# Student Deep learning and the ILE

Christchurch, New Zealand - 17th November 2016

# What are teachers understanding of deep learning?

## What were we looking for?

The workshop in Christchurch focused on Deep Learning and ILEs. Participants worked in small groups to describe what students' deep learning is and model the learning scenarios this takes place in. The workshop inspired an increased awareness of what deep learning is, and how learning spaces currently support or could better support deep learning.

#### What did we find out?

As groups, participants defined a number of key concepts of deep learning, which can be categorised as follows:

- Creativity Thinking "outside of the box/space", creativitymaking, testing, reflecting, curious and seeking;
- Collaborative Working together, asking questions, listening, influencing and contributing to the work of others;
- Critical thinking Higher-order thinking and questioning, being challenged, big idea-making connections whilst utilising prior knowledge;
- Character self-directed agency, change and impact;
- Citizenship Learning as part of an ecosystem, community links and involvement; and
- Teacher as learner.

Participants also identified several elements of the physical environment, which would contribute to enhancing student deep learning. These included:

- À range of spaces including mezzanine floor, reading nook, indoor and outdoor space, breakout space, quiet space, digital space, presentation space and 'campfire' space;
- Moveable furniture and fit outs such as walls, partitions, tables, create-a-space elements, cushions, furnishings, lighting, bi-fold windows and sliding doors;
- Access to variety of tools including Information Technology (IT) devices, paper/pencil, books and music; and
- Materials for hands-on activities.

According to participants, these elements of the physical environment could support deep learning through opportunities for increased 'agency and choice', 'collaboration' and 'engagement' (in the classroom, with the community and globally). These elements would also support deep learning through offering a range of experiential learning experiences such as 'personalised learning', 'problem solving', 'authentic learning', 'reflection' and 'discussion'.

### What does this mean for the project?

If we begin with the assumption that innovative learning environments can and should accommodate the learning approaches of the 21st century student, findings from this workshop seem to suggest that deep learning for the contemporary student should encapsulate characteristics of creativity, critical thinking, character, collaboration, citizenship, and teacher as learner. Participants identified several elements of the physical environment that would contribute to enhancing student deep learning including a variety of space, moveable furniture and fit outs, access to a range of tools and materials for hands-on activities to meet a range of teaching approaches.



Identifying mind frames and belief systems during group discussions. Worksheets helped visualise how learning spaces afffected teaching practices.

"Our learning ecosystem shows students learning in a variety of spaces and different ways. Learning is personalised. Students have choices with how they learn. Learning can be differentiated. Students have the opportunity to tap into interests. Students can be challenged though 'hard fun' fostering creativity. Problem posing - before finding solutions."

Please refer to the full Technical Report, "In the real world...": Teachers perceptions of ILEs, available at: http://www.iletc.com.au/publications/reports/



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