

Green shoots of hope in mobile learning



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The Open University, UK

19th International Conference

mobile learning 2023

Lisbon, Portugal, 11 -13 March

Connecting learning and living

for greater learning opportunities and a sharper focus on learners' lives, interests and needs



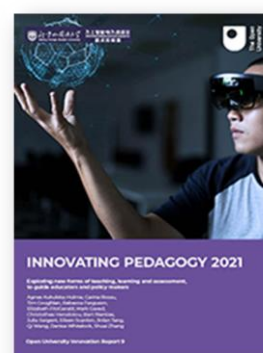
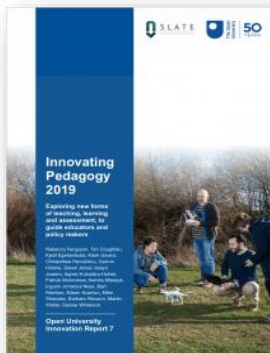
The Open University



Exploring, predicting and shaping future ways of teaching, learning and assessing



- understand emerging trends, opportunities, threats
- address global challenges in education
- promote more equitable, diverse and caring edtech futures



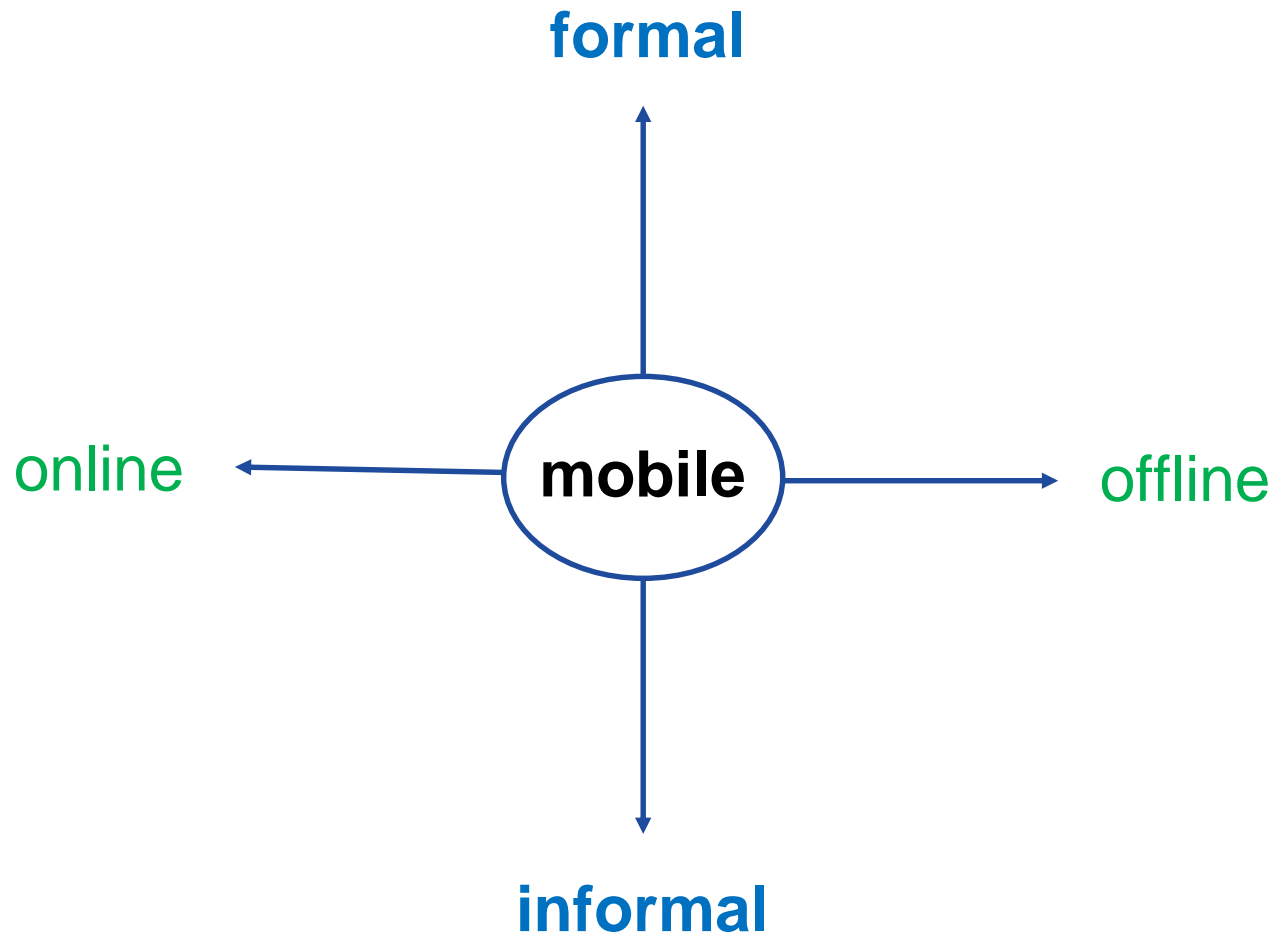
Overarching themes from the past 10 years of Innovating Pedagogy reports



Ten overarching THEMES	Examples
1. Connecting with others	Telecollaboration, Crowd learning
2. Emotions	Playful learning, Learning through wonder
3. Justice	Engaging with data ethics, Decolonising learning
4. Resourcing learning	Bring your own devices, Learning analytics
5. New settings for learning	Place-based learning, Flipped classroom
6. Frameworks to support thinking and learning	Computational thinking, Learning to learn
7. Learning in an open world	Open textbooks, Badges to accredit learning
8. Learning in daily life	Learning through social media, Esports
9. Making learning personal	Dynamic assessment, Translanguaging
10. Engaging learners	Immersive learning, Event-based learning

The past few years...





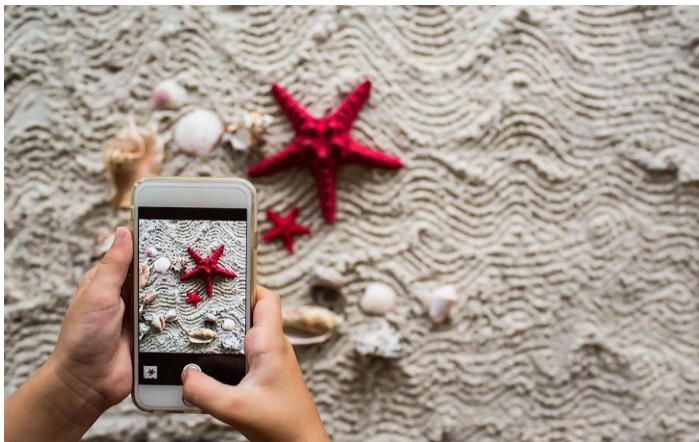
Offline learning



'real' social connection



wellbeing



engaging the senses



direct experience

Walk-and-talk

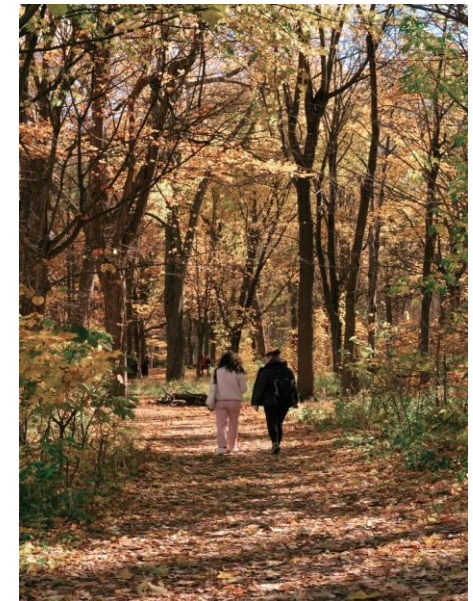
(Innovating Pedagogy 2022)

The act of walking:

- facilitates thinking and discussion
- can lift spirits, clear the mind, spark new ideas, provide insights into life experiences
- may expand social networks



Combined with conversations on the phone, via text messages, or directly between people walking side by side



Walk-and-talk – connecting places and people

Community project run by Learning Unlimited in London

Through **walking with local volunteer guides and others**, socially isolated migrants can engage in informal learning to:

- develop their language skills if English is not their first language
- increase their knowledge of their local area
- find out about local services, support and recreational opportunities



<https://www.learningunlimited.co/projects/walk-talk/>

Learning outdoors

Zimmerman, H. T., & Land, S. M. (2022). **Supporting children's place-based observations and explanations using collaboration scripts while learning-on-the-move outdoors.** *International Journal of Computer-Supported Collaborative Learning*, 17(1), 107-134.



AUGMENTED REALITY
Tree life cycles

COUNTERPOINT

‘if a technologically mediated nature is all we come to know, we risk eroding direct, meaningful engagement with nature’

Cuthbertson et al. (2004: 142) in Reed, J. (2022). Postdigital outdoor and environmental education. *Postdigital Science and Education*, 1-9.

Language teacher training: storytelling rehearsals to teach English across formal and informal settings

(Bertoluzzi, Bertoldi & Marenzi in: *Mobile Assisted Language Learning
Across Educational Contexts*, 2021)

An online environment for student teachers –
supported by teacher educators, librarians, volunteer
narrators, parents, childminders

**Rehearsals for informal storytelling events in
libraries** aimed at young English language learners
(and in gardens during the pandemic emergency)

Mobile interactions enabled anytime planning,
rehearsals, reading resource creation and sharing,
feedback, continuous reflection on action

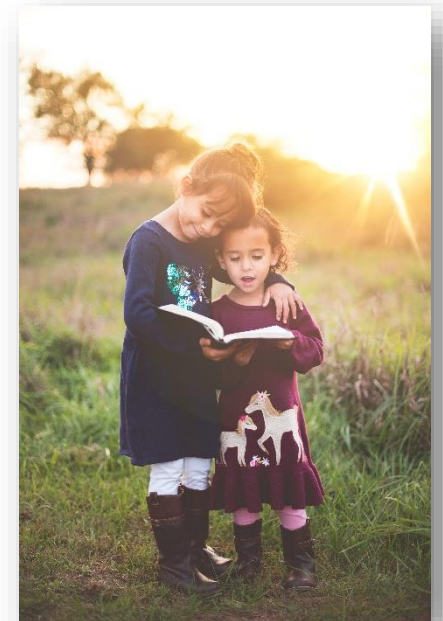
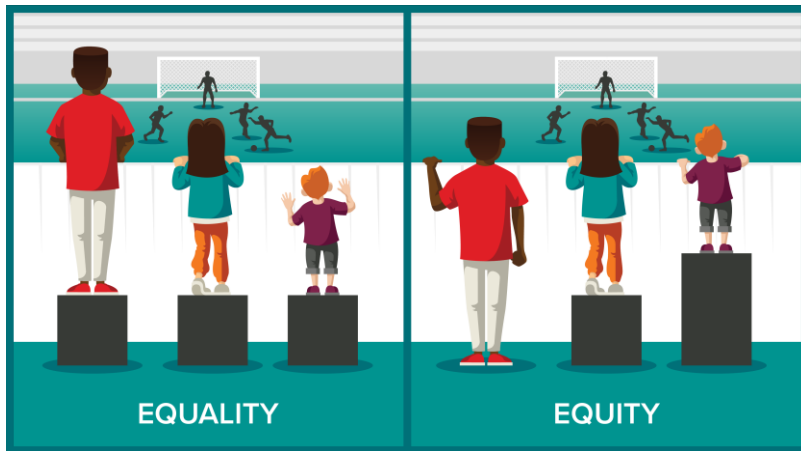


Image by Ben White on Unsplash

Post-pandemic education: More equitable, compassionate?

Awareness of (in)equity



Awareness of wellbeing



Image sources:

<https://medium.com/inspired-ideas-prek-12/whats-the-difference-between-equity-and-equality-in-education-ef20971e7fda>

<https://medium.com/sharing-by-mirco-pasqualini/wellbeing-the-next-disruptive-industry-by-tech-a276828aac50>

Mobile learning in 2023 and beyond...



What are we researching? Mobile Learning 2023 conference



A different way to learn

Reimagining teaching and learning

Cross-cultural education

Education for sustainability

Raising awareness about nature conservation

Relevant and participatory learning spaces

Inclusive learning environment

Inclusive digital democracy

Creating productive experiences

Critical thinking and problem-solving

Hands-on clinical skills

Motion simulation

Global employability skills

Practice through play

What are we researching? Mobile Learning 2023 conference



Opinions of students
Attitudes of students
Attitudes of librarians
Perceptions of teachers
Perceptions of fact-checkers

Evaluation of linguistic aggression
Evaluation of climate change impact
Emotional evaluation of movie posters
Usability evaluation of mobile interfaces
Review of multi-project platforms

Framework of best practices
Data acquisition framework
Digital transformation framework
Conceptual framework for participation
Conceptual model for continuance usage intention
Methodological model for using smartphones
Reference architecture for energy services
Multidimensional ontology

Design principles
Intuitive querying
User-adaptive navigation
Cognitive criteria
Citizen identification

Agendas for mobile learning

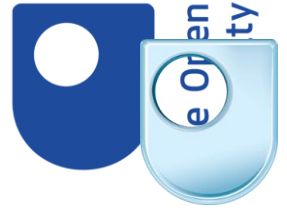
Pegrum, M. (2014) *Mobile learning: Languages, literacies and cultures*. Palgrave Macmillan.

Three agendas for mobile learning:

- Transforming teaching and learning
- Developing 21st century skills
- Promoting social justice

Mobile learning agendas

- 2006: **Big issues in Mobile learning** (Sharples)
- 2007: **Mobile Learning: Towards a Research Agenda** (Pachler)
- 2009: **Future Directions in Researching Mobile Learning** (Kukulska-Hulme)
- 2010: **Leveraging mobile technology for sustainable seamless learning: A research agenda** (Looi et al.)
- 2012: **Turning on mobile learning: global themes** (UNESCO)
- 2012: **An agenda for mobile learning** (Rushby)
- 2014: **Agendas for Mobile Learning** (Pegrum)
- 2016: **The Future of Mobile Learning** (Traxler)



Reflecting on our agendas and research questions

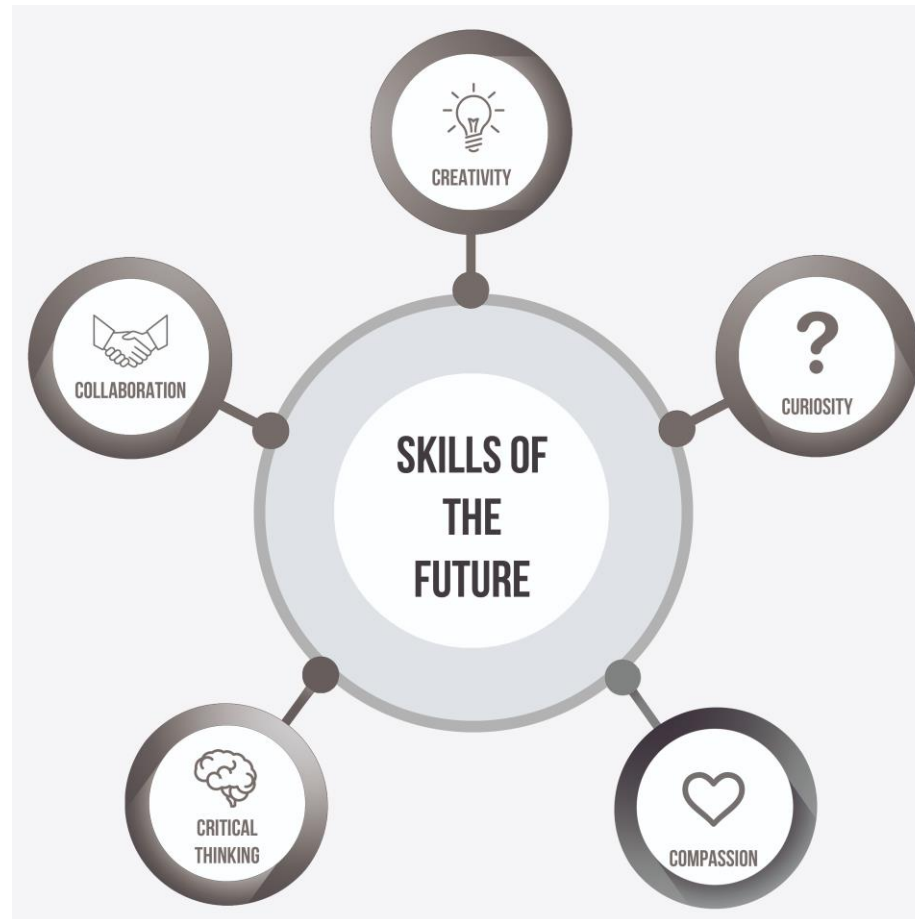
- as individuals and as a mobile learning community

What are our current research agendas in mobile learning?

- » Who sets the agenda for our research?
- » What research questions are we pursuing?

See:
Kukulska-Hulme, A. (2021). Reflections on research questions in mobile assisted language learning. *Journal of China Computer-Assisted Language Learning*, 1(1) pp. 28–46.
Available at: <http://oro.open.ac.uk/78924/>

Artificial intelligence in education



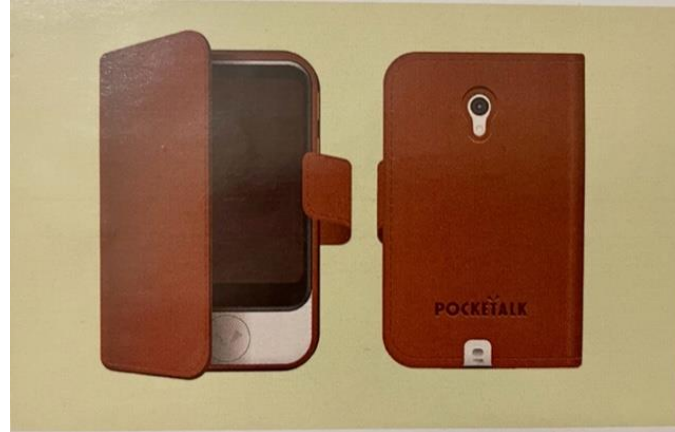
What will
AI do?

What will
people do?

Image: Lighthouse Research and Advisory
<https://lhra.io/blog/future-work-requires-essential-human-skills/>



Smart jewellery



Voice translator



Audio glasses

Increasing opportunities for **informal and home-based learning and content creation**

- **An addition to, or a substitute for, formal learning**
- **Emerging practices**, such as influencer-led education
- **Personal interests and group affiliations** shape choices and practices



SDG4

United Nations

Sustainable Development Goal 4:

Quality Education



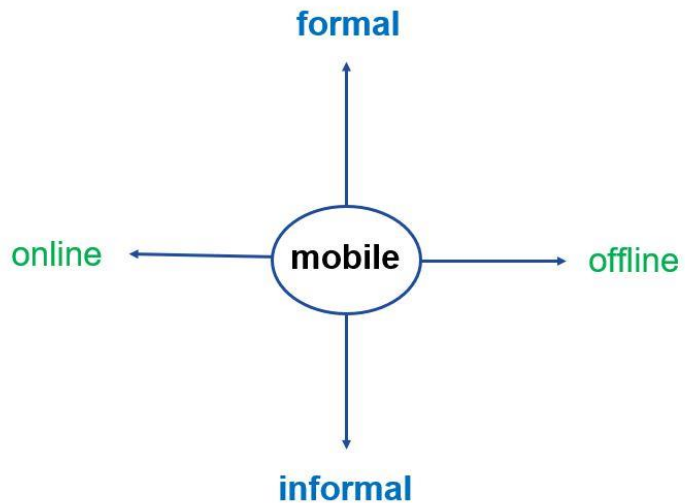
By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university

By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations

By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially

Learning in challenging settings

Widening participation
in **low-resource
contexts** in a mobile
age



Our research on children's use of technology and the English language

Literature review (2020-21) showed a **lack of research** relating to:

- low-income/ under-resourced countries
- marginalised communities
- children's opinions and experiences, both in school and outside of school
- teachers' and parents' perspectives





Reaching out to marginalised young people aged 13-15 in under-resourced countries in Africa and Asia

Supported by



Sudan



Senegal



Bangladesh



Nepal

Partners:

Universities
Schools
Field researchers

Participants:

Children
Teachers
Parents

Focus on:

- mobile technologies & English language learning and use
- lived experience, inside and outside of school
- barriers and opportunities, including role of gender

The Research Team

- **The Open University** Agnes Kukulska-Hulme (Lead), Saraswati Dawadi, Mark Gaved
- **Tribhuvan University, Nepal:** Kamal Raj Devkota
- **University of Dhaka, Bangladesh:** Rubina Khan
- **Ahfad University for Women, Sudan:** Amna Bedri
- **Regional Centre of Teacher Training, Diourbel, Senegal:** Abdou Niane
- **Monash College, Australia** Ram Ashish Giri

Each national partner in the 4 fieldwork countries also had their own research team.

ACCESS AND ATTITUDES

- ❖ **RQ1:** What **access** do marginalised students, teachers and parents have to technology that may be used for educational purposes?
- ❖ **RQ2** What are marginalised students', teachers' and parents' **attitudes** towards the role of technology and the English language?

EXPERIENCES

- ❖ **RQ3** What are the **experiences** of students, teachers, and parents in **using technology** for student learning?
- ❖ **RQ 4** What are the **experiences** of students, teachers, and parents in **using English** for student learning? What factors affect girls' experiences of technology in support of their education?
- ❖ **RQ4** What factors affect **girls' opportunity** and motivation to learn English in the target countries? Is there **gender equity and equality** in English language learning?

School settings in marginalised communities

Bangladesh- slum children (urban area) and Bandearban- remote part of the country where the literacy rate is 34.0%.

Senegal-Taïba Moutoupha and Ndindy, where the GER for girls is the lowest, and the dropout rate for both girls and boys the highest.

Sudan-Suburbs of Omdurman (inhabited mostly by war-displaced people) and white Nile (tribes such as nomads and Hausa)

Nepal- Squatter Community (urban setting), and Tharu community- marginalized ethnic community (rural location).



Experiences of using technology at home

Students:

Home assignments: *He [brother] allows me to use mobile phone for preparing assignments (BD).*

Learning improvement: *I use google search. To improve the English language I search for 'how to learn the English language' on YouTube. For solving maths I downloaded apps (NP).*

Group work: *They work together. Students, for example, have WhatsApp groups through which they carry out work together. I noticed that (Parent-SN).*

Online classes from home: *I use it in an online class (NP).*

Other uses: listening to English songs/music, social media (Facebook, TikTok, YouTube)

Challenges: sharing technology, connectivity



Experiences of using technology in schools

Teacher:

I use it but to prepare my lessons, I use it to make the lesson plan , but I don't use it inside the classroom (SD).

Student:

We have a computer lab but we did not use it during the time of pandemic.

Before the pandemic, our teacher would take us to the lab. He used to demonstrate us different things (NP).



Attitudes towards technology

- Facilitates learning & teaching
- Better job opportunities
- Better life opportunities



Students:

Because many of us cannot use technology such as computers, and students must know how to use those because at a certain level you will need them (SN)

Crucially, technology does create a better opportunity in life for everyone (SN)

Teachers:

Technology creates better life opportunities for me and for others (SD)

- **Students recognised that gaining the skills to effectively use devices is important.**
- **Some teachers, parents and students expressed some negative attitudes towards technology and its possible misuses.**

Gender equality in using technology and learning English



- Some female students have fewer opportunities to use mobile phones at home than male students: girls have certain duties at home and may not be allowed to go to internet cafes.

“Girls should not use a smartphone. It’s only for my son.” (Parent in Bangladesh)

“I do not think girls and boys have the same opportunity to use technology at home” (Parent in Sudan)

- Parents are more concerned about how their daughters use technology than their sons.

“Boys and girls are the same, but you have to be cautious about at what the girl is studying” (Parent in Bangladesh).



Impact related work

First research partner in each country is working with 2-4 other organisations

Other partners (representatives): British Council, Ministry of Education and Education Training Centre

- Policy briefs
- Policy briefs dissemination and workshops for Key stakeholders
- Training of Trainers/ Teacher training/ Awareness raising among parents
- Press release
- Blog post/boosting in SNS sites
- Radio programs/interviews



Our new project
with a focus on Equality, Diversity and Inclusion (EDI)



Digital/mobile learning and the future of English in Higher Education in South East Asia (2022-24)

Supported by



English for the equality, diversity
and inclusion (EDI) generation



Bangladesh



Indonesia



China



India

- **Focus on emerging ‘trends’** - such as digital/mobile English learning and informal learning
- **Collecting perceptions and experiences** from students, teachers, policy makers, I/NGO leaders, IT companies, educationists
- **Drawing out implications** for pedagogy, policy and research

What research shall we do next? How can we work together? What problems shall we try to solve?



Global or local educational challenges in 2023 and beyond

Education provision

- **Limited or inequitable access** to education
- **Poor quality** education
- **Outdated curricula** not developing vital competencies
- **Ineffective pedagogies** that do not engage or achieve results

Environments

- **Under-resourced** learning environments
- **Disruptions** due to natural disasters and wars/political unrest

People

- **Teacher shortages**
- **Skills shortages**
- **Greater learner mobility**, forced or by choice
- **Greater diversity in classes**, requiring specialist support
- **Mental health and wellbeing issues** due to pandemic

Technologies

- **Challenges of online**, mobile, hybrid, virtual learning
- **Rise of artificial intelligence**
- **Unsafe or unethical online spaces**

Mobile perspectives on educational challenges

- **Inequitable access** – access enabled by mobile devices
- **Outdated curricula** – up-to-date mobile resources
- **Ineffective pedagogies** – flexible, personal mobile learning

- **Under-resourced** environments – mentoring or resources on mobiles
- **Disruptions** – continuity through mobile devices

- **Teacher shortages** – mobile resources and smart assistants filling in
- **Greater learner mobility** – mobile support for translation
- **Greater diversity in classes** – mobile support for translanguaging
- **Mental health and wellbeing** – mobile health integrated with learning

- **Lack of skills for online** – mobile literacy outpacing online
- **Rise of artificial intelligence** – chatting with chatbots
- **Unsafe or unethical online spaces** – learner-centric mobile platforms

Mobile learning is still “in its infancy” in many parts of the world

- “mobile learning **in Malaysia** is still in its infancy” (Ismail, Azizan & Gunasegaran, 2016)
- “Within the **Greek formal educational context**, mobile learning is in its infancy” (Nikolopoulou, 2018)
- “learning through mobile devices is still in its infancy **in Pakistan**” (Uppal, Ali, Zahid, & Basir, 2020)
- “the field of mobile learning **in Tanzania** is still in its infancy” (Ndume, Songoro, & Kisanga, 2020)
- “research into mobile learning is still in its infancy stage **in developing countries like Trinidad**” (Samuel, 2021)



Concluding questions

Which broad trends, challenges or agendas is your research or teaching currently aligned to, if any?

Which ones do you consider important?

What can we offer to those who are only now starting out in mobile learning?



ReMaLIC project publication:

<https://oro.open.ac.uk/87586/>

Learning Futures Programme in IET

<https://iet.open.ac.uk/research/programmes/learning-futures>

