



‘Integrating Scholarship of Teaching and Learning in Academic Practice’

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Integrating Scholarship of Teaching and Learning in Academic Practice

Badged open course on the 'Scholarship of Teaching and Learning in STEM'

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Outline of this presentation

Topics

- Scholarship of Teaching and Learning (SoTL) and its role in academic practice
- Motivation for the Badged Open Course on SoTL in STEM
- The Badged Open Course (BOC)
- Pedagogical design of the BOC
 - principles and concepts of SoTL
 - reflective frameworks for
 - planning a SoTL inquiry
 - facilitating the uptake of the inquiry's outcomes to improve academic practice.



Scholarship of Teaching and Learning

Concept

Scholarship of Teaching and Learning (SoTL) is a practitioner type of research where teachers want 'to deepen their understanding of their teaching practices and to improve the quality of their student learning' (Stierer and Antoniou, 2004, p. 275).

SoTL involves educators moving beyond reflection upon their teaching strategies to an intentional, rigorous, systematic and ethically reasoned inquiry to investigate teaching practices and pedagogical strategies for student learning and engagement.

Stierer, B. and Antoniou, M. (2004) 'Are there distinctive methodologies for pedagogic research in higher education?' Teaching in Higher Education, 9,(3), pp. 275–285.

Scholarship of Teaching and Learning

Quotes from the literature

Hutchings and Shulman (1999) assert that SoTL is not synonymous with excellent teaching **but it is a condition for excellent teaching**:

...the scholarship of teaching is a condition – as yet a mostly absent condition – for excellent teaching. It is the mechanism through which the profession of teaching itself advances, through which teaching can be something other than a seat-of-the-pants operation, with each of us out there making it up as we go. *As such, the scholarship of teaching has the potential to serve all teachers – and students**.

...a kind of “going meta” in which faculty frame and systematically investigate questions related to student learning – the conditions under which it occurs, what it looks like, how to deepen it, and so forth – and *to do so with an eye not only to improving their own classroom but to advancing practice beyond it*. (Hutchings and Shulman, 1999)

*emphasis added

Hutchings, P. and Shulman, L. S. (1999) ‘The Scholarship of Teaching: New Elaborations, New Developments’, *Change: The Magazine of Higher Learning*, 31(5), pp. 10–15.

Scholarship of Teaching and Learning (SoTL)

Definition

In the Badged Open Course (BOC), we define SoTL as systematic and ethically reasoned investigation of aspects of teaching and student learning by applying disciplinary knowledge, resulting in reflections and outcomes that are publicly shared for peer-review and for others to build upon.

SoTL:

- SoTL investigations are on a continuum from reflections on academic practice in an individual classroom or involving a small group of students to formal investigations at departmental or institutional levels, and from local and informal to international and traditional ways of making SoTL public.
- extends across disciplinary boundaries
- is inclusive of partnerships in SoTL research; for example, educators, learning designers, content creators, data analysts, tutors, educational researchers and students

Taxonomy of areas of investigation in SoTL



Areas of investigation in SoTL in Session 3 of the BOC, <https://www.open.edu/openlearn/ocw/mod/oucontent/view.php?id=109157§ion=3.3>

Motivation for developing the BOC

Access: to be able to access resources as and when required rather than wait for staff development sessions which may not be available at the time a colleague is looking for help

Self-directed: instilling the motivation for SoTL; a consolidated resource that guides systematic and ethically-reasoned SoTL practice

Need: for a resource that brings the entire process of planning, conducting and evaluating a SoTL inquiry together along with the underpinning principles, practices and frameworks

- **Stages of a SoTL inquiry:** Used to structure the BOC, providing a systematic and structured process of planning, conducting and evaluating SoTL (re-visited in the 'Conclusions' of the BOC)

Key components of the SoTL BOC

Six sessions

1. Engaging with SoTL

2. Getting started with SoTL

3. Formulating a SoTL inquiry

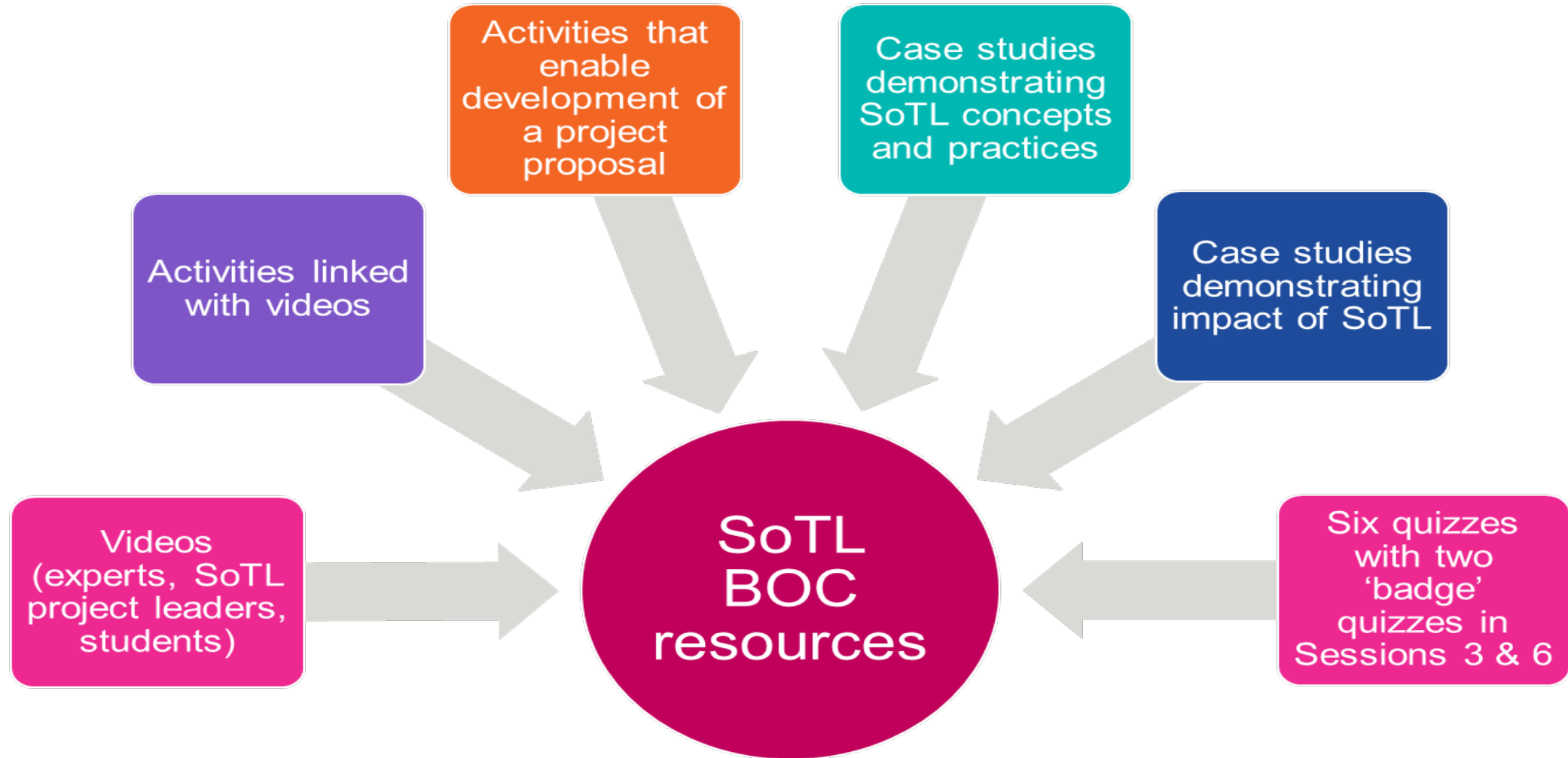
4. Students as partners and ethical considerations in SoTL research

5. Planning and conducting SoTL

6. Making SoTL public and impact evaluation of SoTL

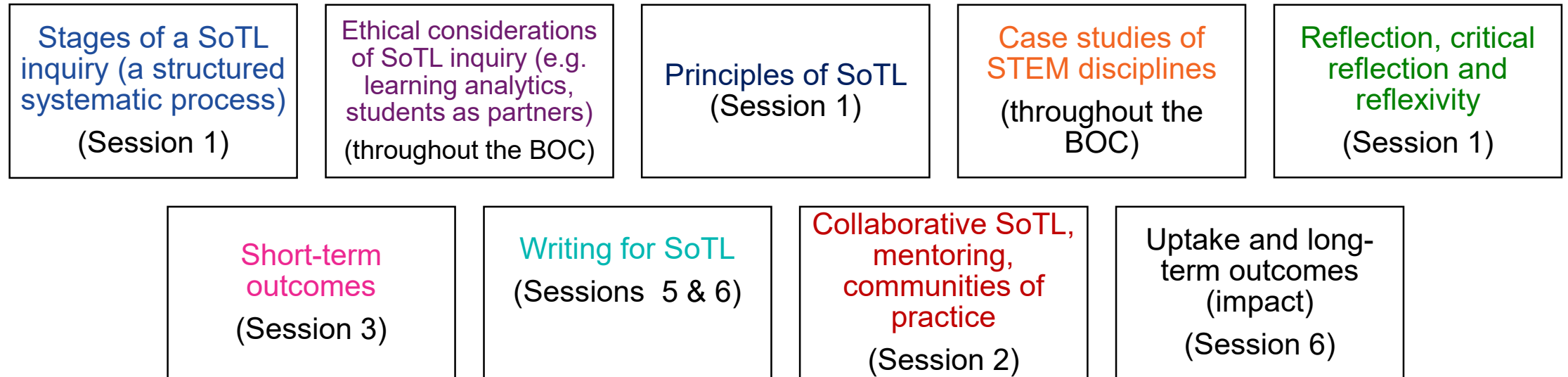
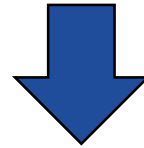
Course Content, <https://www.open.edu/openlearn/science-maths-technology/scholarship-teaching-and-learning-stem/content-section-overview?active-tab=content-tab>

Resources in the SoTL BOC



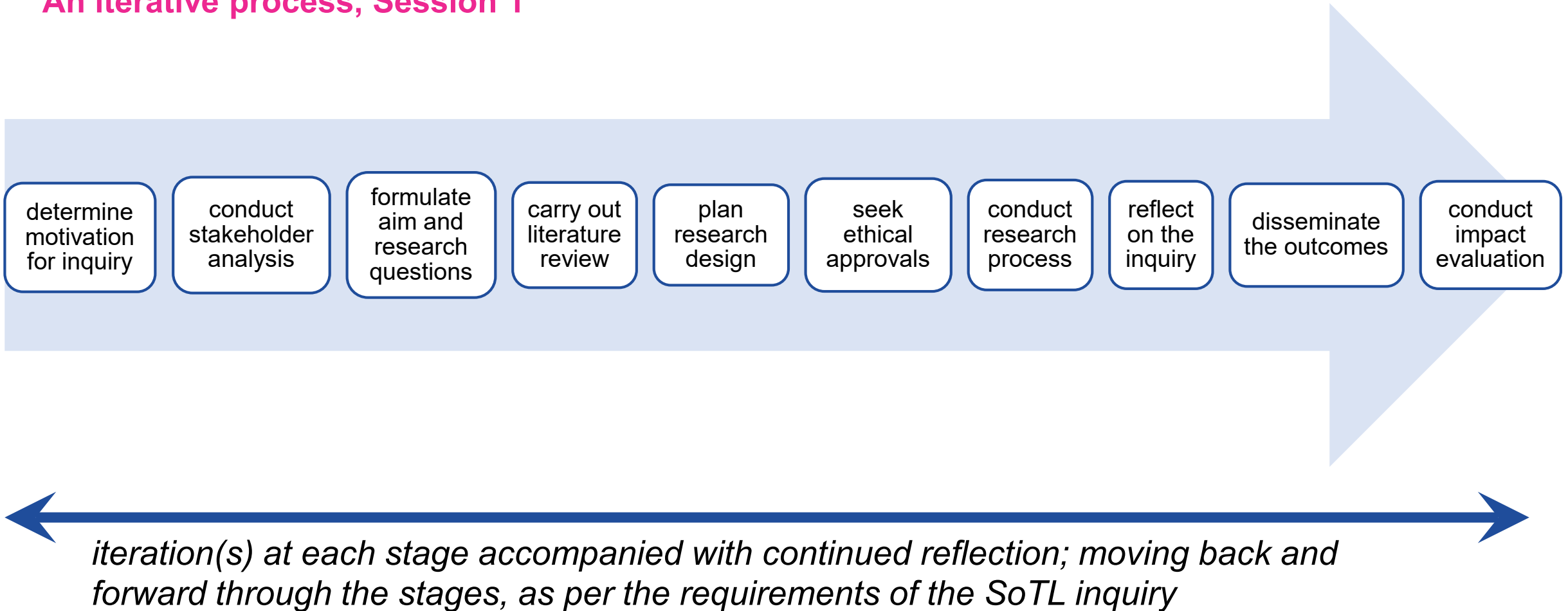
SoTL definition: mapping to principles, practices and frameworks in the BOC

SoTL is systematic and ethically reasoned investigation of aspects of teaching and student learning by applying disciplinary knowledge, resulting in reflections and outcomes that are publicly shared for peer-review and for others to build upon.



Stages of a SOTL inquiry

An iterative process, Session 1



Stages of a SoTL inquiry in Session 1 of the BOC, <https://www.open.edu/openlearn/ocw/mod/oucontent/view.php?id=109160§ion=4>

SoTL: Principles of SoTL

Session 1

1. Inquiry focused on student learning and engagement
2. Grounded in context
3. Rigorous and methodologically sound research design
4. Conducted in partnership with students
5. Appropriately public for evaluation and uptake by peers
6. Reflection, critical reflection and reflexivity

Principles of SoTL in Session 1 of the BOC, <https://www.open.edu/openlearn/ocw/mod/oucontent/view.php?id=109160§ion=2>

Reflection, Critical Reflection and Reflexivity

Session 1



reflection

critical reflection

reflexivity

Reflection, critical reflection and reflexivity in Session 1 of the BOC,
<https://www.open.edu/openlearn/ocw/mod/oucontent/view.php?id=109160§ion=3>

Seven-criteria framework to guide design and evaluation of a SoTL inquiry

Question-driven structured framework, Session 3

1. Clear goals
2. Adequate preparation
3. Appropriate methods
4. Significant results
5. Effective communication
6. Reflective critique
7. Going public

Designing a SoTL inquiry in Session 3 of the BOC, <https://www.open.edu/openlearn/ocw/mod/oucontent/view.php?id=109157§ion=4>

Impact of SoTL

Definitions, Session 6

Impact of a SoTL project implies **demonstrable benefits** to learning and teaching that are directly attributable to that project.

Impact of SoTL activity is usually judged against two aspects, **significance** and **reach**: how significant are the benefits of the SoTL project and for whom?, and how far-reaching are the outcomes of the SoTL project?

Evaluation for impact: evaluation of a SoTL project for impact will involve finding out who has benefited from SoTL and how, and to collect evidence related to significance and reach.

Impact Evaluation Framework (IEF)

12 impact criteria, Session 6

Learning and teaching

What has been the impact on *student experience*?

What has been the impact on *student retention and progression*?

Is there evidence of *excellence in teaching*?

Transfer to others

Has there been an influence on *discipline-based teaching, research and practice*?

Have you *disseminated the project's outcomes*?

Have the outcomes of the project been *adopted by other educators*?

Evaluating for impact in Session 6 of the BOC:

<https://www.open.edu/openlearn/ocw/mod/oucontent/view.php?id=109326§ion=2.3>

Stakeholder benefits

Has the project enhanced *mutual stakeholder understanding*?

Has the project facilitated the *personal and professional development* of project team and associated stakeholders?

Has the project led to the *recognition of project team members and other stakeholders*?

Cultural and economic benefits

Has the project helped to *foster SoTL culture*?

Has the project had any *financial implications*?

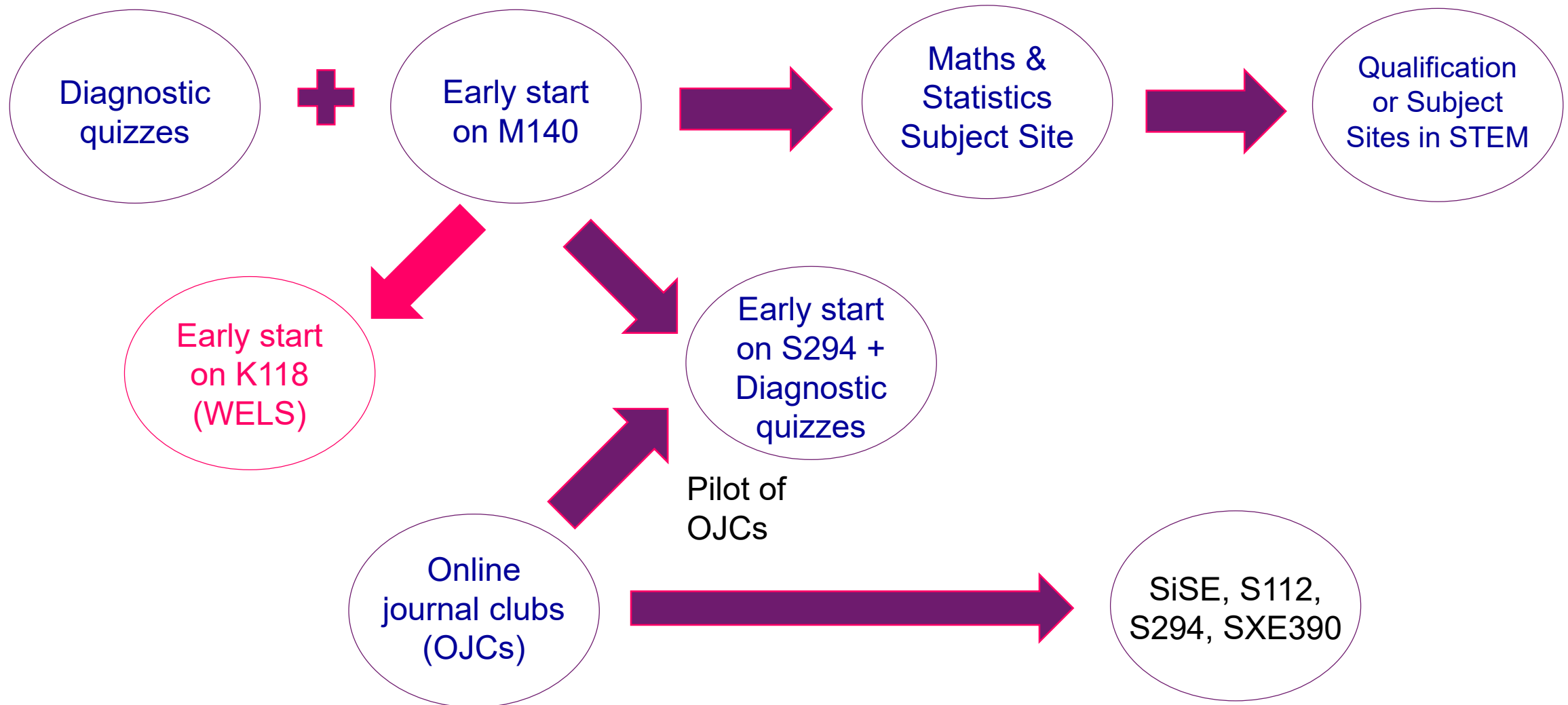
Has the project led to *funding opportunities*?



IEF template: <https://www.shaileyminocha.info/blog/2021/6/7/impact-evaluation-framework-for-scholarship-of-teaching-and-learning>

Impact of STEM SoTL projects: Evaluate, integrate and transfer

Example



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Case studies and videos of SoTL projects

OU STEM colleagues

Course image

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BOC's URL

URL of the free Badged Open Course:

‘Scholarship of Teaching and Learning in STEM’

<https://www.open.ac.uk/scholarship-of-teaching-and-learning-in-STEM>