

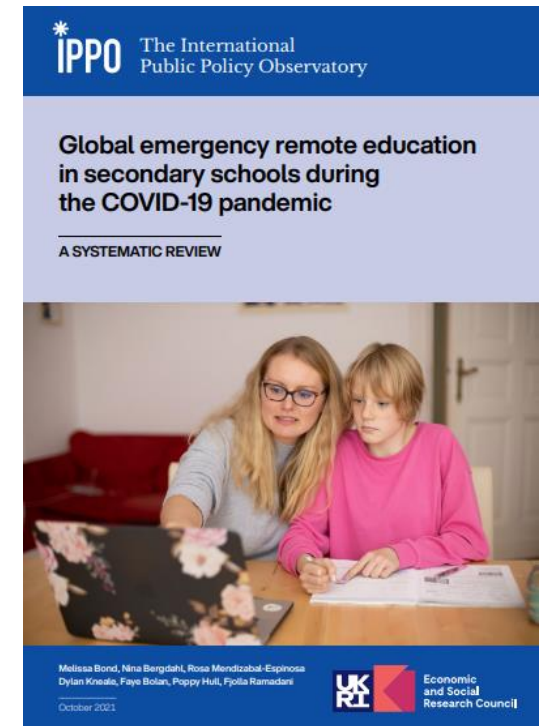
Global emergency remote teaching during the COVID-19 pandemic: Thoughts and findings of online learning during COVID

ConectaEducar Chile
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 @misc_nerd



Presenter background

Lecturer (Digital Technology Education)

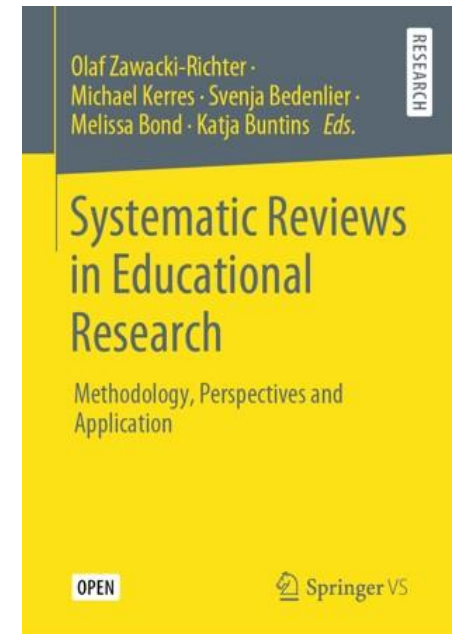
University of South Australia

EPPI-Reviewer Support Officer

University College London

Systematic & mapping reviews

- [COVID-19 studies on teaching and learning in higher education](#)
- [COVID-19 studies on teaching and learning in K-12](#)
- [Teaching and learning in secondary schools during COVID-19](#)
- [Artificial Intelligence in Higher Education](#)
- [Student engagement and educational technology in higher education](#)
- [Student engagement and the flipped learning approach \(K-12\)](#)
- [Systematic Reviews in Educational Research \(co editor\)](#)

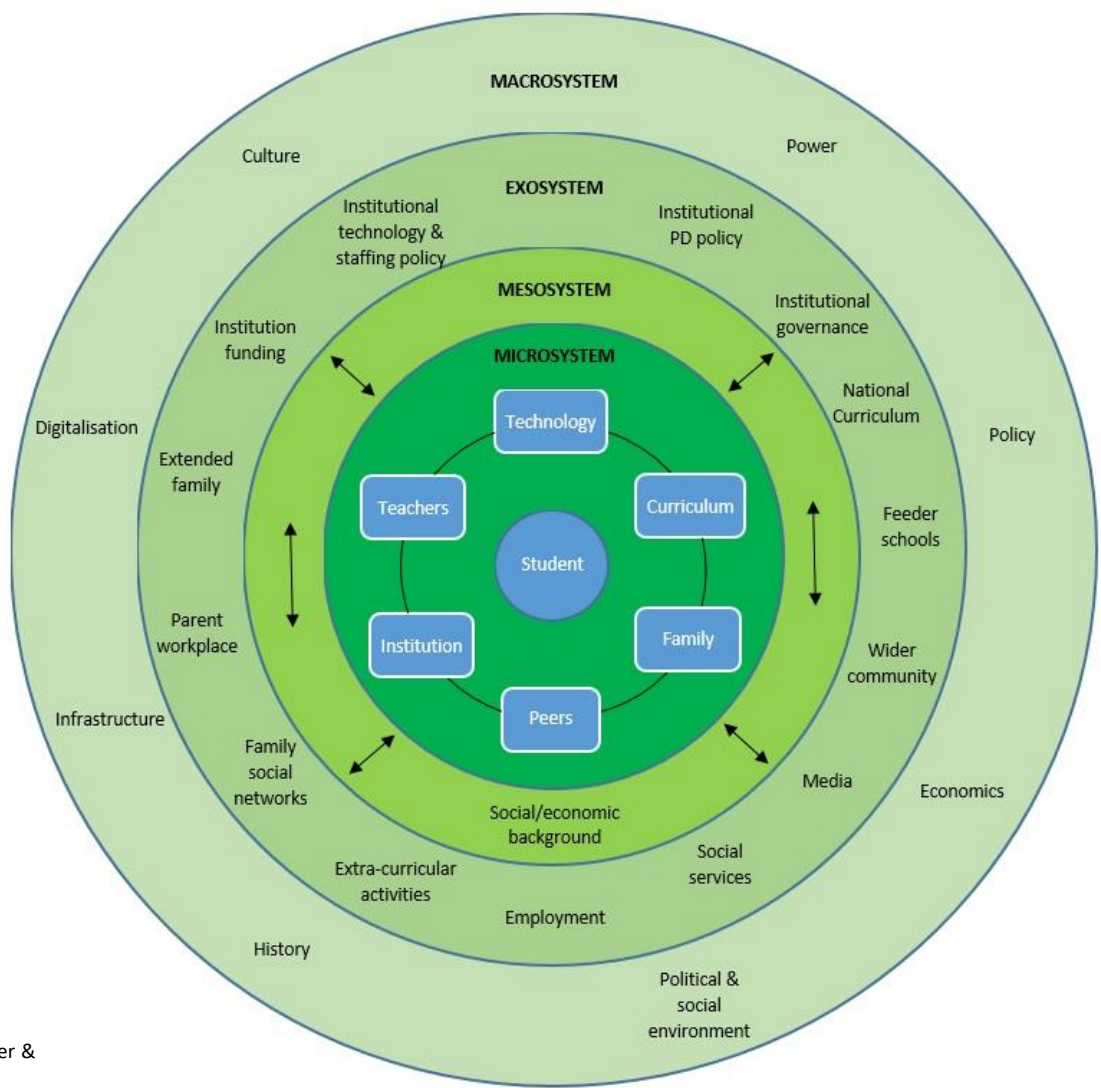


Emergency remote teaching in higher education: Mapping the first global online semester

Research questions

1. Where, when and by whom has research on teaching and learning in higher education during the COVID-19 pandemic been published?
2. What are the characteristics of, methods used, and topics studied in teaching and learning research in higher education during the COVID-19 pandemic?
3. What technology has been used during emergency remote teaching in higher education?

Bioecological Student Engagement Framework



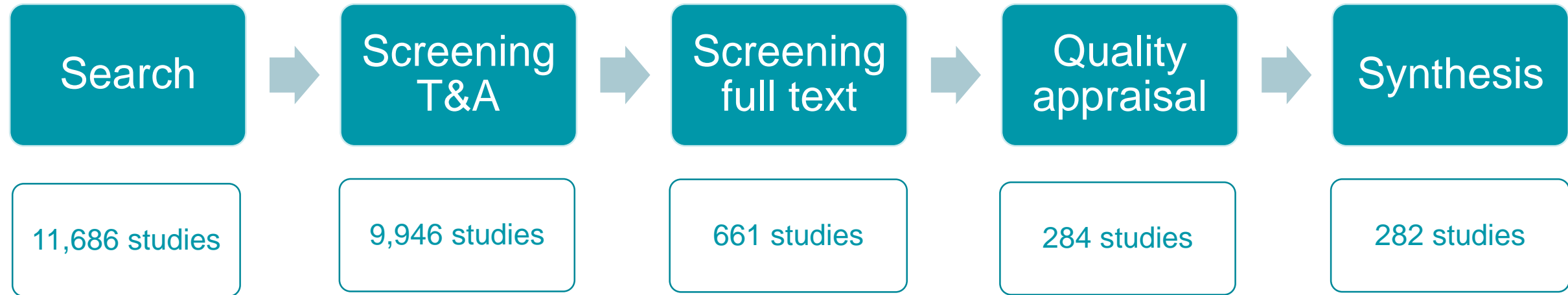
METHOD

Systematic review

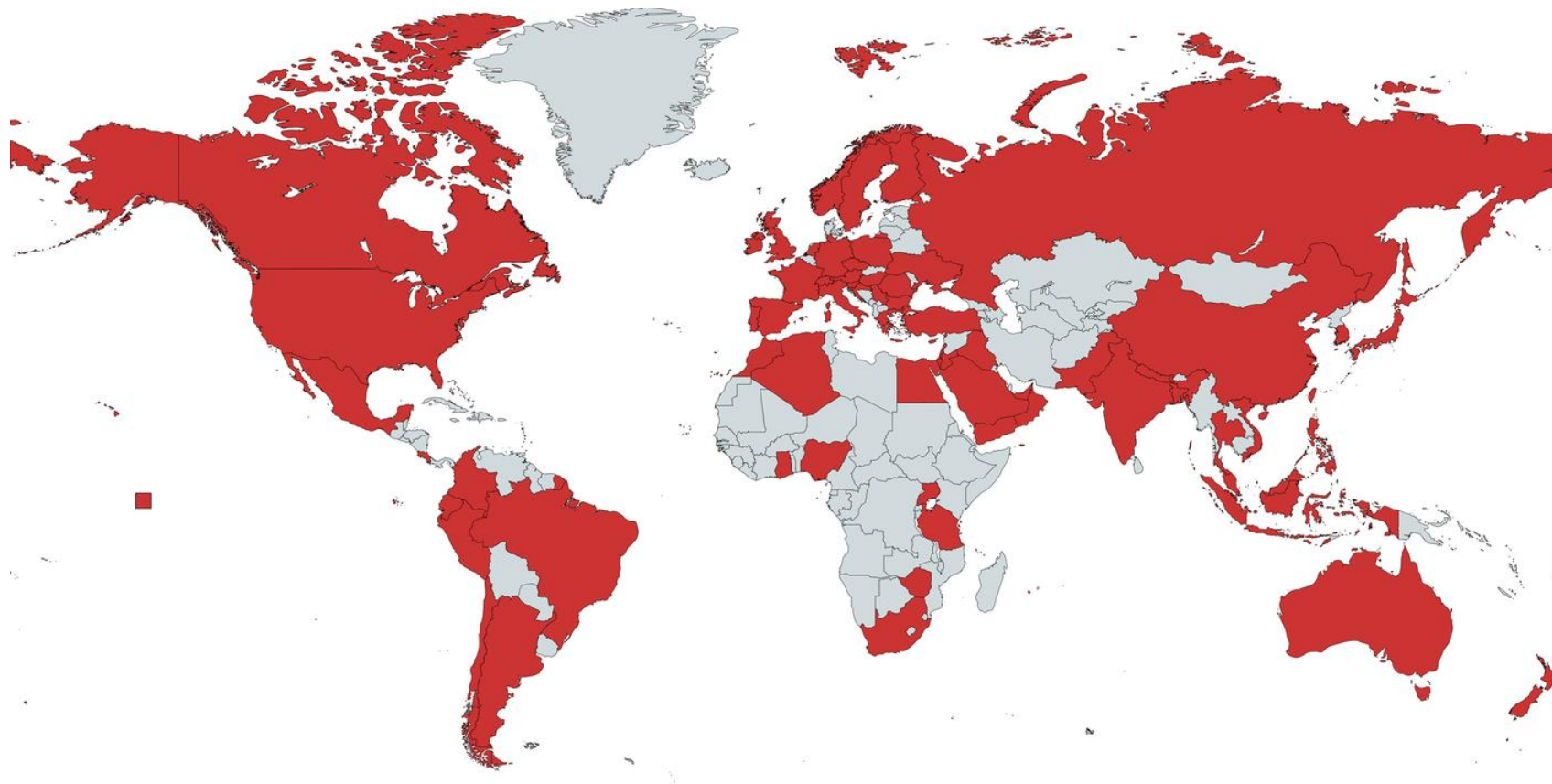
- Mapping review (Living) using EPPI-Reviewer
- ERIC, Web of Science, Scopus, PsycINFO, Google Scholar, Microsoft Academic Graph, ProQuest, EBSCOHost, COVID-19 living map

Inclusion criteria

- During COVID-19 pandemic
- Higher education
- English, Spanish or German
- Teaching and learning
- Published after Jan 2020
- Primary, empirical research
- Students, educators or administrators as units of analysis



| Continent | N | % |
|---------------|----|-------|
| Asia | 78 | 27.7% |
| Europe | 77 | 27.3% |
| North America | 64 | 22.7% |
| Middle East | 40 | 14.2% |
| South America | 18 | 6.4% |
| Africa | 17 | 6.0% |
| Oceania | 3 | 1.1% |



Created with mapchart.net

Sample focus

- Primarily focused on students (82.6%), especially undergraduates
- Instructors as participants in 28.7% of studies
- Relatively few 'smaller samples' (< 25 participants) than in K-12 (16.3% v 34%)
- Health & Welfare (27.3%), Natural Science, Maths & Statistics (24.1%)

Focus

- Student perceptions of online learning/ERE (61%)
- Impact of shift to online learning (30%)
- Teacher perceptions of online learning (19%)

Top 3 tools used

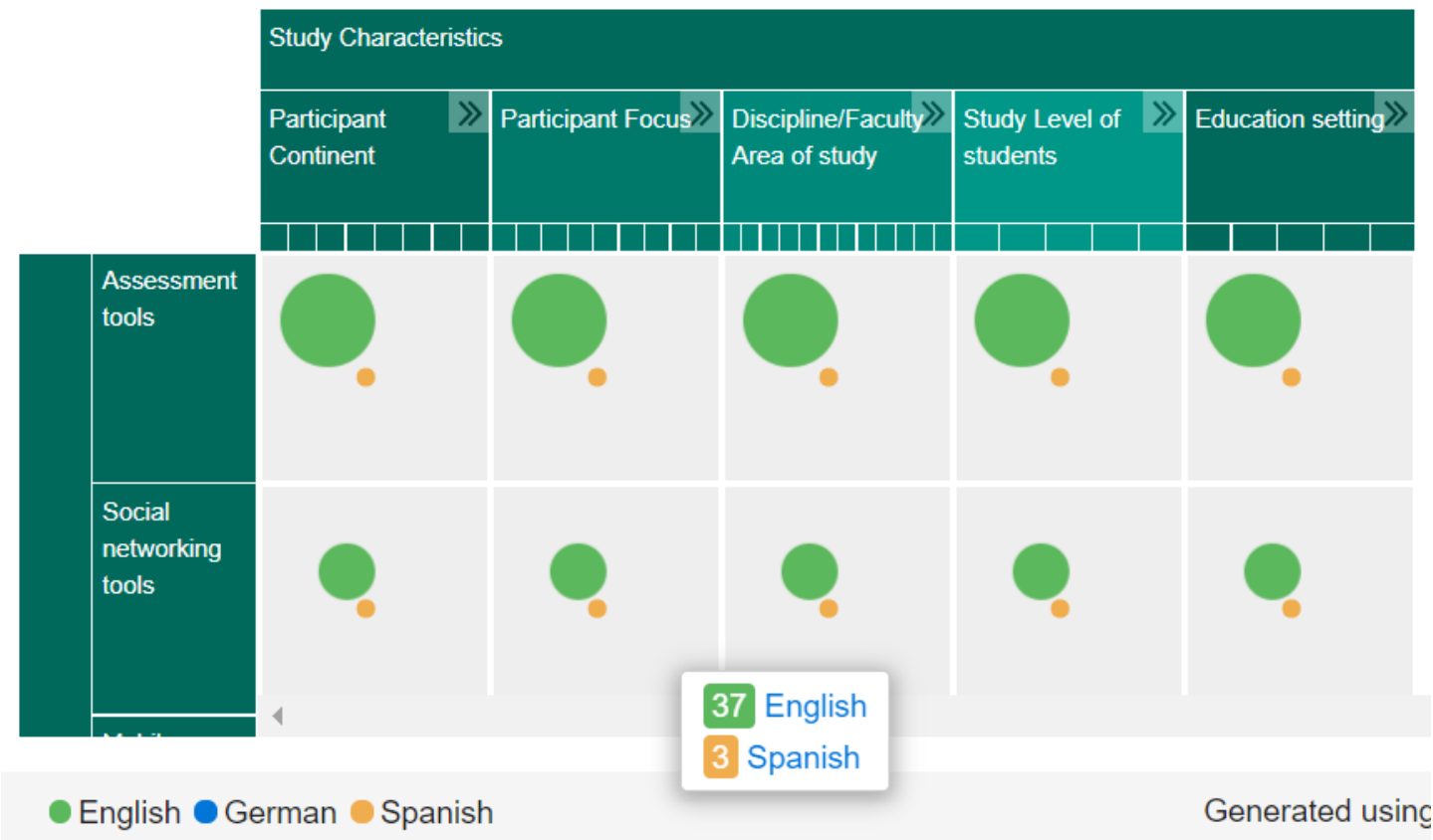
1. Synchronous collaboration tools (52%)
2. LMS (41%)
3. Multimodal production tools (35%)

Approach

- Quantitative (53.6%), Mixed methods (30.1%), Qualitative (16.3%)

Blindspots

- Ethics? Vulnerable groups? Students in their personal environments?
- Greater detail in study design needed, esp. how tech was used.
- Data analytics, assessment tools, social networking tools.
- Postgraduate students far less researched.
- Unbalanced distribution of countries, authors and participants



<https://eppi.ioe.ac.uk/CMS/Portals/35/COVID%20HE%20EGM%20-%20RQ3.html>

Online and blended learning in secondary schools during the COVID-19 pandemic

Research questions

1. In what ways did emergency remote education affect motivation and engagement in secondary students?
2. How did research report on emerging online assessment practices in secondary schooling during the pandemic?
3. Are new approaches to peer collaboration emerging and what does this suggest?
4. How did online learning in secondary schools affect parent engagement?
5. What emerging uses of online and blended learning approaches in secondary schools could continue to be implemented going forward?

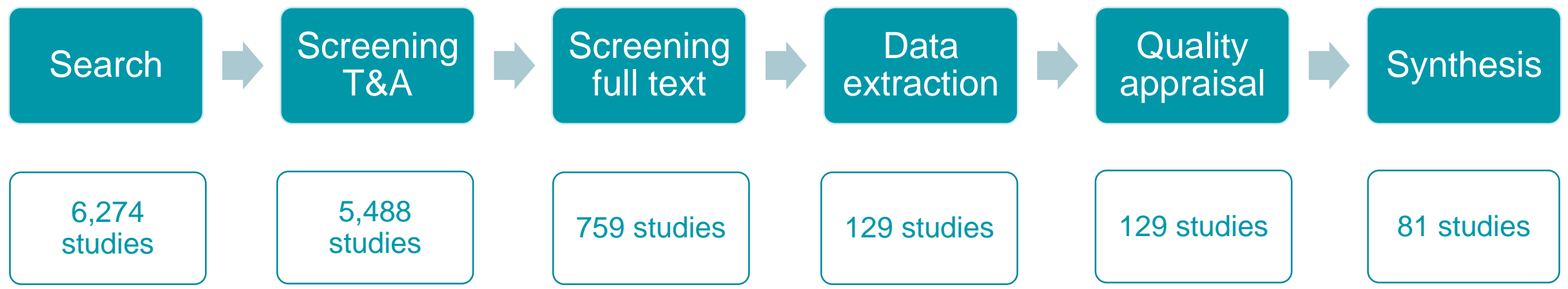
METHOD

Systematic review

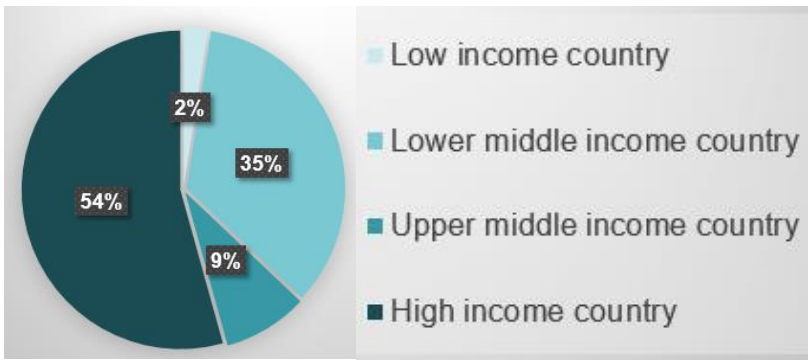
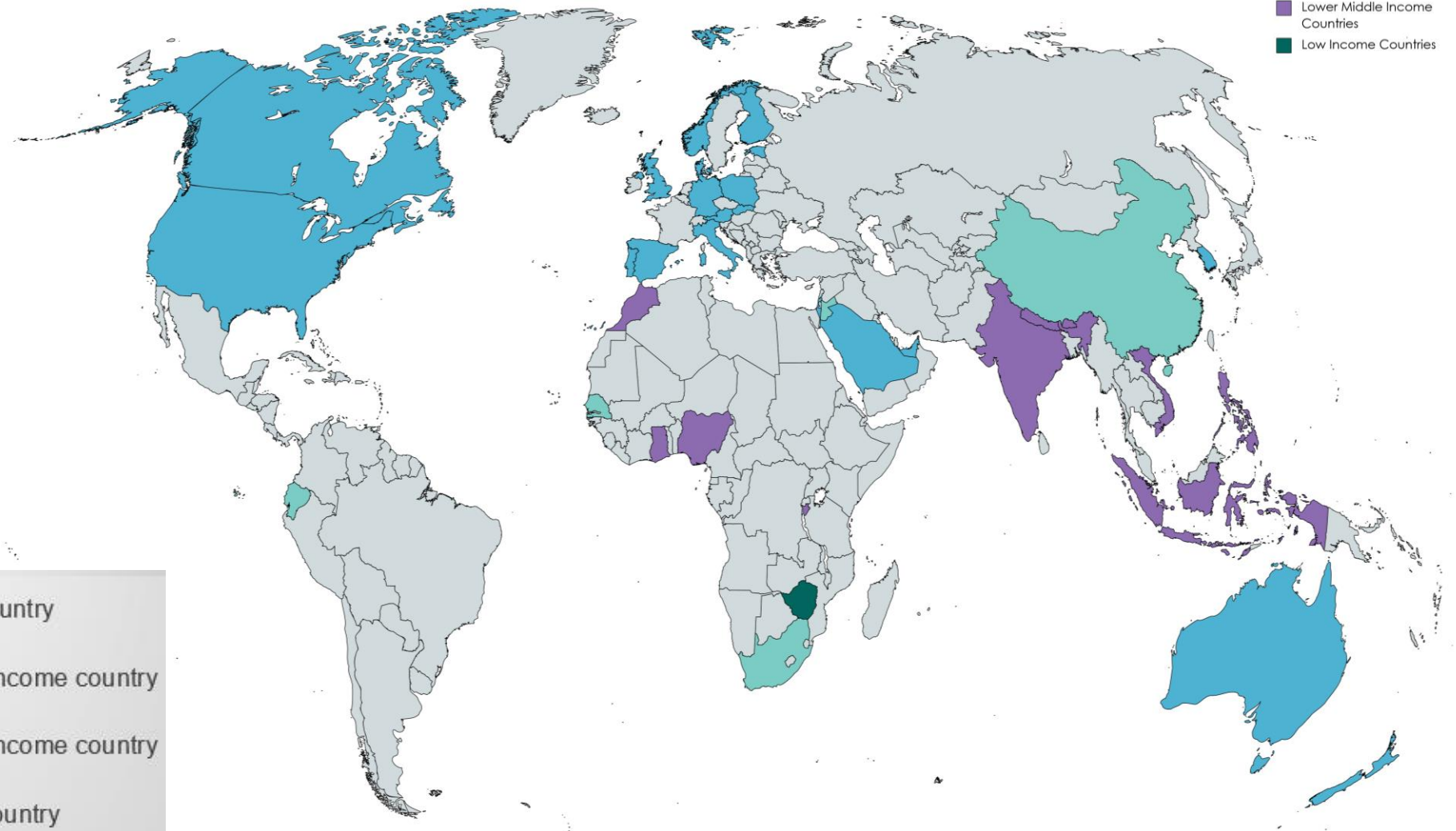
This is a systematic review of research, using rigorous methods for identifying evidence, conducting quality appraisal and synthesis: 81 studies met our criteria and were included in the review.

Inclusion criteria

- Secondary school only
- English
- Teaching and learning
- Online or blended learning
- Primary, empirical research
- Undertaken during the pandemic



| Continent | N | % |
|---------------|----|-----|
| Asia | 34 | 42% |
| Europe | 21 | 26% |
| North America | 12 | 15% |
| Africa | 5 | 6% |
| Middle East | 5 | 6% |
| Oceania | 3 | 4% |
| South America | 1 | 1% |



This review

- Some students were more motivated to learn and complete school work.
 - Increased ability to study.
 - Heightened sense of responsibility.

- Some reserved students were found to interact and participate more.

| Engagement Indicators | | |
|-----------------------|-------------------------------|-----|
| 1 | Heightened self-regulation | 26% |
| 2 | Understanding of topics/tasks | 19% |
| 3 | Enjoyment | 17% |
| 4 | Positive study habits | 17% |
| 5 | Sense of wellbeing | 16% |

This review

| Engagement Indicators | | |
|-----------------------|-------------------------------|-----|
| 1 | Heightened self-regulation | 26% |
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| 3 | Enjoyment | 17% |
| 4 | Positive study habits | 17% |
| 5 | Sense of wellbeing | 16% |

| Disengagement Indicators | | |
|--------------------------|---------------------------|-----|
| 1 | Feeling isolated socially | 27% |
| 2 | Absence from live lessons | 19% |
| 3 | Confusion | 19% |
| 4 | Feeling overwhelmed | 14% |
| 5 | Dislike | 12% |

- Emotional and physical distance.
- More instances of behavioural disengagement in studies from high income countries (59%) as opposed to lower middle income countries (29%).
- Having to learn to use new tools, as well as learning online, was quite overwhelming, alongside life load.

Flipped learning review pre-pandemic

| Engagement Indicators | | |
|-----------------------|-------------------------------------|-----|
| 1 | Increased interaction with peers | 47% |
| 2 | Enjoyment | 39% |
| 3 | Participation/involvement | 36% |
| 4 | Increased interaction with teachers | 35% |
| 5 | Increased confidence | 31% |

| Disengagement Indicators | | |
|--------------------------|---------------------|-----|
| 1 | Task incompleteness | 21% |
| 2 | Frustration | 15% |
| 3 | Unwillingness | 14% |
| 4 | Confusion | 14% |
| 5 | Dislike | 13% |

This review

| Engagement Indicators | | |
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In what ways did emergency remote education affect motivation and engagement in secondary students during the COVID-19 pandemic?



An interactive evidence gap map to accompany the systematic review 'Emergency remote education in secondary schooling during COVID-19'

| | | Study Characteristics | | | | | | | | | | | | | |
|----------|-----------------------------|---------------------------------|-----------------------------|--|------------------|-------------------------|------------------|----------------|------------------------|----------------------------|-------------------------------|---------------------|----------------|------|--|
| | | Technology used | | | | | | | | | | | | | |
| | | Synchronous collaboration tools | Multimodal production tools | Knowledge organisation & sharing tools | Text-based tools | Social networking tools | Assessment tools | Learning games | Website creation tools | Non-tech printed materials | Other technology (e.g. radio) | Data analysis tools | Virtual worlds | None | |
| Outcomes | Student engagement | Positive/Increased Motivation | | | | | | | | | | | | | |
| | Positive overall engagement | | | | | | | | | | | | | | |
| | Cognitive engagement | | | | | | | | | | | | | | |
| | Affective engagement | | | | | | | | | | | | | | |
| | Behavioural engagement | | | | | | | | | | | | | | |
| | Learning gains | | | | | | | | | | | | | | |

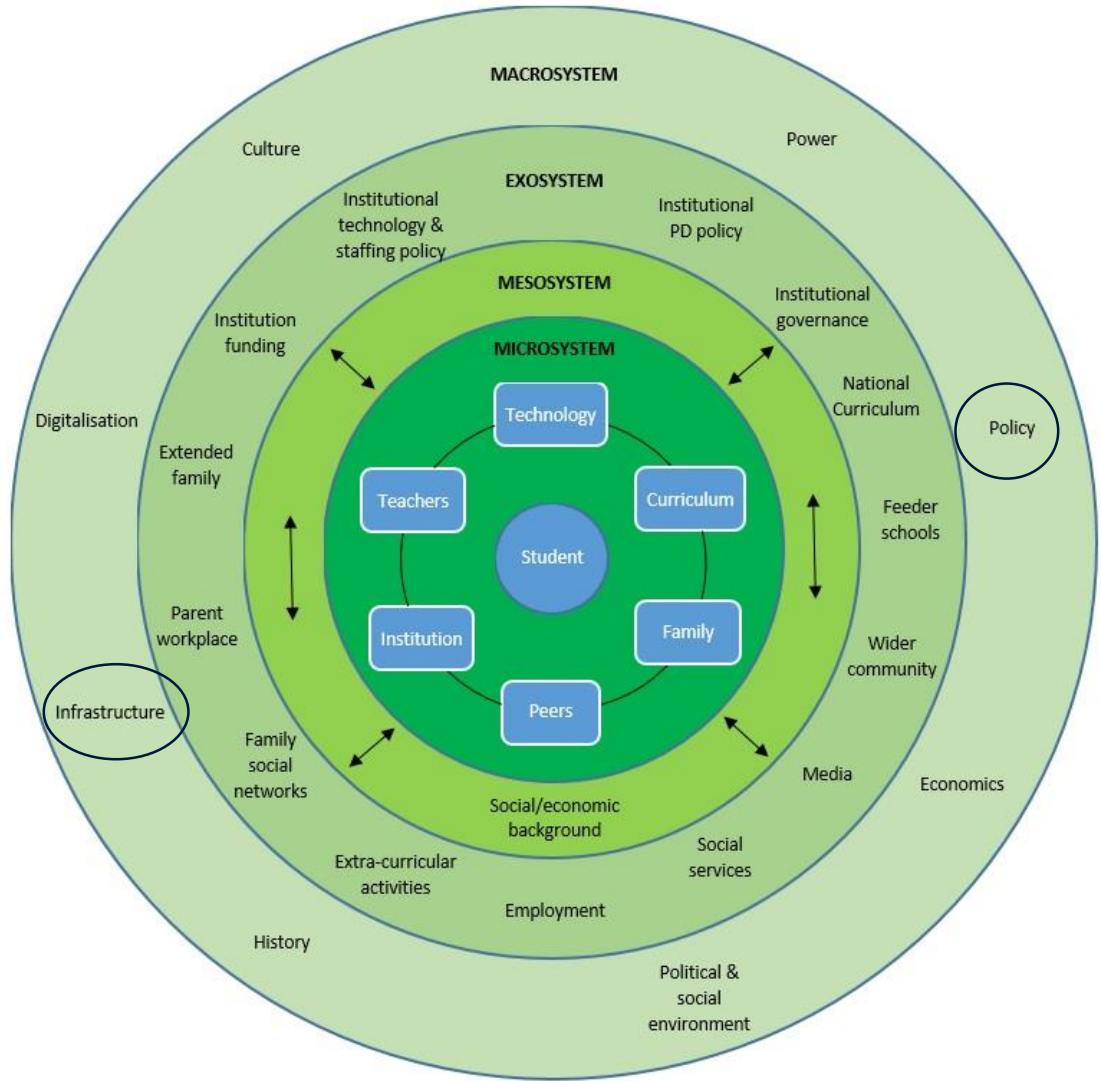
WHAT WAS FOUND ENGAGING?

- ✓ Assessment tools, especially quizzes
- ✓ Learning management systems with collaborative tools
- ✓ Breakout rooms with chat for peer interaction and teaching
- ✓ Live synchronous lessons including social time
- ✓ Teacher-made videos, alongside videos from others

PARTICULAR CHALLENGES

- ☹ Lack of student attendance in live lessons
- ☹ Decreased opportunities for interaction
- ☹ Unexpected changes to the school day
- ☹ Fewer opportunities to ask questions
- ☹ Written explanations sometimes unclear
- ☹ Volume of work assigned by teachers
- ☹ Distractions in the home

Implications for practice



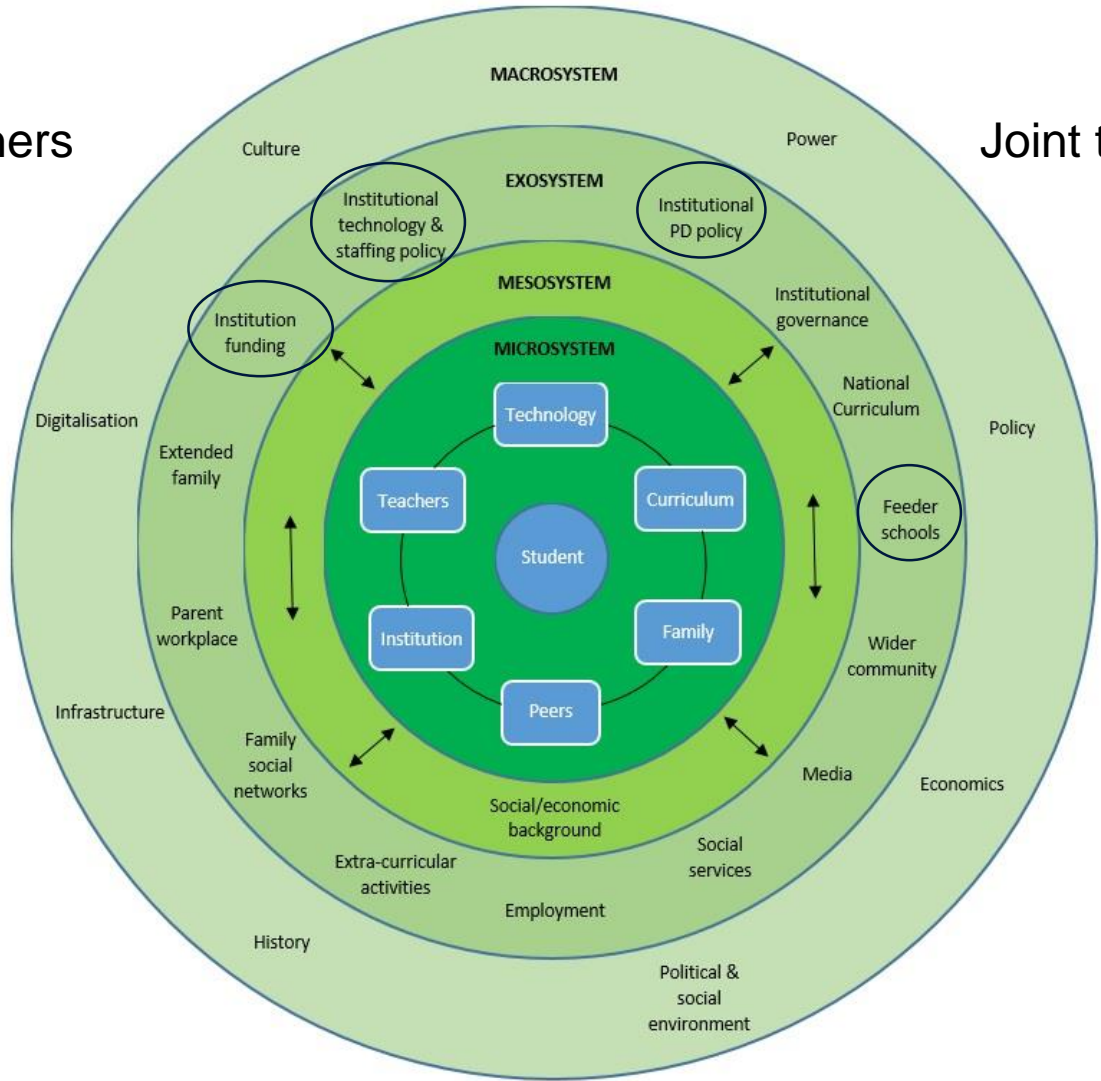
Greater awareness of digital divide

- Government policies
- Contact time
- Professional development

Implications for practice

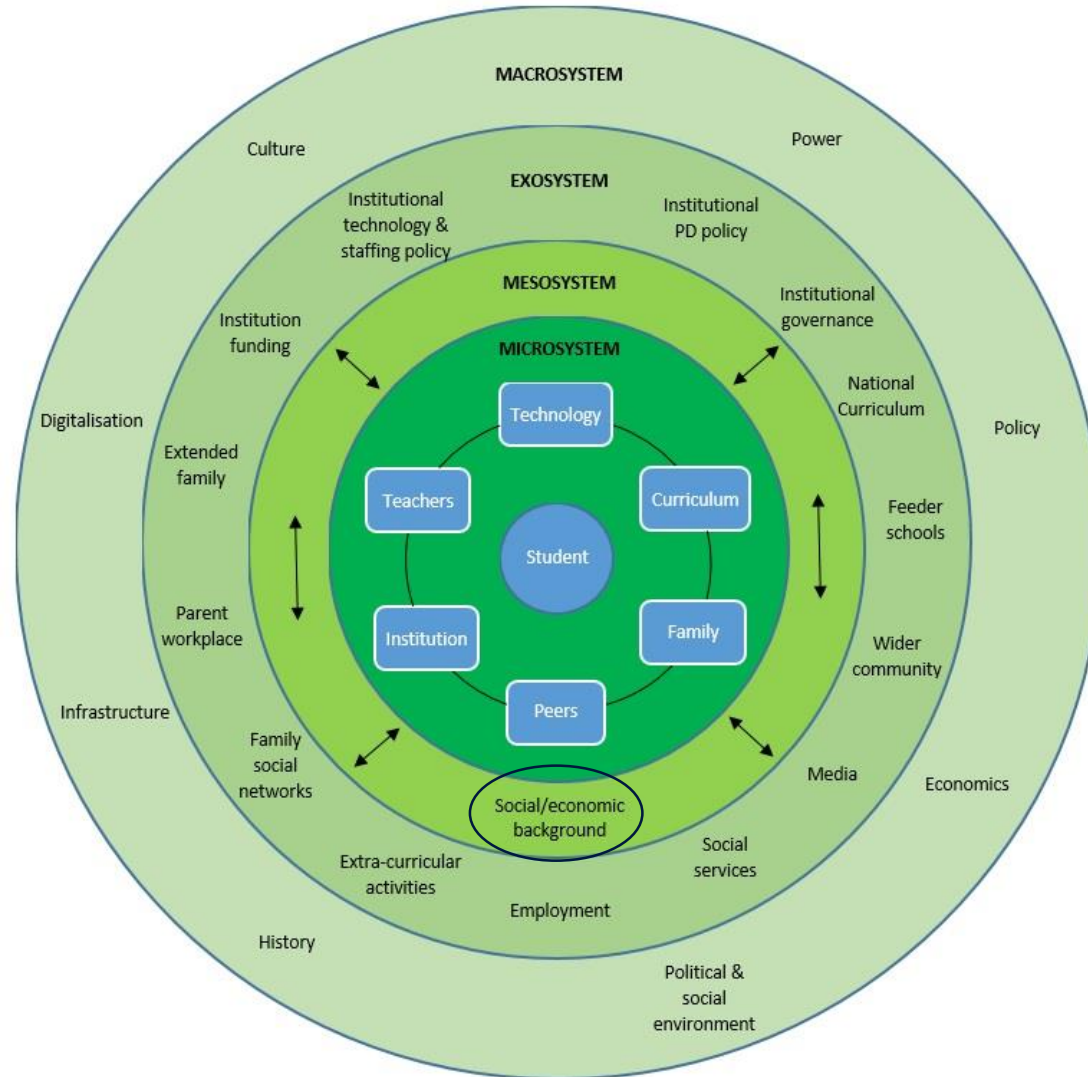
Greater support for teachers

Joint teacher/parent workshops



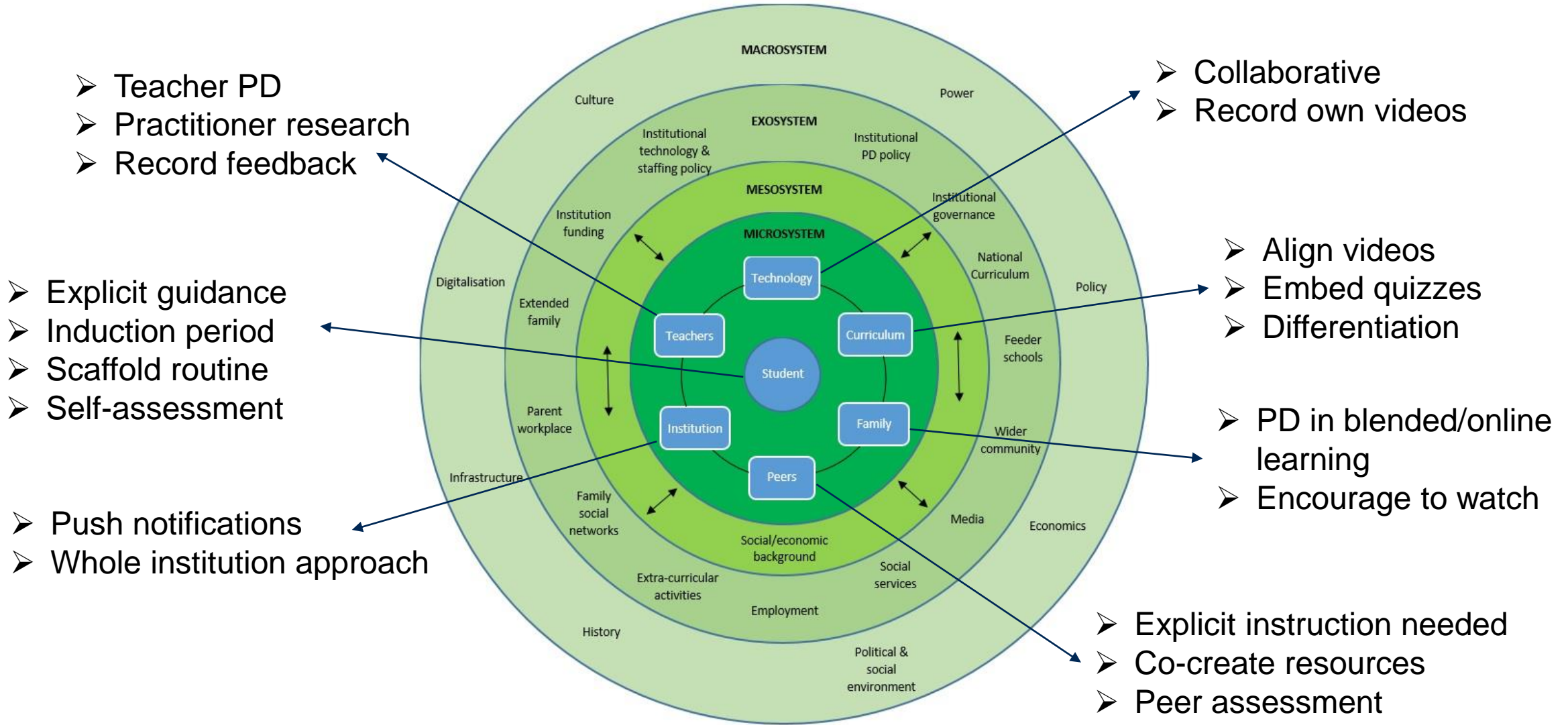
Consider student knowledge/skills

Implications for practice



- Needs analysis
- Loan equipment
- Multiple methods

Implications for practice



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LinkedIn: <https://www.linkedin.com/in/bondmelissa/>

YouTube: <https://www.youtube.com/user/EPPIReviewer4>

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