Teaching Approaches Menu,
including technologies that can support them

About this menu:

- This menu is designed to assist colleagues in identifying different teaching approaches and the technologies that can support and enhance those approaches. It can be used to support both individual modules and entire courses, and aligns with the University's process for the design and approval of its courses.
- The menu covers a number of approaches around the areas of independent learning (page 1), work-related learning (pages 2-3), information-focussed learning (page 4), and peer-learning (page 5). The benefits of using each approach are listed, along with indicative assessment types, technologies that can enhance them and the benefits of using that technology, as well as links to further information, specific examples and case studies. (NB. this is a work-in-progress and subject to further revisions and inclusion of additional materials).
- The latest version of this document can be found at http://go.shu.ac.uk/teachingapproachesmenu and reuse under the terms of the Creative Commons licence shown at the bottom of the page is encouraged.
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	Approaches to teaching and learning	Benefits	Indicative assessment artefacts	Technology to support and enhance	Benefit of using technology	Further information, examples and case studies
Independent Learning	**Reflection** *Students reflect on practice, experience and their newly developed knowledge and skills*	• Students have time to consider their development, and can identify areas of personal challenge • The ability to reflect on actions and decisions is a necessary skill in many occupation and in professional body requirements • Helps students to develop critical-thinking and writing skills	• Commentary • Critical reflection • Development plan • Portfolio • Reflective essay • Situational analysis (SWOT) • Verbal reflection • Viva	• Audio • Blogs • ePortfolio • Google Sites • Mind maps • Video • Wikis	• Can simplify the incorporation of artefacts in a wide range of media types • Easier to share and repurpose reflections • Allows for on-going review and tutor feedback	**Case studies:** • Capturing reflective learning using digital video - Ian Jones • Encouraging reflective writing through blogging - Karen Vernon-Parry • Supporting reflective learning through private blogging - Alison Hramiak • Developing study skills through structured reflection - Tanya Miles-Berry **Related 'Teaching Nuggets':** • Reflective Blogging
	Phased learning (a.k.a. 'Mastery') *Students required to fully understand a concept, skill or technique before moving on to more advanced topics*	• Moving onto more complex topics, making learning more visible to students • Student is encouraged to become more autonomous • Develops students' confidence in their abilities	• Lab reports • Observations • Repeatable (randomised), formative tests	• Blackboard tests • Blogs • ePortfolio • Screencasts • Video • Wikis	• Can provide instant feedback on attainment • New material can be released automatically upon reaching a level	**Further information:** • Mastery Learning [slides] - Namita S. Sahare • What is "Mastery Learning"? [Prezi] - Owen Hoegh **Related 'Teaching Nuggets':** • Formative Objective Testing
	Self-directed learning *Students define and investigate topics of their own choosing using their own tools and methods*	• Can lead to high levels of active engagement as students pick topics of personal interest • Fosters independent learning and increases diversity of topics, resulting in greater topic coverage among a cohort • Encourages students to develop their critical thinking and research skills	• eBook • Case studies • Infographic • Portfolio • Poster • Presentation • Written report	• Blogs • ePortfolio • Resource lists online • Wikis	• Helps students take greater ownership of content and method • Allows a wide variety of sources and resources to be used	**Case Studies** • Developing learning literacies with digital posters - Diane Rushton • Mobile innovation: Using QR codes to support individual learning projects - John Lee • Promoting learner autonomy through media production and presentations - Mike Bramhall **Related 'Teaching Nuggets':** • eBooks • Learner-generated content • Reflective Blogging

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Work-related Learning	**Simulation** *Real-world situations are investigated using tools and methods as close as possible to those in the workplace*	• Facilitate and encourage practical skill and equipment proficiencies likely to be encountered in practice • Modelling the 'real world' allows better understanding of the relevant concepts • Allows 'safe' exploration of challenging or controversial topics and techniques	• Competency tests • Examination • Modelling • Observation • Reflective writing	• Blogs • Computer-based simulations • Interactive resources and equipment, e.g. monitors, IVI, Sim-man, Sim-baby • Video • Wikis	• Simulations can be quickly restarted • Allows simulated events to be paused and studied in detail	**Further resources:** • Simulation in clinical teaching and learning – Weller, et al. • A cross-faculty simulation model for authentic learning - Diamond, S., Middleton, A. and Mather, R. **Related 'Teaching Nuggets':** • Online role-play
	Problem-Based Learning (PBL) *Students are challenged to solve real world problems, often those without a single right answer, helping develop critical thinking skills*	• Encourage and enable imaginative and innovative thinking • Provides students with the opportunity to research and evaluate the relative merits of different approaches	• Practical examination • Presentation • Problem solving • Report • Solution	• ePortfolio • Presentation tools • Resource lists online • Wikis	• Can more closely model the real world by using the same (or similar) tools	**Case studies:** • Engaging students using online problem-based learning - Heidi Probst **Further resources:** • Problem-based learning design: a case study [video] - Bland Tomkinson, University of Manchester • Problem-based learning in Biology with 20 case examples - Peter Ommundsen (relevant beyond Biology) • 7 things you should know about Challenge-Based Learning - Educause **Related 'Teaching Nuggets':** • Learner-generated content • Scenario-based problems
	Role-play *Students work through scenarios modelled on their intended profession*	• Mimic real-world, real-time situations, enabling immediate reflection and feedback • Practice complex or high order skills in a safe and supported environment • Illustrate and consider ethical, moral or legal questions likely to be encountered in employment	• Case studies • Observation • Reflective account	• Audio • Blackboard discussion forums • Blogs • Video • Wikis	• Makes it easier to include external participants • Can replicate real-world situations more closely, e.g. debating around a Blog post • Recorded interactions can be analysed afterwards	**Case studies:** • Using online role-play to develop ICT skills - Claire Craig **Further resources:** • How to teach using role-playing - Carleton College • Rehearsing for the real world: Case studies and role-play - Jones & Bartlett Learning **Related 'Teaching Nuggets':** • Online role-play

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Work-related Learning (continued)	**Practical or project work** *Students undertake a piece of work to help integrate their learning and make it concrete*	• Provides opportunities for students to use theory to develop practical solutions • Allows students to develop examples of their work which could be included in a portfolio • Students are able to develop and show the depth of their knowledge and creativity	• Demonstration • Lab reports • Observation • Peer review • Portfolio • Presentation • Reflective account	• Audio • ePortfolio • Photos • Resource lists online • Video	• Students can use similar tools to those they would in the workplace • Easy to retain intermediate ('draft') versions and review changes	**Case studies:** • Developing learning literacies with digital posters - Diane Rushton • Engaging students beyond the classroom through sharing projects online - Nicholas Pickett • Promoting learner autonomy through media production and presentations - Mike Bramhall **Further resources:** • Project-based Learning Professional Development Guide - Edutopia **Related 'Teaching Nuggets':** • eBooks • Learner-generated content • Reflective Blogging • Social media
	Work-based learning and placements *Students apply their learning in a real workplace and gain practical knowledge and skills*	• Helps students to develop resources for a portfolio of their work • Students can develop useful relationships and contacts within their industry • Opportunities to explore the relationship between theory and practice	• Observations • Reflections • Summative report by placement provider • Written report	• Blackboard discussion forums • Blogs • ePortfolio • Mobile apps and devices • Twitter • Zoom / Bb Collaborate	• Reduces the sense of isolation some students feel when out of University • Allows easier interactions between geographically separated parties	**Case studies:** • Mobile innovation: Communicating with professional students - Alison Hramiak **Related 'Teaching Nuggets':** • Reflective Blogging • Webinar

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Information-focused Learning	**Lectures as pre-work (a.k.a. 'Flipped Classroom')** *Information and lectures provided as pre-work, contact time used for more interactive purposes*	• Students are able to engage with materials flexibly and at their own pace • Students come to sessions with a required level of knowledge and understanding • Allows tutors to repurpose time for more engaging teaching approaches	• In-class tests • Peer-reviewed presentation • Practical activities (formative)	• Blackboard discussion forums • Blackboard tests • Electronic Voting Systems • Panopto • Podcasts • Resource lists online • Video • Zoom / Bb Collaborate	• Allows a variety of media to be used • Students can access the information at a time and place to suit themselves	**Case studies:** • Illustrating difficult concepts using screencasts - Cecile Morris **Further resources:** • Flipping the classroom - Cynthia J. Brame • 7 things you should know about Flipped Classrooms - Educause **Related 'Teaching Nuggets':** • 10 minute screencast lecture • eBooks • Tutor concept blogging • Webinar
	Resource-centred or facilitated discussion *Tutors present artefacts and the class undertake self-directed discussion about them. Students might also select the artefact*	• Encourages expression of feelings, values, opinions and beliefs, and sharing of experiences • Presentation skills may be practiced, building confidence and the ability for self-expression • Develops critical evaluation skills	• Demonstrations • Observation • Peer-review • Report	• Audio • Blackboard Discussion forums • Photos • Resource lists online • Zoom / Bb Collaborate • Video	• Discussions can more easily include external parties • Record of discussion can be subsequently analysed	**Further resources:** • Teaching with discussions - Washington University in St. Louis • Teaching with Artefacts – Nicole Brown • Object-based learning - University of Miami **Related 'Teaching Nuggets':** • Social media • Webinar
	Micro-research *Students given a unique topic to research and later share their findings with the class*	• Development of presentation and/or other communication skills • Used for group work it can develop collaboration skills, but can also develop autonomy, independence and responsibility • Students can develop the learning materials for each other (potentially reusing them in subsequent cohorts)	• eBook • Infographic • Pecha Kucha • Poster • Presentation • Report • Student conference	• Audio • Presentation tools • Resource lists online • Video • Wikis	• Allows flexibility in presentation method and tools • Encourages use of different media types • Develops skills that will be useful in employment	**Case studies:** • Developing learning literacies with digital posters - Diane Rushton • Encouraging learner autonomy through small, self-selected research projects - Chris Corker & Sarah Holland • Promoting learner autonomy through media production and presentations - Mike Bramhall **Related 'Teaching Nuggets':** • eBooks • Peer feedback • Social media • Webinar
	Teacher-directed learning or traditional lecture *Students receive large volumes of information, particularly theoretical information, simultaneously with their peers*	• Time-efficient way of transmitting large amounts of information to large cohorts • Enthusiasm for the subject can be passed on by enthusiastic lecturers • Materials that cannot be shared with students (legally, ethically, morally, physically, etc.) can still be presented to them	• Examination • Report	• Electronic Voting Systems • Presentation tools • Twitter	• Increase engagement during sessions • Encourage interaction during lectures • Identify and clarify misunderstandings as they happen	**Case studies:** • Mobile innovation: Stimulating participation in lectures via mobile devices - Ben Abell **Related 'Teaching Nuggets':** • 10 minute screencast lecture • Webinar

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Peer Learning	**Critiquing** *Students critique each other's work or that of a third party and provide advice on improvements*	• Helps develop skills in critical thinking, evidencing and evaluation in respect of own and others' work • Supports development of reflective capability • Students receive richer feedback on how to improve their work based on multiple perspectives	• Critical essay • Staged development of artefact with reflection on peer criticism	• Audio • Blackboard discussion forums • Blogs • Google Forms • Video	• Can use a variety of media types • Critiques can take place over an extended period of time • Record of critique and response straightforward to obtain	**Case studies:** • Using peer feedback to enhance employability - Anne Nortcliffe **Further resources:** • Creating a culture of critique - David Fawcett • Successful Art class critique - Marvin Bartel (relevant beyond Art) • The Peeragogy Handbook **Related 'Teaching Nuggets':** • Peer feedback
	Debate *Students are given a fairly controversial topic to research and discuss, developing their understanding*	• Develops high-level communication skills and confidence • Builds skills necessary in employment, e.g. supporting a personal point of view, advocating on behalf of others, or playing 'Devil's Advocate' • Stimulates and engages students by challenging existing beliefs	• Blogs or discussion forum, with position post and related discussion • Observation • Peer-review • Report	• Audio • Blackboard discussion forums • Blogs • Video • Zoom / Bb Collaborate	• Easy to obtain a record of the discussion • Enables outside parties to be a part of the debate • Allows students to take part regardless of time and location issues	**Further resources:** • Use online debates to enhance classroom engagement – University of Central Florida • The use of debates as a learning or assessment tool – University of Reading **Related 'Teaching Nuggets':** • Peer feedback • Webinar