the policy debate on learning technology in the UK, on the one hand, and the challenging of norms and shaping emerging digital policy regarding technology in Palestine, on the other.

I1. Shaping and influencing the policy debate on learning technology in ways that challenge established norms, modes of thought and practices in the UK

Our initial pathway was that more contextual understandings through a postdigital approach led to public debates and participants publishing articles in the *Postdigital Science and Education* (PDSE) journal. This influenced the formation of an interdisciplinary research campus based on Postdigital Participation in Braunschweig, Germany, inspired by our work. Interview questions informed by our research evidence on the new policy approach of translating cultural understandings of digital policy issues across local and international public audiences. This led to policy makers funding a new postdigital network [C1]. This pathway has enabled the formation of a new group, the new Midlands HE Policy Network (MHEPN).

MHEPN was formed on the basis of research findings [F1] to deal with the implications of digital disadvantage and to raise regional voices to input into policy. Partners now include participants from local businesses, the West Midlands Combined Authority (WMCA) and Wolverhampton Council [C2]. This is notable for two reasons. First, it showed that our research findings on the resolution of problematic perspectives arising from MENA communities overseas can be applied to diasporic and other underprivileged communities in the UK. Second, there is a very clear resemblance to the problems of digital poverty that are encountered in the current COVID-19 pandemic. The same issues of lack of equipment, differentiated and incompatible devices, data poverty and interruption of services all apply as readily in some UK homes as they do in Palestine, albeit for different reasons. Understanding issues at play (e.g. 20% of the West Midlands population are not internet users) is helping local authorities develop policies to overcome them. The latter is evident in the Wolverhampton Digital website [C3 and C2] and through a WMCA cross-sector coalition to which members of the EPSRC-funded research team on digital skills plans, data and disadvantage in the Black Country are contributing.

This model has been adopted by cross-sector participants in a series of regional events put on in 2019-20 by MHEPN concerning digital disadvantage, data and skills strategy in the Black Country [C4].

I2. Influencing UNESCO policy and the design and delivery of curricula and syllabi in Palestinian Higher Education (HE), manifest in appropriate and improved educational practices, policies on digital technology and dedicated training materials

Underpinning research [F1, F2 and F4], combined with project work in HE in Palestine and in Europe with MENA refugees from 2015 has led to informing policy at UNESCO and to curriculum change around digital learning practice in Palestinian HE, Palestinian policy on digital literacy, and in policies for MENA refugees to EU HE. Two Erasmus+ projects, METHODS and TEFL-ePAL, have drawn on the research [R1 underpinning F1], using it to modernise teaching methods, embed research and build capacity appropriate to MENA and Palestinian culture, contexts, infrastructure and institutions. Partners included Birzeit University, Palestine Polytechnic University, and the University of Jordan.

In Palestine, a policy area of central importance is the need to develop strategies to provide equal access for all mobile devices. Traxler was also able to inform UNESCO's thinking on the informality inherent in the use of digital technologies in education. UNESCO was able to develop a position vis-à-vis education where, "moving beyond literacy and numeracy, [it was able] to focus on learning environments and on new approaches to learning for greater justice, social equity and global solidarity" [C5]. This appreciation is crucial for places like Palestine, where the latter three areas loom larger than they do in the West.

In 2019, UNESCO, writing in a specifically Palestinian context, endorsed Traxler's argument that "empowering people and communities requires culturally specific and culturally sensitive definitions of digital literacy, rather than appropriating those generated outside the region and outside the community" and that "language, values, gestures and culture that are overwhelmingly Anglophone American; it is largely under the control of global corporations and thus alien to many of the world's cultures and communities." [C6]

At the same time as changing policy at UNESCO, the project work has created change on the ground. TEFL-ePAL has led the introduction of modern language learning materials and practices in Palestinian HEIs in the consortium [C7 and C7a]. METHODS has impacted institutional strategy and policy, through effective practice and a collaborative approach giving a strong reassurance that the changes are sustainable. This is evidenced through the buy-in from key decision-makers within partner universities, who have affected institutional change as a result of the METHODS project and an EU Technical Assistance Mission to a Palestinian HEI creating digital literacy curricula [C8 and C8a]. METHODS was able to influence the situation in Palestine directly as the following example illustrates:

> "In a country like Palestine, because of the political situation for example Jerusalem on Tuesday there will be no transport and no classes, so we need alternatives so that education is not disrupted. In Palestine you are going to have days where movement is very difficult, but we need to continue. We live in a precarious environment and that's where technology plays a role. BU Lecturer 2"

> "Adoption of PBL [Project Based Learning] requires a rethinking of curriculum at system level and needs to link to the social context of Palestine directly and its young minds need to be directed to both thinking through and taking actions that solve the problems that are inherent within the developing society." [C8]

Co-development and collaboration between partners in the METHODS project has been strong throughout. The motivation and collaboration between partners in both the EU and Jordan and Palestine have been key to the success of this project.

The significance and reach of this impact relate to the extension of opportunity as the direct result of the embedding of research findings. Palestinian refugees in Jordan and Palestine, as beneficiaries, now have digital access and learning in ways they did not before and could not have achieved had the work not been done because of lack of local research-informed materials and training.

As will be seen in both cases, the challenges of digital poverty, whether in Palestine as the result of violence, poverty and upheaval, or in the UK as the result of poverty, inequality and COVID-19,

both have resemblances to each other. The impact discussed here goes some way to helping to begin to redress the imbalance.

5. Sources to corroborate the impact

C1. Testimonial from Department Head, Georg Eckert Institut, University of Goettingen.

C2. Testimonial from Wolverhampton City Council.

C3. Wolverhampton City Council's digital website - https://digitalwolves.co.uk/index.html

C4. Testimonial from the East Midlands Salon.

C5. UNESCO (2015) *Rethinking Education: Towards a global common good?* Paris, UNESCO, ICT in Education, https://unesdoc.unesco.org/ark:/48223/pf0000232555
See specifically page 50, note 79, referencing R2.

C6. UNESCO (2019) *Evaluation of UNESCO's Work in Information and Communication Technologies (ICT) In Education*, Paris, France: UNESCO Internal Oversight Service (IOS), Evaluation Office https://www.gcedclearinghouse.org/sites/default/files/resources/190326eng.pdf
Traxler is cited in several places, see especially page 212, note 245, referencing R1.

C7. Testimonial from Project Department Manager, Palestine Ahliya University.

C7a. ERASMUS-funded TEFL-ePAL Grant (Grant Number 2018-3489/001-001), Duration 2019-2022, Value GBP99,920 (https://tefl-epal.ps/).

C8. METHODS Quality Assurance and Evaluation Report.

C8a. ERASMUS-funded METHODS Grant (Grant Number 561940-EPP-1-2015-1-JO-EPPKA2-CBHE-JP), Duration 2016-2019, Value GBP80,000 (http://methods.ju.edu.jo/Home.aspx).