Scaling interaction in blended and hybrid environments

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Blended or hybrid learning
Blended or hybrid learning

Horn & Staker, 2014
Presence is precious
The scalability challenge of HE

It is not clear how current education systems and models will scale to support this scenario, meeting the challenges we find in today’s environment whilst scaling to meet these opportunities.

Global Population by Education Attainment. Change from 2015 to 2030. (Millions)

(UNESCO, 2009; ICDE, 2015)
“Scalability: Delivery at scale has been the essence of the founding missions of the many Open University systems established. …… Increased demand for rapid response to enquiries, increased personalisation of study, driven by expectations set by online services in the commercial sector, challenge the economies of scale achieved”

The scalability challenge of HE

SCALE ≠ SCALABILITY
EDUCATIONAL SCALABILITY IS THE CAPACITY OF AN EDUCATIONAL FORMAT TO MAINTAIN HIGH QUALITY DESPITE INCREASING OR LARGE NUMBERS OF LEARNERS AT A STABLE LEVEL OF TOTAL COSTS
The scalability challenge of HE

Lane, 2014
The scalability challenge of HE

Accreditation Indicators:
- Teacher quality
- Student – staff ratio
- Contact hours

(Lane, 2014)

(UNESCO, 2009; ICDE, 2015)
Educational scalability model

Kasch, van Rosmalen & Kalz, 2017
Educational scalability model

Kasch, van Rosmalen & Kalz, 2017
Educational scalability model

28. May 2021
Educational scalability model

SUMMATIVE

Teacher
is responsible,
is decision-maker

EXAMPLES:

Students self-assess and receive a grade for this judgement.

Students and staff both grade the work (summative co-assessment).

Students self-review and/or peer review to make a judgment (critical evaluation) of their work.

Students judge their work based on holistic or analytic criteria, or by comparing exemplars.

Assessment OF Learning
To demonstrate achievement

EXAMPLES:

High stakes’ graded end or mid semester exam, project, essay.

GPA grade/degree classification.

Low stakes’ graded in-class participation; MCOs online primarily for feedback purposes.

Written/oral feedback to students; Staff-student dialogue; Feed-forward (actions to improve); Early feedback to staff to improve teaching.

Students request feedback based on their self-monitoring.

Assessment AS Learning
To self-regulate and critically evaluate

Assessment FOR Learning
To give feedback on learning and teaching

FORMATIVE

Student
is responsible,
is decision-maker

Teacher is responsible, is decision-maker

High Stakes

Low Stakes

T&L, 2018
Educational scalability model

Biggs, 2003
Interaction
Equivalency
Theorem
Guideline 1

Sufficient levels of deep and meaningful learning can be developed, as long as one of the three forms of interaction (student-teacher; student-student; student-content) is at a very high level.

(Anderson, 2002)
Guideline 1

Opening the Iron Triangle:

Students: **tools & methods** to support interactions of:
- Student – Student
- Student – Content
- Student – Teacher
Examples of scalable best practices (student-content)

• Automated elaborated feedback in MCQs
• Video-based hints on request
• Adding support material to MCQs with feedback
• In case of incorrect answers, reference is given to course material/videos (feed forward)

Kasch, van Rosmalen, & Kalz, 2021
Examples of scalable best practices (student-student)

• Peer-feedback in multiple options

• Guided discussions with prompts and guidelines on answering and commenting

Kasch, van Rosmalen, & Kalz, 2021
Which educational methods are scalable?

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Guideline 2

Social Presence

COGNITIVE PRESENCE

Supporting Discourse

EDUCATIONAL EXPERIENCE

TEACHING PRESENCE

Setting Climate

Selecting Content

Garrison, Anderson, & Archer, 2000

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Design challenges for blended and hybrid learning
1.) Which role does precious presence time play in future teaching and learning practices in HE?

2.) How can we use digital technologies intelligently in the mix to increase interaction quality and improve the scalability of teaching and learning?
Our heads are round so our thoughts can change direction.

- Francis Picabia

Thank you!

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