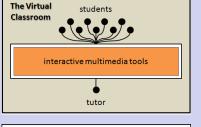
The Virtual Classroom: A New Cyber Physical System

Dr Joanna Isabelle Olszewska

School of Computing and Engineering University of West Scotland, UK

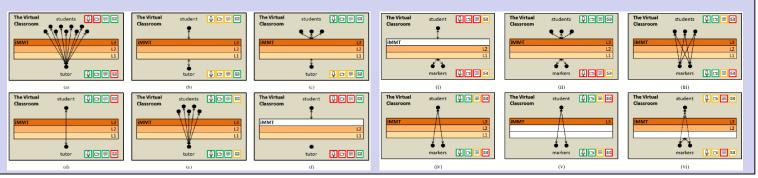
Content

- Virtual Classroom
 - Overview
 - Interactivity & Cybernetic
 - Interactive Multimedia Softwares
 - Layers

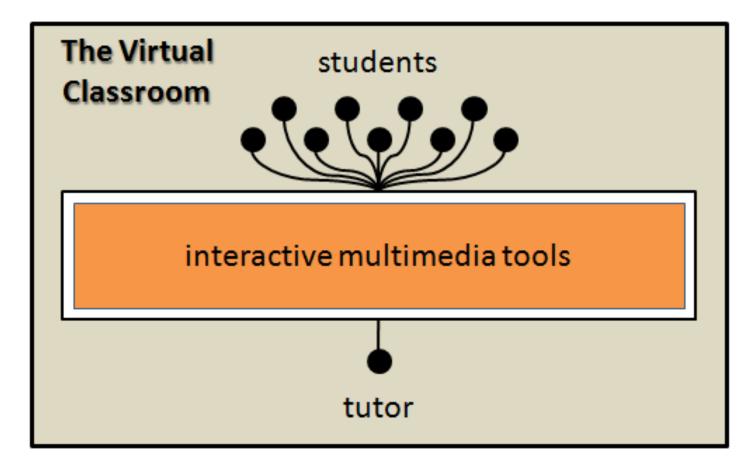




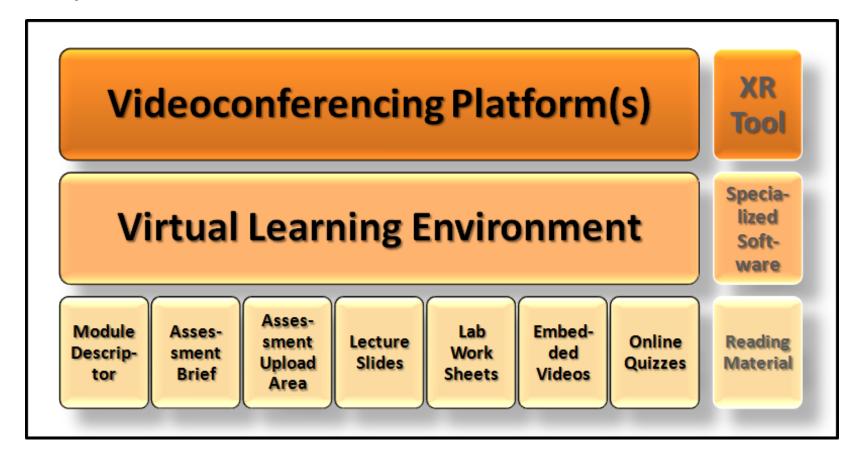
- People & Software Interconnection
 - Patterns



Overview



Layers



Delivery Patterns

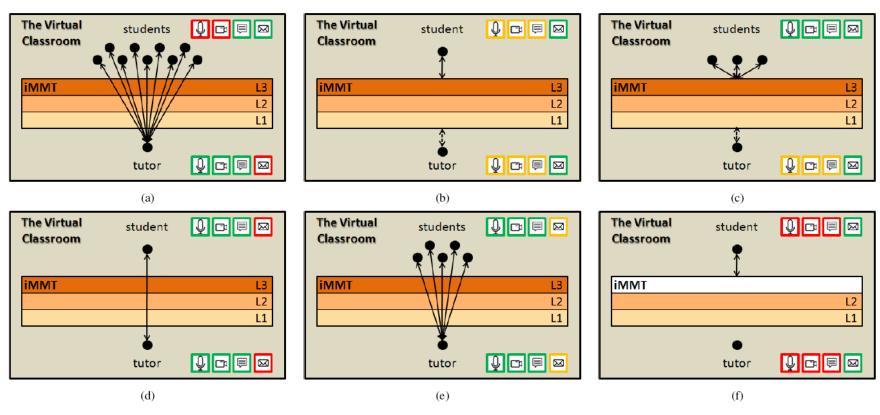


Figure 4: Identified virtual-classroom patterns for the interconnection of interactive multimedia tools in case of (a) lecture; (b) lab work; (c) workshop; (d) tutorial; (e) seminar; (f) home work.

Assessment Patterns

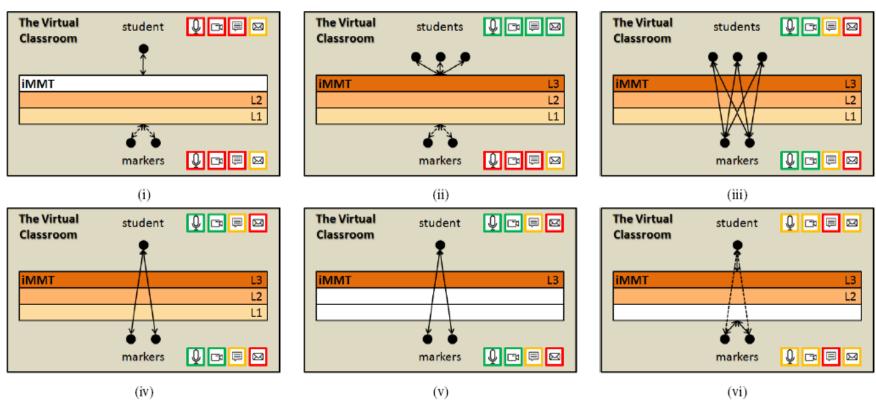
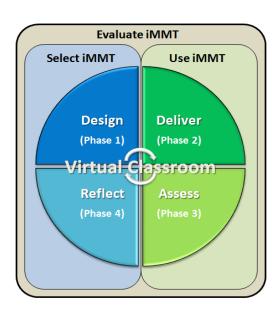


Figure 5: Identified virtual-classroom patterns for the interconnection of interactive multimedia tools in case of (i) individual coursework; (ii) group coursework; (iii) group demo; (iv) project presentation; (v) oral exam; (vi) written exam.

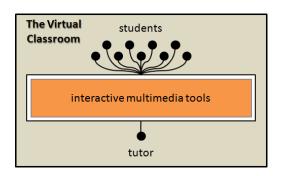
Conclusions

The Virtual Classroom

- Development Life-Cycle
 - Design
 - Delivery
 - Assessment
 - Reflection



- Patterns to Interconnect Softwares & People
 - for Delivery
 - for Assessment
- New Cyber Physical System
 - Architecture



The Virtual Classroom: A New Cyber Physical System

Thank You

Contact Details

Dr Joanna Isabelle Olszewska joanna.olszewska@ieee.org

School of Computing and Engineering University of the West of Scotland (UWS) United Kingdom