UNIVERSAL DESIGN FOR LEARNING IN CREATIVE ARTS EDUCATION
What is Universal Design for Learning (UDL)?

UDL is a framework for designing learning that encourages tutors to address the widest possible variety of learning needs, styles, and preferences. It recognises that each of us has preferred modes of receiving and processing information and of demonstrating our knowledge and abilities.

UDL places a strong emphasis on the diversity of the students entering higher education. It focuses on individual differences to enable the design of an effective and inclusive curriculum that benefits all learners. (CAST, 2011)

Why ‘Universal’?

The term ‘Universal’ is borrowed from the architectural concept of Universal Design. This is defined by the Center for Universal Design (CUD) at North Carolina State University (1997) as “the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialised design” (CUD, 2008).

Universal Design has expanded into a much larger concept including approaches to teaching, learning and accessible curricula. The Center for Applied Special Technology (CAST) has been at the forefront of encouraging the use of technology to expand the accessibility for all regardless of any difference or impairment.

What does UDL encourage staff to do?

a) Develop flexible means of creating and providing teaching and learning materials e.g. providing content using a range of media.

b) Allow students to demonstrate their knowledge and understanding in flexible ways, e.g. oral presentation, question and answer activity, film/video, use of social media (Instagram, blog, vlog, YouTube videos).

c) Engage students using a variety of methods with the awareness that there is not one right way to teach and/or learn.
The ‘WHAT’ of learning

Representation focuses on how you present the learning session (e.g. lecture, workshop, demonstration).

Providing multiple representations of the same information ensures that learning is accessible to students with particular sensory and perceptual differences, but it is also easier to access for everyone. This makes the information easier to understand for all students.

First principle of UDL: Representation

1. Provide Multiple Means of Representation

1. Provide options for perception
   1.1 Offer ways of customizing the display of information
   1.2 Offer alternatives for auditory information
   1.3 Offer alternatives for visual information

2. Provide options for language, mathematical expressions, and symbols
   2.1 Clarify vocabulary and symbols
   2.2 Clarify syntax and structure
   2.3 Support decoding of text, mathematical notation, and symbols
   2.4 Promote understanding across languages
   2.5 Illustrate through multiple media

3. Provide options for comprehension
   3.1 Activate or supply background knowledge
   3.2 Highlight patterns, critical features, big ideas, and relationships
   3.3 Guide information processing, visualization, and manipulation
   3.4 Maximize transfer and generalization

Resourceful, knowledgeable learners
**Ask yourself:** How will you convey your information?

Be clear in what you want your students to learn. Once you have done so, decide how best to convey the information so that it meets the needs of all your students.

**Examples of Representation**

- Pre-recording technical workshop sessions or lectures.
- Providing exemplars of art/design work to give students clear expectations.
- Using digital content such as lecture/workshop hand-outs and handbooks.
Second principle of UDL: Expression

The ‘HOW’ of learning

Students differ in the ways they manage their learning and express what they have learned. For example, students with cerebral palsy, executive disorders, or language barriers might approach learning in very different ways. Some may be able to express themselves best in a written form but would struggle with speech. The learning experience should be designed and adjust so that students can express their knowledge effectively through multiple forms of action.

II. Provide Multiple Means of Action and Expression

4: Provide options for physical action
   4.1 Vary the methods for response and navigation
   4.2 Optimize access to tools and assistive technologies

5: Provide options for expression and communication
   5.1 Use multiple media for communication
   5.2 Use multiple tools for construction and composition
   5.3 Build fluencies with graduated levels of support for practice and performance

6: Provide options for executive functions
   6.1 Guide appropriate goal-setting
   6.2 Support planning and strategy development
   6.3 Facilitate managing information and resources
   6.4 Enhance capacity for monitoring progress

Strategic, goal-directed learners
**Ask yourself: How will your students show what they know?**

Expressing what we know requires a great deal of strategic and organisational ability. This is another area in which students differ, so providing all students with multiple options for action and expression is essential. This is about making clear what you want your students to know and why.

**Example of Expression**

- Monitoring progress through frequent formative feedback.
- Providing timely and targeted feedback.
- Offering multiple options for students to evidence learning in assessment tasks e.g. films, documentaries, voice recording, comic/illustration book, written work.
Third principle of UDL: Engagement

The ‘WHY’ of learning

There are many reasons that influence students’ approaches to learning. This include culture, personal interest, relevance, subjectivity and background knowledge as well as neurological factors.

There is no one-way of engagement that will be favourable for all students in an art and design context so providing multiple options to engage and motivate students is essential.

### III. Provide Multiple Means of Engagement

#### 7: Provide options for recruiting interest
- 7.1 Optimize individual choice and autonomy
- 7.2 Optimize relevance, value, and authenticity
- 7.3 Minimize threats and distractions

#### 8: Provide options for sustaining effort and persistence
- 8.1 Heighten salience of goals and objectives
- 8.2 Vary demands and resources to optimize challenge
- 8.3 Foster collaboration and community
- 8.4 Increase mastery-oriented feedback

#### 9: Provide options for self-regulation
- 9.1 Promote expectations and beliefs that optimize motivation
- 9.2 Facilitate personal coping skills and strategies
- 9.3 Develop self-assessment and reflection

**Purposeful, motivated learners**
Ask yourself: How will you keep your students’ interest in your lesson/topic?

While some students are highly engaged by new things, others might feel intimidated by the prospects of a new learning environment and social situation. Some students prefer to work alone while others strive in peer groups.

If students are not engaged their ability to absorb meaningful information will be limited. The principle of engagement encourages you to build a relationship with your students by means of having a ‘presence’ that allows you to become a real person to them.

Examples of Engagement

- Invite students to participate in designing a learning activity.
- Encourage students to talk and share lived experiences that could enhance understanding of project briefs.
- Foster peer support/collaboration e.g. notetaking
## Representation: practical strategies

<table>
<thead>
<tr>
<th>Support Perception</th>
<th>Teaching/Support Strategies (Inclusive support model)</th>
<th>Disability challenges &amp; in-class LSA (Deficit model)</th>
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</table>
| **Options for Visual support** | - Provide usual aids, large print, films, graphics, posters etc.  
- Allow students to record lessons using their own devices (e.g. smartphones) for reviewing at a later time.  
- Provide other formats for printed text e.g. audio text, video/films. | - Note taking.  
- Record session in various formats e.g. text/visually.  
- Face to face conversation with student to explain activity/brief/project. |
| **Options for Verbal/Audio support** | - Allow/encourage students to discuss content with peers/tutors.  
- Read aloud any notes put on screen. Use audio to enable on-demand review  
- Provide digital ‘lesson notes’ for use with text to speech software. | - Note take  
- Provide notes digitally e.g. human voice recording.  
- Face to face conversations with student to explain activity/brief/project. |
| **Options for Kinaesthetic support** | - Use interactive activities  
- Allow students to move around the room to gather information in different areas.  
- Design activities that are active and promote participation. | LSA will support with organising studio space & materials.  
LSA will support physical accessibility within the learning environment. |
| **Options to support Language** | - Clarify new terminology  
- Avoid idioms, slangs, jargon  
- Provide illustrations/graphics to support understanding of concepts and instructions.  
- Provide digital copy of text (e-books) and audio (e.g. human read recording) when possible.  
- Embed visuals alongside text to support students’ understanding. | LSA will support with explanation and clarification of new terminology, word meaning, text comprehension. |
In this case study, the tutor (Thomas) uses ‘purposeful session planning’ (UDL-Representation). When pre-planning a learning activity, Thomas thinks about ways to use written text/audio, visuals/videos and graphics when he presents information. During the session, he engages students in kinaesthetic activities and provides multiple ways to activate background knowledge, helping students linking new knowledge to existing knowledge.

BA Illustration tutor Thomas uses Session Plan templates as part of his teaching practice to detail the aims and learning outcomes (LOs) he expects his students to meet. His diverse teaching approach aims to support and improve learning while increasing accessibility. Thomas purposefully pre-plans and aligns his LOs to a wide range of learning activities that he has developed and reflected on in his journal.

These are key teaching strategies for Thomas. They help him manage the process of content delivery and engage students through active learning, which keeps their motivation high.

During a seminar on Dystopia, students were provided with opportunities to develop a range of skills. Students were able to discuss new topics, argue logically, debate with peers, listen to different points of view, offer considered criticism, and express their own opinions using evidence to support them.
The seminar was designed as a springboard for further independent study. Two weeks before the seminar, students were emailed key texts in both *written* and *audio* formats giving them time to familiarise themselves with new concepts. This decision was purposely made by Thomas as he was conscious that not everyone benefits from reading written text.

During the seminar, Thomas made good use of different resources including YouTube film clips relevant to sections of the key texts given. Students were then able to articulate their own understanding of key concepts from personal experiences to wider perceptions of global issues. The seminar promoted a student-centred, collaborative approach to teaching and learning.

The multimodal approach to representing content prepared students to work in pairs. The activity was intentionally designed to engage students from different cultural backgrounds with the hope of encouraging students to share lived experiences. This exercise was valuable because it reinforces interpersonal skills to do with communication and cooperation. Using the diverse and rich resource of students’ experiences and background knowledge helped foster a shared *knowledge community* in which students with or without prior knowledge and experiences could still participate equally.

Using mind mapping, Thomas encouraged students to visualise what they were thinking, helping develop executive function application skills in the process. This learning strategy supported students to organise information, make connections, recall and present ideas to others and enhance creative problem solving. Students gathered information and structured it for evaluation, giving them a deeper understanding of the subject through group discussion. By enabling students to respond to their surroundings and express their individuality and autonomy through group performances, Thomas provided opportunities for sharing and developing relationships between ideas and helped students learn how to assimilate and apply new knowledge and skills.
<table>
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<tr>
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<th>Teaching/Support Strategies (Inclusive support model)</th>
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<tr>
<td></td>
<td>Offer more breaks in between lectures/seminars.</td>
<td>In-class assistant will usually advocate for a</td>
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<td>Give more time for students to complete tasks or break</td>
<td>student who needs a break from a teaching</td>
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<td></td>
<td>them up into chunks.</td>
<td>session by approaching a tutor on behalf of a</td>
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<td></td>
<td>Extend deadlines appropriately.</td>
<td>student.</td>
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<td></td>
<td>Provide access to a variety of mediums for students</td>
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<td></td>
<td>to demonstrate what they have understood (Learning</td>
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<td></td>
<td>outcomes).</td>
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<td>Options for Expression &amp;</td>
<td>Ask students to: draw, design a chart, paint a</td>
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<td>poster, design a graphic novel, create a digital</td>
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<td>presentation (PP, Prezi).</td>
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<td>Illustrate a story, perform a narrative, create a</td>
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<td></td>
<td>timeline of events, create a video/film, design a</td>
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<td>leaflet/brochure, webpage, collage images, create a</td>
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<td></td>
<td>song, record sounds, create a talk show or podcast,</td>
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<td></td>
<td>use social media (Instagram).</td>
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<tr>
<td>Auditory</td>
<td>Ask students to: create an audio recording, create a</td>
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<tr>
<td></td>
<td>song, record/collect sounds, create a talk show,</td>
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<td></td>
<td>podcast, use social media (Instagram).</td>
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<td>Kinaesthetic</td>
<td>Ask students to: perform a story, use role play,</td>
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<td>choreograph a dance, conduct a demonstration, present</td>
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<td>a text/idea, design costumes, curate an exhibition,</td>
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<td></td>
<td>create 3d pieces.</td>
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<td>Options for executive functions</td>
<td>Support students individually to set learning goals that meet their own abilities and extend their learning, through face to face conversations. Help students understand how much time a project will take to complete by using charts / visual timetables. Encourage students to take ownership of their self-directed study time with few prompts.</td>
<td>In-class assistant would provide a one-to-one conversation with a student to make sure he/she had understood the task/learning outcome. In-class assistant would provide support with time management in the form of a to-do list, diary reminders, emails, texts.</td>
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<td>Provide planner/to do lists for students to keep track of projects’ deadlines, assessments and tutorials. Provide learning group opportunities with project planning tools to keep track of who is doing what. Encourage your students to make use of visual/digital diary as a tool to support students’ thinking and managing of information. (smartphones) Encourage students to use concept maps and apps to organise work, to make use of notifications and reminders to keep them on track for monitoring own progress.</td>
<td>In-class assistant usually offer ‘informal’ tutorials to students after a lecture, seminar to discuss notes taken (by the LSA). The conversations usually involve the LSA asking the student what he/she understood and what needs to happen next in terms of an action plan.</td>
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## Engagement: practical strategies

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<tr>
<td><strong>Options for recruiting interest</strong></td>
<td>Provide students with the opportunity to make their own choices relating to the type of participation in class, the context and materials use for developing skills</td>
<td>Some students will prefer to work alone. LSA usually is the first point of contact when student needs reassurance and/or clarification.</td>
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<td>Allow students to take part in the design of learning activities and academic tasks.</td>
<td>LSAs will note take and/or encourage student to participate in any group discussion.</td>
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<td>Involve all students when possible in setting their own personal and academic goals.</td>
<td>LSA/LM will provide face-to-face sessions to talk to students about their own expectations and goals.</td>
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<td><strong>Optimise relevance</strong></td>
<td>Use reading material to connect students with contemporary sources, using the Web where possible. Design teaching sessions that are culturally relevant and contextualised to the 21st-century learner.</td>
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<td></td>
<td>Use Google Maps to track key places, directions of historical events; view photography to current events’ photography, online archives of their birth town. Even a very small personal connection can make a learner more engage with the learning material.</td>
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<td>Design tasks that promote active participation, hands-on approaches and reflect a purpose that is clear to all students.</td>
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<td><strong>Sustaining effort and persistence</strong></td>
<td>Provide reminders or prompt students to engage with learning goals, assessment requirements, outcomes. Display them in different ways. Engage students in assessment discussions and include clear explanation of assessment criteria. Foster opportunities for one-to-one peer support. Create communities of learners by engaging in common interests or activities. Provide feedback that is timely, frequent, specific and positive.</td>
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<tr>
<td><strong>Options for Self-regulation</strong></td>
<td>Provide students with plenty information, guides, checklists to help them stay motivated and positive that they can meet their LOs. Provide activities that encourage self-reflection, peer-to-peer feedback to identify personal goals and how to reach them. Provide scaffolds and feedback for managing frustration and anxiety. Provide appropriate feedback for seeking external emotional support.</td>
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<tr>
<td><strong>Develop self-assessment and reflection</strong></td>
<td>Provide peer activities during which learners get feedback that supports progress. For many students, recognising that they are making progress in their learning is highly motivating. Offer different self-assessment techniques to help students learn how to monitor and recognise their own progress.</td>
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Catharine Slade-Brooking designed a learning style workshop to help students recognise that we all learn in different ways. She uses this teaching strategy to help students develop awareness of the ways in which they learn, enabling them to gain a better understanding of their unique ways of doing things.

Catharine’s aim is to encourage students to appreciate their different approaches to learning, and help them acknowledge their strengths as well as their weaknesses. The activity involves students discussing the idea of ‘All being different’ to embrace the notion that every creative team is composed of different types of people. Students are introduced to learning styles using the VARK and Honey & Mumford questionnaires where they explore their preferred ways to learning through a series of group activities.

Catharine does not assume that learning styles are necessarily fixed personality traits. The emphasis of her workshop activities shifts from accommodating learning styles to encouraging an inclusive approach to learning and an **explicit awareness** of the
multiple approaches available to students to engage with their own learning.

There is a clear benefit in enabling students to reflect on how they learn. **Metacognition** is a process where students are encouraged to think and reflect on how they learn, and is an advantage for applying learning styles in educational activities. Supporting students to understand the ways they learn best can enable them to recognise when they are struggling and when to ask for help.

Encouraging students to consider how they learn is also valuable as it helps them become critical thinkers. Thinking critically means asking questions instead of simply accepting facts at face value. During Catherine’s learning styles workshop, students are encouraged to look for evidence to support their choices. They engage in active peer group discussions which leads to increased conceptual understanding, as they critically analyse their preferred ways of learning before drawing any conclusions about the subject.

The interactive workshop is designed to *activate prior knowledge* and *stimulate interest* by asking students to discuss the findings from the questionnaires and mind-mapping and offer peer feedback. They then present their findings in groups to the rest of the class for further discussion. Students generate more ideas by collaborating and communicating within the groups, sharing their thoughts and providing timely and specific feedback to each other. This cooperative activity is motivating to students who learn best through stimulation and movement.

As part of the workshop, students create a personal design manifesto and a reflective evaluation to use at the end of each unit. They reflect on what their learning style means for their creative identity, the strengths that it gives them, and how enables them to personalise their learning.
Create a welcoming classroom environment by introducing yourself, establishing good communication with your students and making yourself as approachable as possible. Consider having the classroom doors open to support access to the learning space. This will allow late-comers to feel less anxious about entering a room, but also provide accessibility to students in wheelchairs or who have mobility issues.

Set clear expectations by listing and explaining learning outcomes, assessment requirements and assessment criteria. Offer workshops/sessions where key words and terminology are explained to all learners (international and home students). Make sure everyone has a clear understanding of the alignment between assessment, learning outcomes and assessment criteria.

Provide course documents that meet the needs of all learners i.e. those with dyslexia, international students, those from diverse backgrounds.
**Upload learning material at least 48 hours before a session**
e.g. Powerpoint presentations, films/videos. Powerpoint slides should have notes explaining each slide. This will increase students’ engagement with the session and reduce the need for note-taking and distractions.

**Use a range of teaching methods** including visual and interactive approaches e.g. a combination of lectures, seminars, practical workshops and demonstrations. Use questioning techniques to encourage an active classroom environment.

**Make use of a wide range of content** e.g. find suggested reading material that spans a range of cultures. Use examples of artists and designers from various ethnic backgrounds and those with any of the nine characteristics of the Equality Act 2010.