The following guide provides a brief description of each learning activity. Activities are colour-coded by activity type. Communication and collaboration roles icons and are also provided at back



Usually teacher-centred content; if used excessively in isolation can create a passive learning experience but can act as a trigger for independent learning or EBL when combined with learner-centred activities.

Teacher-led





Examples include: books, papers, handouts, lecture notes, resource packs. The content is generally knowledgebased requiring students to read and comprehend.



Web-based or VLE hosted hypermedia materials. Examples include: internal and external websites, electronic resources such as online journal articles.



A recorded presentation including the capture of presentation slides or materials, audio narration and optional video headshots or full-scale filming.



An audio recording made by the lecturer. Content can be narrative, descriptive or informational. Formats can include: a radio show, narrated e-book or annoucements. A true podcast is disseminated and published 'regularly' using RSS.



Screen capture demonstration, which can include audio narration and/or visual annotations or captions. E.g. Demonstrating specific tasks with software, an online application or website.



Knowledge or concept maps can be used to present an overview of a knowledge domain, present links and relationships between different topics or concepts.

Asynchronous



A visual sequential presentation of a scenario, process, procedure, event or roleplay. Particularly useful when providing contexualised examples.



A sequential presentation of images and/or short video clips and structured informational 'screens'. The presentation may also include an audio narration. Though contentbased, the medium can also be used as a stimulus or trigger for studentcentred activity.



Examples include: past exam questions and answers, essay title and suggested outline, mathematical question and proof, scientific question and a worked solution. Examples may be provided 'as is' or with additional supporting commentary.



A list of externally-hosted or stored resources which are either optional or mandatory reading for the activity or course.



A drawing, diagram, illustration, 3D model, visual respresentation or annotated photograph.



A moving illustration showing a sequence of events. The animation may also include synchronised annotations.

Interactive Experimental

These activities are student-centred and can facilitate enquiry-based learning, support independent learning and skills development. They can be processorientated and usually provide direct or intrinsic feedback to students.



A goal-based learning experience whereby students undertake a series of structured activities involving the exploration and evaluation of web-based resources.



The practical construction of an experimental or project-based artifact, model, simulation or apparatus. Successful construction, iterative development and implicit testing provides direct feeback to students.



Chemical, biological, physical or engineering experiments conducted in a laboratory or industrial setting. A hypothesis is either developed by students or given to them, which is then explored and tested through a structured series of student tasks.



A research or enquiry orientated exercise. Students can be given a brief or specific topics to investigate, or be supported through a structured exploration of a research question.



A problem-based learning activity in which students work collaboratively or independently to solve problems, develop solutions through the exploration of subject material and reflect on their experiences.



A discipline-specific activity undertaken with the physical context of the real world. Examples includes: Laboratory, law court, school classroom, factory, sports centre etc.



A project-based learning activity. Students undertake collaborative project-driven activities. The processes involved and development of any 'products' of the project are both important to the learning experience.



Students are given a scenario and partial data and are required to develop or use decision-making or diagnostic trees in order to 'walk through' a process exploring the impact of variables, factors or decisions made upon any outcome.



Students are presented with a 3D world simulation to explore and interact with the environment (objects, characters and scenery). Tasks are usually goal-based or enquiry-led.



Simple puzzles can require students to demonstrate knowledge and understanding (through related questions). Successful completion of the puzzle provides immediate feedback. Often used in conjuction with other activites to add a level of interactivity.



Game-based learning and the use of simulations to support task or goal orientated objectives. The system emulates a real-world set of variables or experiences and provides immediate and intrinsic feedback to the learner.



Students engage with a case study and apply existing theory, models, knowledge and experience to resolve or deconstruct the study. It can stimulate curiosity in the students, encouraging them to actively explore and seek new evidence or knowledge.



A diagram or illustration which incorperates interactive annotations and support materials. Students can both explore aspects or features of the diagram and analyse the impact of different exploration or inspection techniques.

Communicative Collaborative

Learner-centred activities that are facilitated by a mode and medium of communication and/or collaboration. Intrinsic feedback is provided by peers as well as by facilitators. To work effectively each activity requires clearly defined student roles and tasks.



Online Chat

Video Conference

Face-to-face activities that might include: seminars, team meetings, workshops, discussion, role-play or debating groups. Can be facilitator or student-led. Requiring a fixed time, duration and location.

An online synchronous communication tool. Enabling two way text-based communication. Generally requires a fixed time though drop-in chat might be provided for support reasons.

An online audio-video communication tool. Enabling two way audio, video and text-based communication. Requiring a pre-arranged time, duration and activity schedule.



Participation in collaborative activities within a 3D virtual world (e.g. SecondLife). In-world communication can include avatar gestures, audio and text-chat. Activites can include: joint goal-based exploration or character role play.







A real world activity enabling asynchronous communication of ideas though the use of small paper-based messages. Synchronous collaboration on sequencing and grouping of ideas can follow as well as acting as a trigger for general face-to-face discussion.

A synchronous activity that forces participants to actively listen to the experiences and perspectives of a specific group of people undertaking a structured task or discussion. Observation might be face-to-face or facilitated through web-conferencing.

A group activity where participants take on a structured role-play within a given scenario, environment or problem-based activity.





An activity structured by the use of open, closed and multiple choice questions designed to stimulate discussion or facilitate engaging revision sessions.



The development, participation in or critical review of a community of learning (practice or inquiry). Participants may be provided with a structured series of tasks or may contribute and participate at will.



The use of asynchronous communication: electronically via email or physically via post. Correspondence can be two-way.



Online asynchronous text-based communication through discussion boards. Participants may post topics and/or replies. Can be used to facilitate structured discussion.



Online asynchronous audio-based communication used to faciliate structured discussion. Participants may record and review audio entries online. Wimba Voice Tools is an example.



Online asynchronous collaboration on a primarily text-based structured document or freeform website. Individual students might be assigned different roles or tasks within the activity.



Online synchronous collaboration on a text-based document. Individual students might be assigned different roles or tasks within the activity.



Online collaboration through the creation, review or development of concept, knowledge or mindmaps. Collaboration may be synchronous or asychronous.



Participation in a social network site (e.g. Facebook, Ning etc) for academic purposes, research collaboration or peer support.



The collaborative development of tags and reviews for web-based resources useful to the course. Useful for sharing research and facilitating enquiry.



Productive

Individual

Assignment

A simple activity designed to foster and build a community relationship amoungst students. Used in the first face-to-face or online 'meetings'.

- Learner-centred
- Supports independent learning Product-orientated
- (even if the product is a description of a process) Extrinsic feedback required

An individual text-based product:

- Narrative / Reflective
- Descriptive / Informative Comparison / Contrast
- Evaluation / Review
- Persuasive or Philosophical
- Examples: essay, assignment, dissertation, lab / project report



A group text-based product collaboratively produced.

Reflective Blog



An assignment produced in a reflective style using a blogging or journal tool.



An audio podcast produced by student(s).



The use of an e-porfolio system for: personal development planning (PDP), capturing and storing evidence, reflection, giving and receiving feedback, collaboration, presenting to an audience. E.g. PebblePad.



The development of a comic strip or storyboard by students to represent visually: a narrative or story, development process, scenarios setting or to communicate concepts.



A presentation by students to an academic panel, their peers or external respresentatives.



The individual creation of an artistic product: a musical piece, painting, illustration, poem, costume etc.



Activities are intended to bring about deep learning, where students use technology and inquiry to engage with issues and guestions that are relevant to their lives. The emphasis on students' own artifact construction to represent what is being learned.



The analysis and interpretation of experimental or operational data and statistics. Students manipulate, model and test the data to provide an analysis. Interpretations are produced which contextualise their analysis and results.



The production of a knowledge, concept or mindmap by a student. Useful for revision or as an assignment draft / outline as well as testing conceptual knowledge relationships.



Learners produce a diagram, annotated illustration, model or other visual representation that demonstrates the learning objectives.

Assessment Feedback

An activity for assessment and or feedback. Including: formative, summative, individual, peer or group. Or an activity that provides automatic feedback through the tasks or through the 'system' or tool.



An icon used to represent feedback provided by a facilitator or marker on a piece of individual or collaborative work i.e. it can be used in conjunction with nearly any student activity to indicate feedback from the lecturer or facilitator.



Formative multi-choice questions (MCQ) facilitated through computer-aided assessment (CAA). Feedback is provided by the system on performance and/or student answers.



The use of electronic voting systems in a synchronous session facilitated through MCQs and instant presentation of response counts to students. Can be used to collect feedback, provide formative assessment and faciliate dicussion through EBL-style questions.



Students anonymously vote online using a polling or simple survey tool.



A bank of questions and answers designed to aid revision and formatively assess academic performance. Students attempt to answer questions then model answers are made available.



Students answer a bank of formative MCQs which assess their knowledge against a competencies map / domain; presenting students with a representation of their level with respect to lecturer expectations and that of their peers



Mathematical assessment activity providing analysis of the students' response and feedback.





Synchronise

A decision icon representing timed release. Proceeding activities will commence at the specified time / date or be released at a specified frequency (e.g. sessions, weeks, terms).

A decision icon representing a selective release of following activities based upon specified criteria (group membership, grades or scores from previous assessments etc). Release is on an individual student basis and there may be more than one branch.

A decision icon representing a forced pause in student activity for all students. The pause is released by direct teacher action. This can be used to provide a cut of time / day or enable activity breaks.

A decision icon used to represent when students on different learning activity design branches (from a differentiation activity) are brought back together on to one common pathway.



The arrow represents the flow, direction or sequence of activities. A dotted, or dashed line arrow may represent different branches of a learning design.



Encompassing learning activities in a solid-line box indicates that multiple activities are undertaken by students at the same time or in the same session.



Encompassing learning activities in a broken line box indicates optional activities. Unless specified, students individually must select at least one activity from the set.



Designing for Inquiry-based Blended Learning



Produced by the DIBL Development Team University of Birmingham (c) 2010

Icons for Instructional Design

Communication, Collaboration Roles and Tasks



Instructional Design Storyboard Templates

Hotspot

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			Demonstration
			Website
	Drag'n'Drop	Scenario Decision-making	Document

Matching

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Fill in the blank



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Short Answer