| Title:      | A Learning Design Support Environment: using technology-<br>enhanced learning to support teachers in developing their<br>practice  |
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# Abstract:

### **Session Learning Outcomes**

By the end of this session, delegates will:

- Gain an understanding of the rationale underpinning the Learning Designer and the pedagogy (model of teachers' learning) that it supports
- Gain an overview of how the Learning Designer can be used to plan and design students' learning, and to support collaboration and reuse in learning design;
- Gain insights into the potential role of an intelligent tool in promoting greater rigour and precision in the articulation of educational concepts.
- Understand how such a tool may support the work of educational developers.

### **Session Outline**

Key issues to be addressed are:

### 1. Rationale

There has been a range of initiatives to support teachers in the use of technology-enhanced learning (TEL) (ref. 1, 2,) but to date impact has been limited. However, in the same way that we encourage teachers to use TEL to enhance students' learning, we can also use it to extend the reach and quality of teachers' professional development and to support their everyday practice. In this paper we describe an example of this approach: the Learning Designer, an intelligent tool that scaffolds teachers' decision-making from basic planning to the creative, appropriate, use of TEL (ref. 3). The goal is to make it easier for teachers to engage with TEL in a way that draws on good practice and is informed by the findings of pedagogical research. To achieve this, we have worked closely with lecturers, staff developers and learning technologists throughout the development process.

### 2. Conceptual design

The conceptual design of the Learning Designer is underpinned by a model of collaborative learning, with teachers developing their practice through discussion and sharing ideas and

materials. This model locates use of the tool in both formal professional development initiatives and informal, self-directed and above all collaborative learning. The vision is of teachers as action researchers as they construct, analyse and revise a learning design, realise it with a group of learners and share their design and reflections with others (ref. 4).

### 3. Evaluation

Lecturers have responded positively to the prototype Learning Designer, commenting that it challenges their current practice in a constructive way: for example, through its analysis of a learning design in terms of the forms of learning (inquiry, discussion etc.) that students will experience. They have also appreciated its potential for supporting collaboration in design, and for sharing ideas and practice. In the paper we will present additional findings from more recent evaluations, including feedback from early-career lecturers using the tool in a staff development context.

# Session Activities and Approximate Timings

- 1. Introduction: rationale underpinning the Learning Designer and the pedagogy (model of teachers' learning) that it supports. (10 min.)
- 2. Opportunity to discuss the issues raised, seeded with a few key questions. (5 min.)
- 3. Brief overview of the tool, showing the key features that support the conceptualisation of teachers' learning: e.g. modelling, guidance and support, community building/sharing. This will a demonstration of the tool in use and will not deal with the technical aspects (AI, or the ontology underpinning it.). Participants will have an opportunity to download the tool and explore it further after the session. (12 min.)
- 4. Example case study/evaluation. (8 min.)
- 5. Discussion, seeded with questions, bringing out issues of relevance to the SEDA community and in particular how such a tool can support the work of educational developers (10 min)

### Indicative questions:

a) For discussion immediately after the introduction:

- Are the assumptions underpinning the Learning Designer valid?
- Are the pedagogical approaches including constructionism and learning by sharing adequate?

### b) For the closing discussion

- What are the limits (and limitations) of modelling tools such as the Learning Designer?
- How do we develop and extend a community of users?
- What role can such a tool have in supporting educational developers, particularly in relation to modelling and sharing good practice?
- How might we develop synergies with other projects: e.g. those promoting the use of open educational resources (OER)?

# References

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- 3. https://sites.google.com/a/lkl.ac.uk/ldse/
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