Inclusive Technology Enhanced Learning

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What I would like to cover

- Focus on research findings relating to fields of technology enhanced learning and social justice and well-being
- Explain why and how uses of digital technologies should be categorised through a learning landscape perspective
- Use this taxonomy to show evidence from across fields of research, policy and practice that indicate differences in ways digital technologies support or enhance learning for different groups of users (focusing on young people)
- Highlight outcomes and impacts for those challenged cognitively, physically, emotionally and socially
- How these groups might be more effectively supported through more considered or focused applications and uses
Pictures of use
Technologies are used in different learning landscapes
Technologies are used with different mediators

- Teachers
- Teaching assistants
- Parents and guardians
- Support workers and youth workers
- Counsellors
- Online tutors
- Peers
How to categorise technologies

- Topic-specific resources and software
- Curriculum-wide learner-centred software
- Curriculum-wide teacher-centred software
- Software involving and supporting parents
- Online resources supporting curriculum-wide needs
- Online resources supporting revision needs
- Online learner support
- Project and after-school club activities involving digital technologies
Conceptualising learning

A neurobiological perspective views learning through biological structure and function

A cognitive perspective views learning through psychological structure and function

A motivational or emotional perspective views learning through the roles of interest and uses for the individual

A social or societal perspective views learning through the ways that social involvement are integrated with practice and how outcomes are used in the longer term
Describing learning

- Cognitive
  - Knowledge, ideas, concepts, memorising
- Metacognitive
  - Knowing how to learn, learning strategies
- Megacognitive
  - Expert learners, wide and deep learning, learning transfer
- Social
  - Working with others, dialogue, participation
- Societal
  - Values, social worth, community support, for longer-term good
Evidence about uses and outcomes of technologies

<table>
<thead>
<tr>
<th>Digital technology category</th>
<th>Megacognitive</th>
<th>Cognitive</th>
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<th>Social</th>
<th>Societal</th>
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But then, learners are different

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<td>Learners with limited opportunities</td>
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<td>Mainstream young learners</td>
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Learners with social, emotional and behavioural challenges

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Those included in the previous groups

- Learners with challenging emotional features and attributes
  - Anxiety; Shyness; Withdrawal; Emotional distraction; Elective or selective mute; Those with mental illness

- Learners where attitudes pose challenges
  - Engagement; Disaffection; Dissatisfaction; Disenfranchisement

- Learners with challenging behavioural attributes
  - Disruptive behaviour; Anti-social behaviour

- Learners with challenging social attributes and abilities
  - Those in areas of social deprivation; Those who are marginalised; Those with language barriers; Those facing ethnic and cultural barriers; Those involved in criminal activities; Those involved in drug and alcohol abuse; Those who are reluctant communicators
But even within one of these groups, there are differences

- For those with physical impairment or features:
  - Topic-specific resources and software have been used to support learners with HI and physical disabilities, but are less frequently identified in the literature for those with VI.
  - Parent-involved software has been explored with learners with HI on smart telephones, with some success.
  - Curriculum-supportive online resources have been used more with learners who are HI, while issues of access have been identified more for learners with VI.
  - Online learner support and project and after-school club activities involving digital technologies have not been identified from the literature with these groups of learners.
More?

INCLUSIVE TECHNOLOGY ENHANCED LEARNING
OVERCOMING COGNITIVE, PHYSICAL, EMOTIONAL & GEOGRAPHIC CHALLENGES
DON PASSEY
Discussion

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