



Understanding the potential  
of **learning design** to support  
university teachers' design  
processes

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# Online learning

- Driven major **change**
  - fully online, multi-campus, off-shore, f2f
- **Dissatisfaction** with quality
  - Good teaching?
  - Needs of students?
  - Staff want to do better
- How to **improve** teaching?



# Who are our teachers?

- Researcher
- Discipline expert
- Teaching experience
- No teaching qualifications



Many are motivated to improve what they do

# Criticism of support for teachers

## **Expert advice**

→ Too general

## **Descriptions**

→ Too specific

## **Prof. Development**

→ Not tailored

## **Instr. Designers**

→ Too few

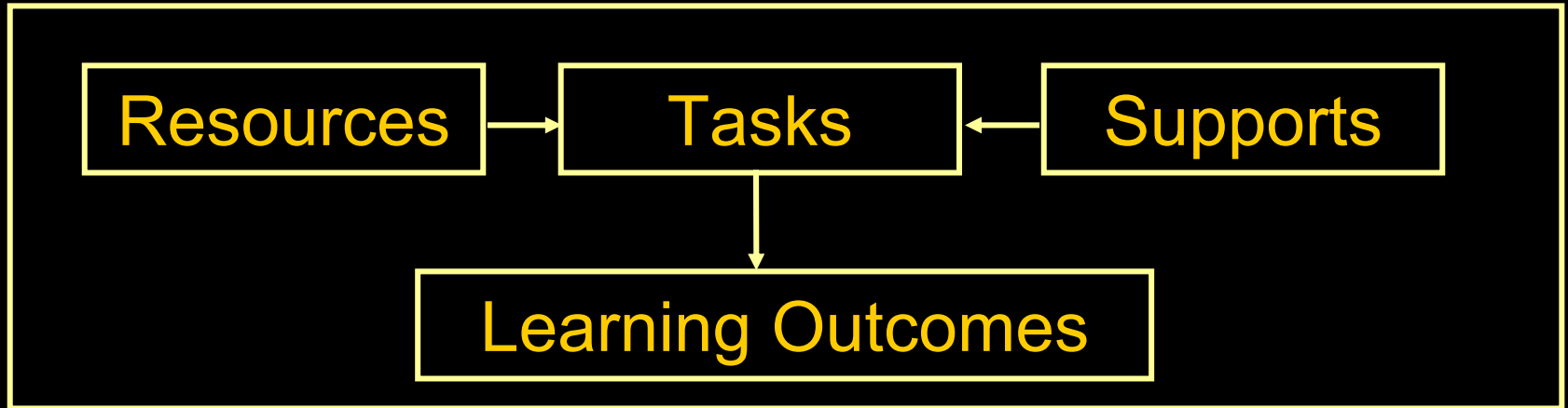


# Teachers as designers

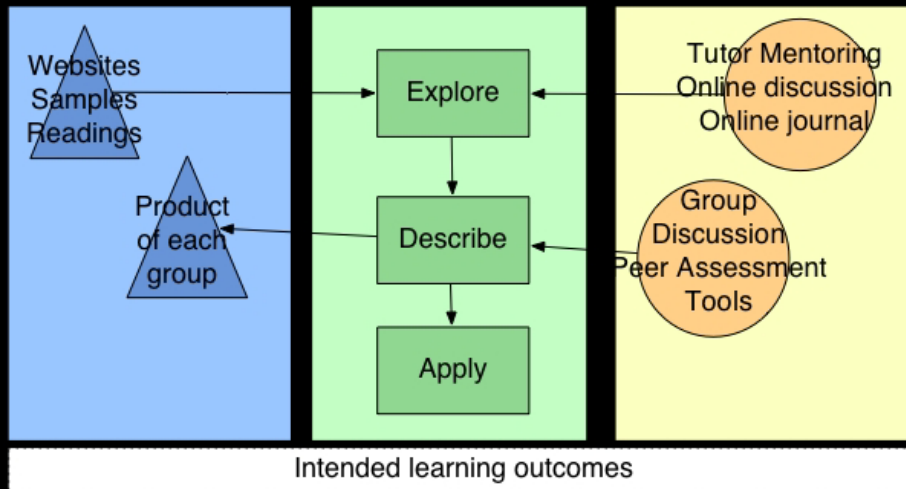
- **Poorly** understood
- Focus has been on ‘approaches to teaching’
- Little known about
  - Their **practices**
  - Their **thinking**
  - **Influences** on what and how they design



# Learning designs



# Representation



[top](#)

the four individually-based assessment tasks and it is expected that the learners are the online discussions. The learning tasks follow this sequence:

to produce an initial response paper to an assigned reading and is to incorporate online peer in their essay.

to a minor topic by searching for relevant resources about a designated topic. They are to assign. Each student's work serves as input to the next task for another student. That is, these resources to be examined by another students for their major topic.

to site.

throughout the subject is the contribution to the glossary and bibliography.

to be in the construction of knowledge and actively pursue the negotiation of what knowledge is constructed and how this is done.

In the online setting students can choose to begin this journey in one of two ways:

- Students can either explore the four central questions that are introduced online but elaborated in print, that is: What is at stake?, What is the status quo?, What are the alternatives?, What happens when different knowledges speak to each other?, or
- Students can explore the issue presented on the web site, Wilderness, that introduces the four central questions in relation to a specific context.

Students can then explore any of the other issues in any order they choose. All issues are introduced through the four central questions (which serves as a scaffold to assist students when examining the literature). The issue of "Wilderness" is the only one that has a visual interface on the web site.

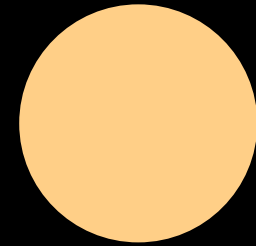
(It is intended that all issues will be introduced using a similar visual stimulus in the subject web site.)

**SIGNIFICANCE OF ORDER**  
There was much conversation about this in the design phase of the materials about this. We wanted students to experience an actual site of contestation, for example, like the Wilderness which would be within every students' experience as well as the issue of stereotypical concepts from a white western paradigm.

However, to really understand how it could be contested, students needed to understand the key questions that were being asked. To resolve the issue, we have provided screen prompts on the subject web site about where we recommend the students begin. But the choice is ultimately up to the students. We have found though, that this guided approach has worked well to date.

**CRITICAL ACTIVITIES**  
Because the understanding of different knowledge systems provides different perspectives on issues, the activities have been

# Graphical representation



**Resources**

**Tasks**

**Supports**

static  
dynamic

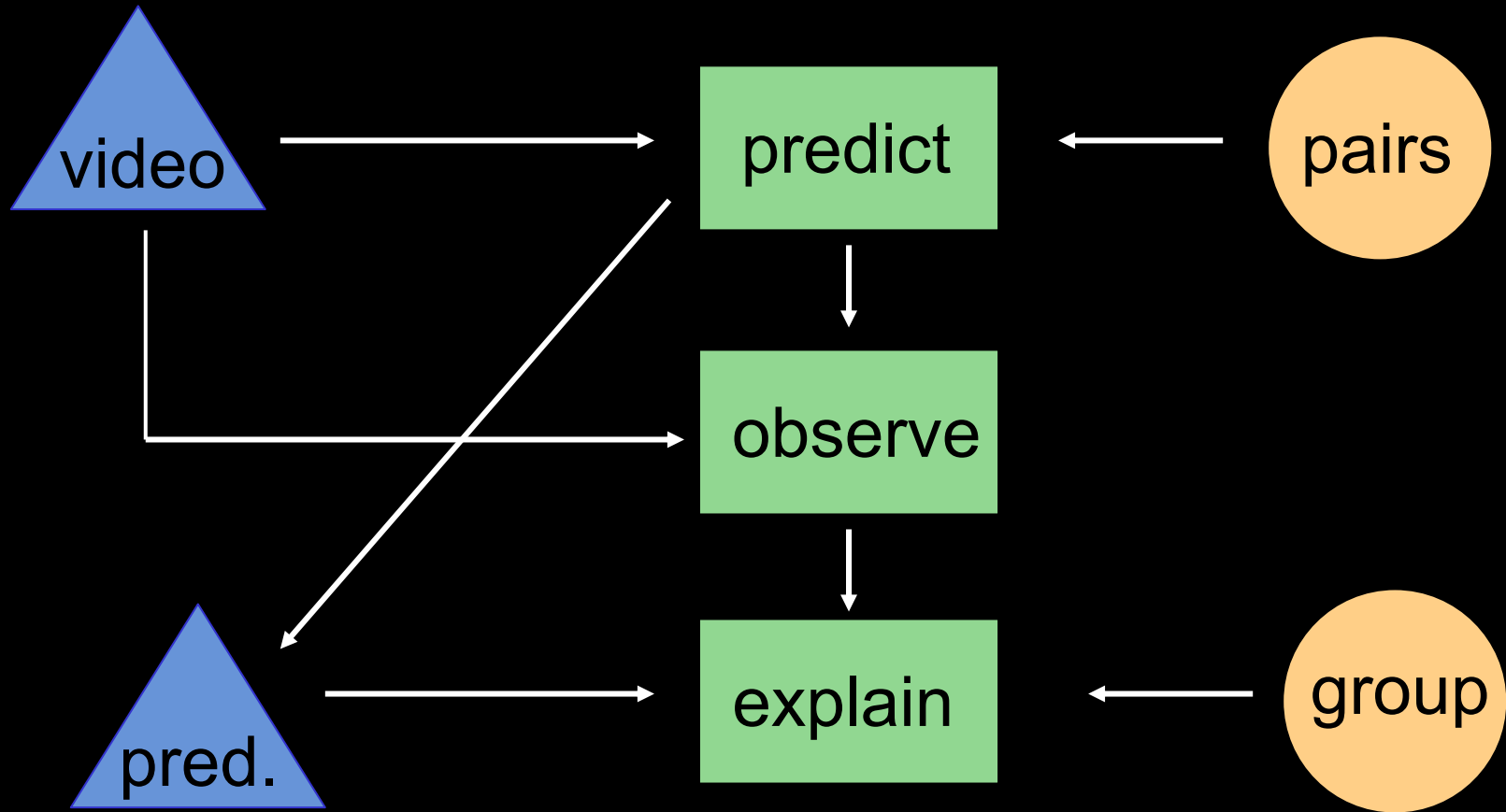
formative  
summative

people  
documents  
software





# Example



# The Learning Design Web Site

The screenshot shows the 'Learning Designs' website interface. At the top, there is a blue header with the title 'Learning Designs' and a subtitle 'products of the AUTC project on ICT-based learning designs'. Below the header are navigation tabs: 'home', 'exemplars', 'guides', 'tools', 'the project', and 'search'. A secondary navigation bar includes 'overview' and 'using this site'. The main content area is titled 'Information and Communication Technologies and Their Role in Flexible Learning'. It contains a paragraph about the website's purpose for teachers and instructors, a callout box with instructions to hover over navigation tabs, and a list of four ways to use the site's resources. Below this is a diagram illustrating the design process: four boxes at the top describe the steps (selection of exemplars, analysis for generic use, creation of generic designs, and selection of ICT-based tools). Arrows indicate a flow from 'Exemplars' to 'Guides' and 'Tools', and from 'Guides' to 'Tools'.

**Learning Designs** products of the AUTC project on ICT-based learning designs

home exemplars guides tools the project search

overview using this site

## Information and Communication Technologies and Their Role in Flexible Learning

This web site has been designed for teachers and instructors in higher education to access a rich set of resources that support the development of flexibly delivered high quality learning experiences for students.

[Move the mouse pointer over the navigation tabs or over the diagram below to see a description of Exemplars, Guides, Tools, and The Project.]

Use the web site resources to develop high quality learning experiences for students by

- exploring a range of proven learning designs, with exemplar aspects and full instructions on how to implement the designs (exemplars)
- examining a set of generic learning designs to apply in your knowledge domain (guides)
- making use of a set of tools for supporting learners (tools)
- reviewing the principles for design of high quality learning experiences (the project)

A selection of learning designs with exemplary aspects

A review and analysis of exemplars to determine suitability for generic use

A set of generic learning designs based on a selection of exemplars

A set of ICT-based tools with potential for generic use, based on exemplars

Exemplars

Guides

Tools

[www.learningdesigns.uow.edu.au](http://www.learningdesigns.uow.edu.au)

# Learning Designs

- Not **templates** or recipes
- Are **patterns or sequences** which capture the design logic
- Must be **adaptable** and **customisable**

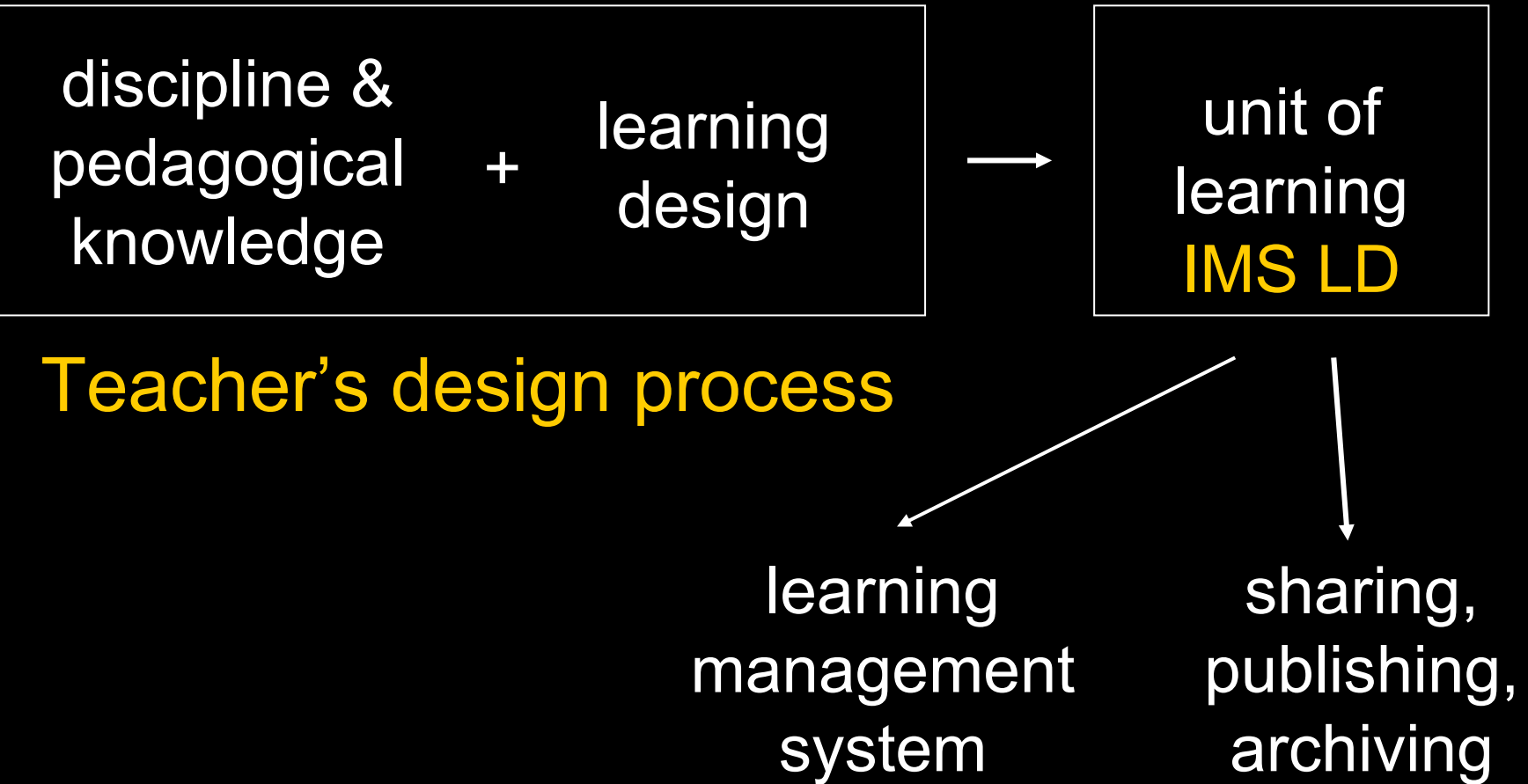


# Next step

- Create and investigate tools to support teachers design **processes** and **decision-making**
- **Embedded** in the environment in which teachers work
- Investigate **standards** that can support the tools and process



# The Process



# Preliminary research

**Education**

**Nursing**

**Arts**

**Medicine**

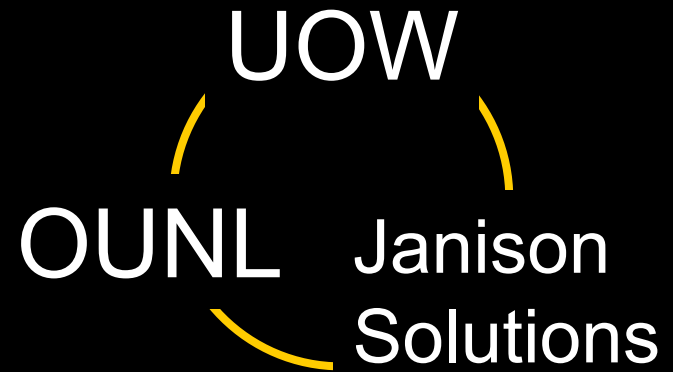
**School-based PBL**

- ✓ Readily understood
- ✓ Adaptable
- ✓ Assists communication



# The Project

- **Phase 1:** Investigations
  - Teachers' actual practices
  - Analysis of learning designs available
  - Analysis of IMS LD
- **Phase 2:** Design, Development, Evaluation
- **Phase 3:** Final analysis



# Project outcomes

- Understand more about how university teachers **design** learning experiences
- Advance learning designs as supports for **process** and **decision-making**
- **Embedded** in the environment in which teachers work
- Apply and advance **standards** to enable software systems to use learning design

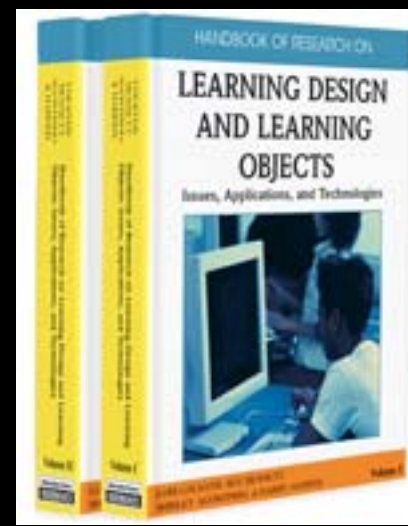




# Conclusion

- Learning designs **address gap** in current support
- Provide **scaffold** to help teachers apply their professional and disciplinary knowledge to design high quality learning environments
- Next step is a **support system** that maintains these characteristics, and is **technically sound**





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Handbook of Research on Learning  
Design and Learning Objects: Issues,  
Applications and Technologies

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