

Digital Teaching and Learning Good Practice

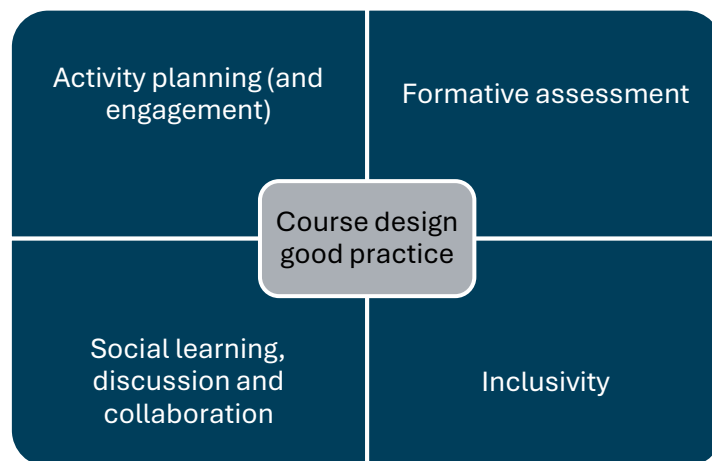
This resource has been developed to support academic staff in thoughtfully embedding digital elements into their teaching practice. It offers a set of pedagogically grounded principles that can be applied holistically across all modes of delivery, supporting consistent and high-quality course design regardless of context.

While the guidance complements the University's Virtual Learning Environment (VLE) Policy, VLE Guidance Document and VLE Baseline Standards (see [VLE Resources](#)), it is intentionally designed to be flexible and can be used independently to inform course design decisions.

Throughout the document, core principles of effective digital teaching and learning are emphasised. Where appropriate, reference is made to institutionally licensed digital tools that can support implementation, alongside targeted examples illustrating how these principles may be enacted across different delivery modes – for example, approaches to fostering collaboration within a HyFlex learning environment.

The principles are organised into the following four key areas that underpin effective course design:

1. Activity planning (and engagement)
2. Formative assessment
3. Social learning, discussion and collaboration
4. Inclusivity



Digital learning as design practice: Effective digital teaching involves the purposeful alignment of pedagogy, curriculum, assessment and technology. Digital learning frameworks emphasise moving beyond substitution towards practices that enhance and transform learning experiences, supported by reflective, evidence-informed design (Beetham and Sharpe, 2019).

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Course design good practice

Activity planning and engagement

Clear objectives

Defining clear learning objectives for each activity is essential to ensure students understand the purpose and expected outcomes. Learning objectives should be specific, measurable, achievable, relevant, and time-bound (SMART). Clear objectives help students focus on what they need to learn and provide a roadmap for their progress. For example, instead of a vague objective like "understand photosynthesis," a clear objective would be "explain the process of photosynthesis and identify the roles of chlorophyll and sunlight in the process."

[Bloom's taxonomy](#) can help you to write clear learning objectives. By selecting action verbs from each cognitive level, you can clearly specify what you expect learners to know, understand, and be able to do.

Variety of activities

Incorporating a mixture of lectures, hands-on activities, group work, and individual tasks provides students with a varied learning experience. This variety caters to different learning needs and keeps students engaged. For instance, lectures can provide foundational knowledge, hands-on activities can reinforce learning through practice, group work can develop collaboration skills, and individual tasks can promote independent learning. A balanced mix of activities ensures that students have multiple opportunities to engage with the material in different ways.

Multimedia learning: When combining text, images, audio and video, learning is enhanced when materials follow evidence-based multimedia principles, such as coherence (avoiding extraneous content), signalling (highlighting key ideas), segmenting (short, learner-controlled chunks), and modality (spoken words paired with visuals rather than on-screen text). These principles help learners process information more effectively and avoid cognitive overload (Mayer, 2020).

Importance of active learning

Why active learning?: A meta-analysis of 225 studies shows active learning increases exam performance by approximately 6% and halves failure odds compared with traditional lecturing. Use think-pair-share, problems, and debates to turn listening time into doing time (Freeman et al., 2014).

Active learning involves students in the learning process, encouraging them to engage with the material through activities such as discussions, problem-solving, and collaborative projects. Active learning helps students retain information better and develop critical thinking skills. Examples of active learning techniques include think-pair-share, case studies, and role-playing. By actively participating, students are more likely to understand and apply what they have learned.

Activity types

Design lens: The six activity types map to Laurillard's Conversational Framework, balancing acquisition with inquiry, discussion, practice, collaboration and production, in a feedback-rich learning cycle (Laurillard, 2012).

Use Laurillard's six activity types as a lens for course design. Incorporating a variety of activity types provides opportunities for students to develop different skills.

Here are the activity types and what they look like in a digital context:

- **Acquisition:** Receiving content through PDFs, videos, and podcasts. This is a passive form of learning where students absorb information.
- **Collaboration:** Working together using cloud collaboration and discussion tools. This active learning strategy involves negotiation and shared output.
- **Discussion:** Participating in forums, Teams, breakout rooms, and channels. This constructivist approach promotes active learning through dialogue and exchange of ideas.
- **Investigation:** Engaging in online research to acquire knowledge with a purpose. This active learning approach encourages students to explore and investigate.
- **Practice:** Improving skills through quizzes, scenarios, and problem-solving tasks. This active learning method allows students to refine their abilities through repetition and feedback.
- **Production:** Collating and presenting knowledge using Office 365 tools. This active learning approach involves creating and sharing content.

Bloom's taxonomy

Build in varying levels of challenge using Bloom's taxonomy. Lower levels of Bloom's (remembering and understanding) can be taught through passive learning, while higher levels (applying, analysing, evaluating, creating) are more likely to be achieved through active learning approaches.

- **Remembering:** Recall facts and basic concepts (e.g., quizzes).
- **Understanding:** Explain ideas or concepts (e.g., summaries).
- **Applying:** Use information in new situations (e.g., case studies).
- **Analysing:** Draw connections among ideas (e.g., compare and contrast).
- **Evaluating:** Justify a decision or course of action (e.g., debates).
- **Creating:** Produce new or original work (e.g., projects).

Interactive elements

Polls and peer discussion: Well-crafted polling questions prompt peer explanation and guided debrief, improving concept understanding and participation in large classes (Caldwell, 2007).

Plan for durability: Use frequent low-stakes quizzes/polls for retrieval practice, and space attempts over weeks; both strategies reliably strengthen long-term retention (Roediger and Karpicke, 2006; Cepeda *et al.*, 2008).

Using interactive tools such as polls, quizzes, and discussion boards keeps students engaged and actively participating. These tools can be integrated into learning sessions to facilitate real-time interaction and feedback. For example, using a poll during a live session can gauge student understanding and prompt discussion. Quizzes can provide immediate feedback on comprehension, and discussion boards can foster ongoing dialogue and peer learning.

Cognitive load theory: Learning tasks should be designed to minimise unnecessary cognitive load so learners can focus their mental effort on the core learning goal. Clear objectives, well-structured activities, explicit instructions and carefully sequenced tasks reduce extraneous load and support deeper learning, particularly in digital environments (Sweller, Ayres and Kalyuga, 2011).

Maximise the usefulness of live sessions

Flipped time well spent: Move acquisition to pre-work and use live time for application and analysis. This flipped structure aligns with higher Bloom levels in class (Bishop and Verleger, 2013).

Flipped learning can be used to free up time in live sessions to dive deeper into key topics.

In a traditional model, most learning occurs during synchronous sessions, with homework activities used to consolidate learning. In a flipped scenario, some learning takes place asynchronously before the scheduled session, allowing the synchronous session to focus on deeper exploration and higher-order thinking. This approach enables students to engage in peer learning and ask questions, facilitating a more interactive and collaborative learning environment.

Flipped learning and Bloom's taxonomy

Bloom in action: Focus on applying, analysing, evaluating and creating in class, which can be supported by collaborative tasks and tutor feedback (Anderson and Krathwohl, 2001; Bishop and Verleger, 2013).

Flipped learning aligns well with Bloom's Taxonomy by allowing students to engage with lower-order thinking skills (remembering and understanding) outside of class and focusing on higher-order thinking skills (applying, analysing, evaluating, and creating) during class time.

Lower-order thinking skills (outside of class): Remembering and Understanding: In a flipped classroom, students first encounter new material on their own. This initial exposure involves lower-order thinking skills, such as remembering and understanding the content. For example, students might watch a video lecture or read a chapter to grasp the basic concepts.

Higher-order thinking skills (during class):

Applying: During the live session, students apply what they have learned to new situations. This might involve solving problems, conducting experiments, or working on case studies.

Analysing: Students analyse information by breaking it down into parts and examining relationships. Activities might include comparing and contrasting concepts, discussing implications, or interpreting data.

Evaluating: Students evaluate by making judgments based on criteria and standards. This could involve debates, peer reviews, or assessing the validity of arguments.

Creating: The highest level of Bloom's Taxonomy involves creating new or original work. In a flipped classroom, students might engage in projects, design experiments, or develop presentations that synthesise their learning.

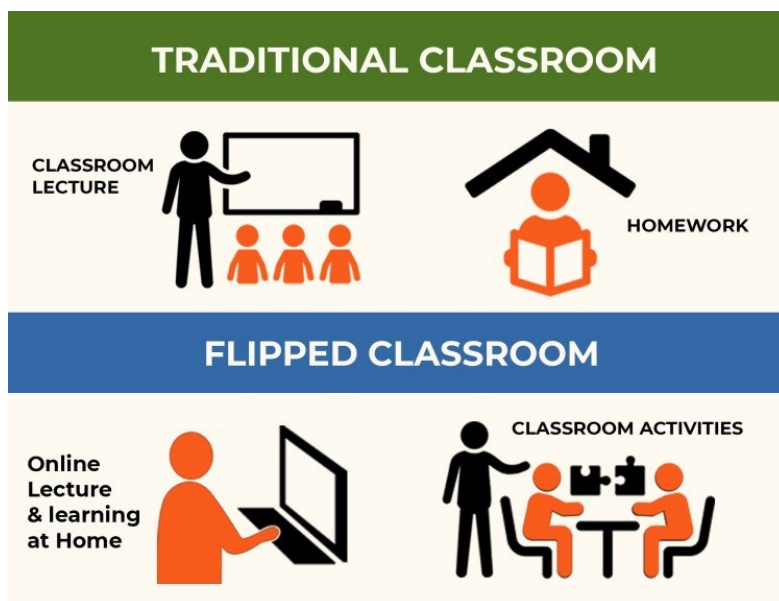


Figure 1: Traditional vs. flipped classroom (Source: <https://edtechimpact.com/news/flipping-the-classroom-ultimate-guide/>)

Real-world application

Designing activities that connect theoretical concepts to real-world scenarios enhances relevance and student interest. For example, a business course might include providing students with realistic briefs, where students are required to undertake group projects using collaborative tools to contribute to shared documents. Moreover, there might be an opportunity within your discipline to use a tool such as [H5P](#) to design e-learning scenarios where students apply theory to realistic situations in a safe environment, or even to create branching pathways where students make choices and see the consequences of their decisions. Real-world applications help students see the practical value of what they are learning and motivate them to engage more deeply with the material.

Feedback mechanisms

Make feedback count: feedback has a moderate to high positive effect when it helps students close the gap (what, how, next). Combine whole-class patterns with targeted, actionable guidance (Hattie, 2008; Wisniewski, Zierer and Hattie, 2020).

Providing timely and constructive feedback helps students improve and stay motivated. Feedback should be specific, actionable, and focused on both strengths and areas for improvement. It can be delivered through various digital methods, such as Turnitin Feedback

Studio, quizzes with automated feedback, audio recordings, online one-on-one meetings, or Moodle discussion forums. Effective feedback helps students understand their progress, identify areas for growth, and build confidence in their abilities.

Formative assessment

Assessment for learning: strengthening formative assessment practices produces substantial achievement gains across subjects and levels (Black and Wiliam, 1998).

Regular checkpoints

Implementing regular formative assessments is crucial for monitoring student progress and identify areas needing improvement. These checkpoints can take various forms, such as weekly quizzes, short reflective essays, or quick in-class polls. Regular assessments help both students and staff gauge understanding and adjust teaching strategies accordingly. They also provide opportunities for students to reflect on their learning journey, identify gaps in their knowledge, and seek help when needed.

Diverse assessment methods

Using a variety of assessment methods ensures that students can demonstrate their understanding and skills in multiple ways. Quizzes can test factual knowledge and comprehension, while peer reviews encourage critical thinking and collaborative learning. Self-assessments promote self-reflection and personal growth. Incorporating different methods keeps students engaged and caters to diverse learning styles. For example:

- **Quizzes:** Short, frequent quizzes can reinforce learning and provide immediate feedback.
- **Peer reviews:** Students review each other's work, offering constructive criticism and learning from their peers.
- **Self-assessments:** Students evaluate their own progress, fostering self-awareness and responsibility for their learning.

See [Digital tools](#) for further information about tools which can support you with creating these activities.

Constructive feedback

Build self-regulation: clarify goals/criteria, use exemplars, enable self- and peer- review, and provide opportunities to act on feedback. These principles develop students' ability to self-regulate (Nicol and Macfarlane-Dick, 2006).

Offering detailed, personalised feedback is essential for guiding students towards better performance. Feedback should be specific, highlighting both strengths and areas for improvement. It should be timely, allowing students to apply the feedback to future tasks. Constructive feedback helps students understand their mistakes, learn from them, and build confidence. Effective feedback can be delivered through written comments, one-on-one meetings, or audio recordings, depending on what works best for the student and the context.

Low-stakes assessments

Designing low-stakes assessments reduces anxiety and encourages honest self-reflection and learning. These assessments should focus on learning and improvement rather than grades. Examples include practice quizzes, draft submissions, and informal presentations. Low-stakes assessments create a safe environment for students to experiment, make mistakes, and

learn without the pressure of high-stakes grading. This approach fosters a growth mindset, where students view challenges as opportunities to develop their skills.

Alignment with objectives

Ensuring that formative assessments align with course objectives is vital for providing meaningful insights into student learning. Each assessment should be designed to measure specific learning outcomes and provide data that informs instructional decisions. Aligning assessments with objectives helps maintain a clear focus on the desired learning goals and ensures that students are being evaluated on relevant skills and knowledge. This alignment also helps to identify which areas of the curriculum may need adjustment to better support student learning.

Social learning, discussion and collaboration

Discussion forums

Community of Inquiry (CoI): Balance teaching presence (design/facilitation), social presence (belonging), and cognitive presence (sustained inquiry) to steer productive, inclusive dialogue (Garrison, Anderson and Archer, 2000/2001).

Creating online discussion forums is essential for fostering a collaborative learning environment. These forums provide a space where students can share ideas, ask questions, and engage in academic discourse. Effective discussion forums should be well-structured with clear guidelines and prompts to encourage meaningful participation. Facilitate discussions by posing thought-provoking questions, moderating conversations, and providing feedback. Additionally, forums can be used for peer-to-peer support, where students help each other understand complex topics and share resources.

Group projects

Structured interdependence: Cooperative learning methods (clear roles, positive interdependence, group processing) reliably improve achievement over competitive or individualistic designs (Johnson, Johnson and Stanne, 2000).

Assigning group projects is a powerful way to foster collaboration, communication, and teamwork skills. Group projects require students to work together towards a common goal, which helps them develop interpersonal skills and learn to manage different perspectives. To ensure the success of group projects, provide clear instructions, define roles and responsibilities, and set milestones for progress checks. Using collaborative tools like shared documents and project management software can help students coordinate their efforts and stay organised. Group projects also offer opportunities for peer learning, as students can learn from each other's strengths and expertise.

Peer learning

Scaffold within the zone of proximal development (ZPD): Use prompts, roles and exemplars so peers support work just beyond current capability (Vygotsky, 1978).

Encouraging peer learning through activities such as peer reviews, study groups, and collaborative problem-solving tasks enhances the learning experience. Peer reviews allow students to give and receive constructive feedback, which helps them develop critical thinking and analytical skills. Study groups provide a supportive environment where students can discuss course material, clarify doubts, and prepare for assessments together. Collaborative problem-solving tasks challenge students to work together to find solutions, promoting deeper understanding and application of knowledge. Facilitate peer learning by creating structured activities and providing guidance on effective collaboration.

Interactive sessions

Incorporating live interactive sessions, such as webinars or virtual office hours, facilitates real-time discussion and engagement. These sessions provide opportunities for students to ask questions, participate in discussions, and receive immediate feedback, both from teaching staff and peers. Webinars can be used to deliver lectures, host guest speakers, or conduct workshops, while virtual office hours offer a more informal setting for one-one-one or small

group interactions. To maximise the effectiveness of interactive sessions, use engaging presentation techniques, encourage active participation, and create a welcoming atmosphere where students feel comfortable sharing their thoughts.

Community building

Promoting a sense of community is crucial for creating a supportive and inclusive learning environment. Incorporating social elements into both online and offline delivery helps students build relationships and support networks. This can be achieved through icebreaker activities, social events, and informal discussion spaces where students can connect on a personal level. Another way to encourage community building is by recognising and celebrating student achievements, fostering a culture of respect and inclusivity, and providing opportunities for students to collaborate on non-academic projects. Building a strong community enhances student engagement, motivation, and overall satisfaction with the learning experience.

Inclusivity

Frameworks to use: Apply UDL Guidelines 3.0 (2024) to design for variability (multiple ways to engage, represent, and express) and meet WCAG 2.2 (2023) for accessible pages and media (e.g. visible focus, target size, accessible authentication) (CAST, 2024; W3C/WAI, 2023).

Accessible materials

Ensuring all course materials are accessible to all students is fundamental to creating an inclusive learning environment. This includes providing alternative formats, such as audio recordings, transcripts, and large-print versions of text materials, and using accessible technology, such as screen readers and captioning services, to ensure that content can be accessed by all. Additionally, materials should be designed with [Universal Design for Learning \(UDL\) Guidelines](#) in mind, making them usable by the widest range of students without the need for adaptation. This might involve using clear fonts, high-contrast colours, and simple layouts to enhance readability.

Diverse content

Including diverse perspectives and content that reflects the backgrounds and experiences of all students enriches the learning experience and promotes a more inclusive environment. This can be achieved by incorporating readings, case studies, and examples from a variety of cultures, genders, and socioeconomic backgrounds. Highlighting contributions from underrepresented groups in the field of study can also provide role models for students and broaden their understanding of the subject matter. Diverse content helps students see themselves reflected in the curriculum and fosters a sense of belonging.

Inclusive language

Using inclusive language in all communications and materials is essential for creating a welcoming and respectful learning environment. This involves avoiding language that may be discriminatory or exclusionary and instead using terms that are gender-neutral and culturally sensitive. For example, using "they" instead of "he/she" and avoiding idioms that may not be understood by all students. Inclusive language also means being mindful of how different groups are represented and ensuring that all students feel valued and respected. Providing guidelines on inclusive language to students can also promote a more respectful and supportive classroom culture.

Flexible learning options

Offering flexible learning options accommodates the diverse needs and circumstances of students. This can include providing recorded lectures for students who cannot attend live sessions, offering multiple assessment methods to cater to different learning needs, and allowing for flexible deadlines in cases of personal or health-related issues. Flexibility in learning options ensures that all students have the opportunity to succeed, regardless of their individual circumstances. It also promotes a more equitable learning environment where students can engage with the material in ways that work best for them.

Support services

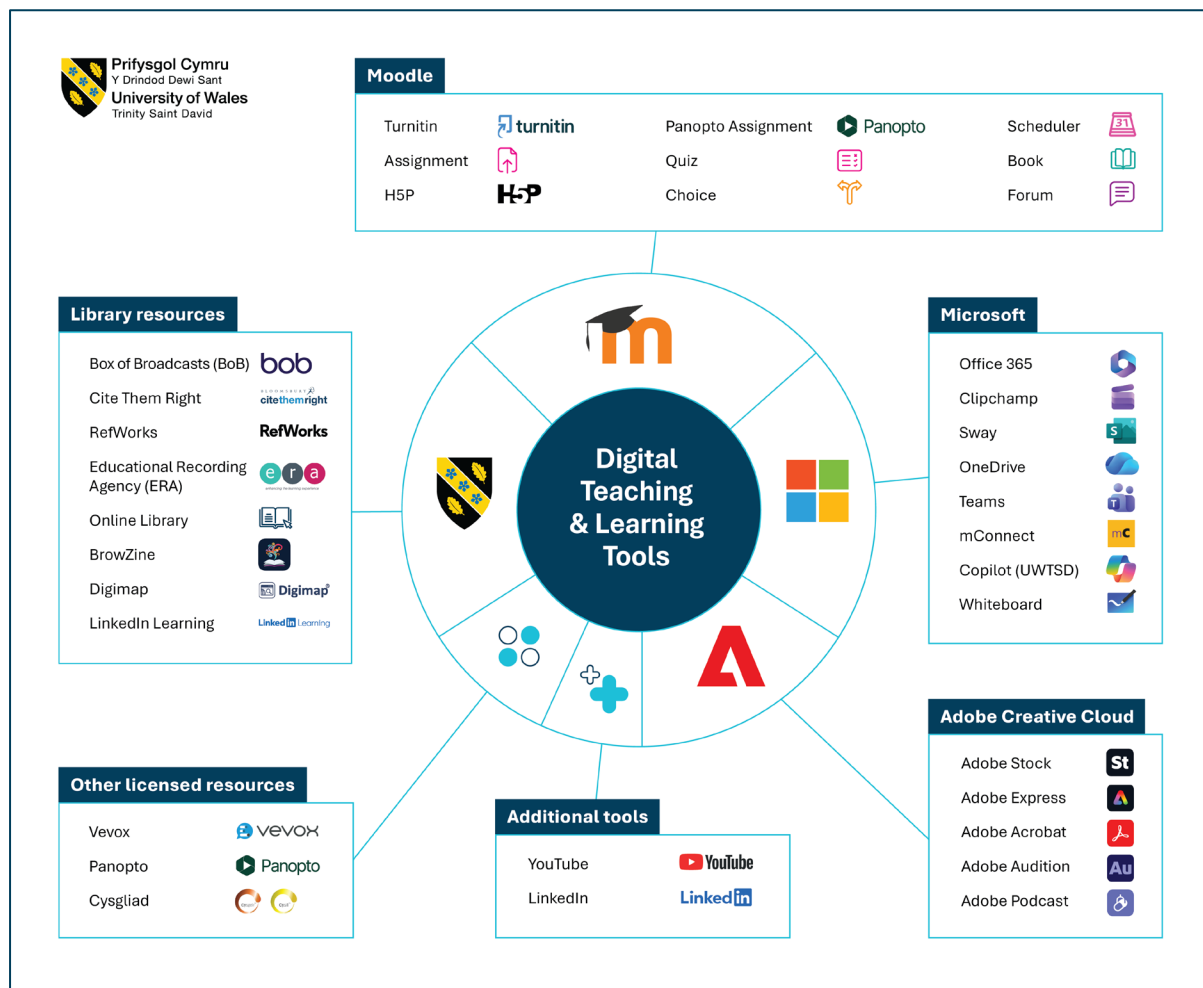
Making students aware of available support services is crucial for ensuring they have the resources they need to succeed. This includes academic support services, as well as health and wellbeing resources. Providing information about these services at the beginning of the

course and reminding students periodically can help ensure they know where to turn for help. Additionally, creating a supportive environment where students feel comfortable seeking help is important. Academic staff can play a key role by being approachable, offering office hours, and showing empathy towards students' challenges.

Digital tools

What tools are available to support me with achieving this?

The below diagram shows the digital tools available to staff to support with digital teaching and learning.



Moodle

Turnitin: Support academic integrity by checking originality and providing feedback on student writing. Use for summative assessment submissions where originality checking is required.

Assignment: Collect, manage, and grade student submissions in one place. Use for standard submissions where Turnitin is not required (e.g. formative work, file uploads, or non-text assessments).

H5P: Create and embed interactive content and formative assessments in Moodle to enhance learning.

Panopto Assignment: Enable students to submit video assignments with built-in recording and sharing tools.

Quiz: Design and deliver online assessments with automated marking and feedback. Typically used for formative assessment, unless otherwise specified by programme requirements.

Choice: Gather quick responses or feedback from students through simple polls.

Scheduler: Allow students to book appointments or meetings with staff.

Book: Organise course content into structured, multi-page resources for easy navigation.

Forum: Facilitate discussions and collaborative learning through structured online conversations.

Microsoft

Office 365: Create and manage teaching resources while supporting communication, collaboration, and organisation.

Clipchamp: Create and edit videos easily using templates, screen recording, and simple editing tools.

Sway: Design and share interactive presentations, reports, and newsletters in a visually engaging format.

OneDrive: Securely store, access, and share files in the cloud from anywhere.

Teams: Collaborate, communicate, and manage projects in one integrated platform.

- **mConnect:** Easily create and manage Teams groups from Moodle cohorts.

Copilot (UWTSD Licensed Version): Use AI to draft content, analyse information, and support teaching and administrative tasks.

Ensure you are signed in with your UWTSD account (e.g. via Office 365 or Copilot) to access the licensed version. Avoid entering sensitive data unless you are logged in.

Whiteboard: Collaborate visually in real time with digital canvases for ideas, planning, and learning activities.

Adobe Creative Cloud

Adobe Stock: Access high-quality, copyright-cleared images and media for educational projects.

Disclaimer: For internal teaching materials only. Please contact the Graphics team for official marketing or external-facing content.

Adobe Express: Easily create engaging multimedia content like graphics, videos, and web pages.

Disclaimer: Even if content is shared via “anyone with the link”, it may become publicly accessible. Avoid including sensitive or internal information unless permissions are

carefully controlled. For further information please see [Privacy and permissions when publishing and sharing file links](#)

Acrobat: Create, edit, and share accessible PDFs that meet document standards.

Adobe Audition: Record, edit, and enhance audio with professional tools.

Adobe Podcast: Quickly record, edit, and publish high-quality podcasts using AI-powered tools.

Take care when sharing links externally, ensuring no sensitive or internal content is exposed.

Library resources

Box of broadcasts (BoB): On-demand TV and radio content for educational use.

Cite Them Right: Guidance on referencing and citation to support academic writing.

RefWorks: Manage references and create bibliographies efficiently.

Educational Recording Agency (ERA): Access licensed TV and radio clips for teaching and learning: <https://era.org.uk/>

Online Library: Access a wide range of digital academic resources, including journals, eBooks, and databases.

- **BrowZine:** Browse, read, and stay up to date with academic journals.

Digimap: Access mapping and geospatial data for teaching and research.

LinkedIn Learning: High-quality short courses to complement core learning.

Other licensed resources

Vevox: Enhance teaching with live polls, Q&A, and interactive student engagement tools.

Panopto: Record, manage, and share video lectures and learning content securely.

Disclaimer: Panopto is the University's approved platform for recording and sharing teaching content. Use it for all University video content to ensure security, access control, and policy compliance.

Cysgliad: Support Welsh language writing with spelling, grammar, and proofreading tools.

Additional tools

YouTube: Share and access a wide range of educational videos to support teaching, learning, and revision.

Disclaimer: Use YouTube to source or share publicly available content only. Do not use YouTube to upload or share University materials containing internal, sensitive, or copyrighted content. Use Panopto for your own teaching videos.

LinkedIn: Build professional networks, showcase achievements, and explore career opportunities and learning resources.

Moodle

What is Moodle?

Moodle is the University's centrally supported VLE for hosting modules, structuring content and activities, and providing analytics and integrations (e.g., Vevox, H5P, Teams). It supports both asynchronous and synchronous learning, promotes consistency and accessibility, and enables tracking of student progress.

How does it support effective course design?

1. **Activity planning and engagement:** Organise weekly/topic structures with clear learning objectives and instructions; embed interactive elements (H5P, Vevox) and flipped-learning workflows to maximise live session value.
2. **Formative assessment:** Use quizzes, assignment drafts, workshops, and completion tracking for regular checkpoints with timely feedback and analytics to identify gaps.
3. **Social learning, discussion and collaboration:** Enable forums, group spaces, and peer-review workflows to stimulate discussion, community, and peer learning.
4. **Inclusivity:** Apply a consistent course layout, provide accessible materials and captions, and surface support information; aligns with UDL principles referenced in your guide.

Where can I find out more?

[Course: Dechrau arni gyda Moodle / Getting started with Moodle | Home](#)

[VLE Resources](#)

[MoodleDocs](#)

H5P

What is H5P?

H5P is a suite of browser-based interactive content types (e.g., interactive videos, branching scenarios, drag-and-drop, image hotspots) that you can create and embed directly in Moodle.

How does it support effective course design?

1. **Activity planning and engagement:** Convert passive content into active learning (e.g., annotate a video with in-stream checks; create inquiry prompts with hotspots; run branching case studies).
2. **Formative assessment:** Build low-stakes, auto-marked checks with instant feedback; use attempt data to spot misconceptions and adapt teaching.
3. **Social learning, discussion and collaboration:** Pair H5P activities with Moodle forums (e.g., "Discuss your decision path in the branching scenario") to externalise reasoning and compare approaches.
4. **Inclusivity:** Most content types support captions, transcripts, alt text and keyboard navigation; chunking and multiple representations help diverse learners engage and succeed.

Where can I find out more?

[H5P - MoodleDocs](#)

Vevox

What is Vevox?

Vevox is the university's licensed audience-response system for live and asynchronous polling, quizzing and surveys. It integrates with Moodle and Microsoft Teams, enabling quick pulse checks, confidence ratings, and Q&A – on campus or online.

How does it support effective course design?

1. **Activity planning and engagement:** Use polls, word clouds, and moderated Q&A to activate prior knowledge, surface misconceptions, and maintain momentum during lectures or seminars.
2. **Formative assessment:** Run low-stakes quizzes with immediate feedback; collect muddiest-point or exit-ticket responses to inform next steps and spacing of practice.
3. **Social learning, discussion and collaboration:** Display aggregated responses to spark debate (“why did 42% choose B?”), then move to small-group justification and whole-class debrief.
4. **Inclusivity:** Anonymous participation lowers barriers for quieter students; mobile-first access aids commuter and remote learners; captioned brief prompts can scaffold understanding.

Where can I find out more?

[Generate quizzes, polls and surveys using AI](#)

[Boost student engagement with Vevox](#)

LinkedIn Learning

What is LinkedIn Learning?

LinkedIn Learning is a large library of high-quality video courses, learning paths and practice resources mapped to software skills, professional competencies and foundational concepts. It can be embedded into Moodle and aligned to module outcomes.

How does it support effective course design?

1. **Activity planning and engagement:** “Flip” core skill acquisition (e.g., data analysis primers) to pre-class playlists so contact time targets application, analysis and creation.
2. **Formative assessment:** Use built-in chapter quizzes and reflections; couple with Moodle checks to verify completion and understanding before advanced tasks.
3. **Social learning, discussion and collaboration:** Set shared watch-lists and prompt discussion (“Compare two techniques demonstrated in the video and justify your choice in pairs”).
4. **Inclusivity:** Many courses include transcripts, captions, playback speed control, and multiple languages; gives flexible routes to prerequisite knowledge for diverse cohorts.

Where can I find out more?

[Embed LinkedIn Learning into your teaching](#)

Immersive technologies (immersive rooms/VR/AR/MR)

What are immersive technologies?

Spaces and devices (e.g., immersive rooms, head-mounted VR, tablet/phone-based AR, mixed-reality) that place learners in simulated or augmented environments for experiential learning – ideal for spatial, procedural, and scenario-based activities.

How do they support effective course design?

1. **Activity planning and engagement:** Design authentic scenarios (labs, studios, clinics, field sites) where students practise decisions, observe consequences, and reflect-high presence, high motivation.
2. **Formative assessment:** Use in-experience checkpoints (decision nodes, performance metrics) and debrief rubrics; combine with Moodle reflections/e-portfolios for feedback and iteration.
3. **Social learning, discussion and collaboration:** Facilitate co-located or networked teamwork (e.g., multi-user simulations, role-play in an immersive room) with structured debriefs to make thinking visible.
4. **Inclusivity:** Provide non-headset alternatives (desktop views, 360° videos), offer comfort settings and clear safety guidance; pair tech-heavy tasks with scaffolded resources in Moodle to ensure equitable access.

Where can I find out more?

[Digital Experience and Engagement \(DE&E\) | Digital Services | University of Wales Trinity Saint David](#)

Delivery models

How can I achieve effective course design for different delivery models?

HyFlex

HyFlex combines simultaneous in-room and online participation, allowing students choice and flexibility. Good practice here requires intentional equity-designing so that both groups experience comparable opportunities to learn, interact, and receive support.

Hyflex design principles: Activities should be intentionally designed so that students participating on campus or online can achieve similar learning outcomes and engage meaningfully with peers and content (Beatty, 2019; Raes *et al.*, 2020).

Activity planning and engagement:

- Provide clear activity instructions so both in-room and remote learners can participate without disadvantage.
- Use multimedia, shared digital workspaces, and interactive tools (e.g., polls, collaborative documents) to ensure equal engagement regardless of location.
- Design flipped or pre-work resources to establish a shared foundation before synchronous sessions.

Formative assessment:

- Offer low-stakes checks that all students can complete online, regardless of where they join from.
- Use polling tools during live sessions to gather whole-cohort insights and adjust teaching in real time.
- Keep feedback channels (e.g., Moodle) centralised so remote and in-person students receive feedback consistently.

Social learning, discussion and collaboration:

- Use breakout rooms that pair on-campus and online students, or dual-mode group workspaces such as shared documents and Moodle forums.
- Make explicit efforts to moderate discussions across modes, ensuring remote students are not sidelined.
- Use cameras, microphones, and digital whiteboards so interaction is audible and visible to all participants.

Inclusivity:

- Provide equivalent alternatives where full HyFlex participation is not possible (e.g., recordings, transcript summaries).
- Ensure all instructions, slides, and resources are digitally accessible.
- Avoid privileging one group's physical presence, invite contributions verbally and via chat.

Online (Blended) Delivery

Blended learning intentionally combines asynchronous online learning with scheduled synchronous teaching (on campus or online). High-quality design ensures both modes build on one another rather than duplicating content.

Activity planning and engagement:

- Chunk content into manageable online learning sequences supported by interactive activities (e.g., H5P).
- Use synchronous sessions for higher-order activities-discussion, application, problem-solving, rather than content transmission.
- Make the connection between asynchronous (pre-work) and synchronous (live) activities explicit.

Formative assessment:

- Integrate frequent, low-stakes assessments within online components to provide immediate feedback.
- Use pre-session checks to assess completion of asynchronous work and tailor synchronous sessions accordingly.
- Provide opportunities for student reflection and self-assessment to help them monitor their own progress.

Social learning, discussion and collaboration:

- Use discussion forums to continue conversations beyond live sessions and to extend peer-to-peer support.
- Design collaborative tasks using shared digital tools to maintain a sense of community across modes.
- Use synchronous touchpoints to strengthen social presence and clarify misconceptions emerging from asynchronous tasks.

Inclusivity:

- Provide flexible access to online materials, including recordings, transcripts, and alternative formats.
- Scaffold students' digital skills and signpost where support is available.
- Consider varied home circumstances – noise, connectivity, time zones – when designing pre-work and deadlines.

Distance learning

Fully asynchronous learning places greater emphasis on clarity, structure, and opportunities for self-regulation. High-quality asynchronous design creates a cohesive learning flow despite the absence of live sessions.

Activity planning and engagement:

- Use clearly structured modules with sequential pathways (e.g., "review → practise → reflect").

- Employ rich media and interactive elements to sustain engagement in the absence of live contact.
- Provide explicit expectations regarding weekly pacing and completion time for activities.

Formative assessment:

- Increase the frequency of low-stakes checks to guide learners through the material and reduce isolation.
- Provide detailed automated and tutor feedback, supported by examples and model answers.
- Offer reflective activities to strengthen metacognition and self-monitoring.

Social learning, discussion and collaboration:

- Use asynchronous forums, peer review activities, and collaborative documents to maintain social presence.
- Provide structured prompts (e.g., scenario questions, debate topics) requiring meaningful interaction rather than “post once, reply twice” approaches.
- Schedule optional synchronous drop-ins or Q&A sessions for additional support, even if the course is predominantly asynchronous.

Inclusivity:

- Ensure all activities can be completed at different times, supporting students with varied responsibilities or schedules.
- Provide multiple means of engaging with content (readings, videos, audio, transcripts).
- Offer clear guidance on how to seek help and provide regular tutor presence (e.g., weekly announcements, forum check-ins).

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