C. Unit Plan

Year 12 Industrial - MULTIMEDIA

Course **Multimedia**	**Teaching Term:** **TERM 1 (Term 4)**
Focus Area: **Major Project - Design Management & Communication**	**Unit Length:** **6 weeks**

Learning Outcomes

H3.1 demonstrates skills in sketching, producing and interpreting drawings
H3.2 selects and applies appropriate research and problem solving skills
H3.3 applies and justifies design principles effectively through the production of a Major Project
H4.2 explores the need to outsource appropriate expertise where necessary to complement personal practical skills
H4.3 critically applies knowledge and skills related to properties and characteristics of materials/components
H5.1 selects and uses communication and information processing skills
H5.2 examines and applies appropriate documentation techniques to project management
H6.1 evaluates the characteristics of quality manufactured products
H6.2 applies the principles of quality and quality control

Assessment task Summative - Podcast *of progress made on HSC Major Project.* Students are to create a 5 minute podcast covering all progress that has been made on their Major project in the last 8 weeks. Students will upload podcast to youtube and submit link to classroom.	**Due Date** Week 8 of Term 1, Year 12.

Week	Students learn about	Students learn to	Integrated Teaching and Learning Activities & Learning Goals	Teaching & Learning (Numeracy, Literacy & ICT)	Catering for Diverse needs	Resources
1	- application of design principles in the production of the Major Project: – research – design development – sketching and idea generation – quality and ongoing evaluation – prototyping, modelling and testing – production and working drawings - ethical use - ease of copying, manipulation and incorporating	- consider legal and ethical issues in the development of multimedia presentations - use computers, associated materials and accessories safely and responsibly - explain and justify decisions made during the designing/modifying and planning stages of the Major Project - refine skills in interpreting and creating drawings relevant to the Major Project	Ss explore the websites provided in the resources section to create their own understandings of Copyright, Intellectual Property. Ss will research the differences of ethical and legal in the appropriate usage of multimedia materials. Using the posters around the room regarding possible risks of long term use of computers. Ss will discover the safe use of computers Ss will familiarise themselves with the proper terms involving using computer equipment safely. Ss are to pay close attention to issues such as eye stain , neck and back injuries, excessive use and Repetitive Strain Injury Ss are made aware of the Podcast Assessment Task due in week 8 which is to document the *Major Project progress* due week 8. Ss have the chance to ask questions and clarify any concerns.	**Literacy** UnT11- Ss critically evaluate visual elements in multimedia texts. LiS8 - identifies and paraphrases key points of a speaker's arguments UnT9 - summarises the text identifying key details SpG13 - uses spelling rules and generalisations, word origins and visual memory to spell unfamiliar words (ACARA, 2020) **ICT** Recognise intellectual	**The Use of Padlet** **Visual Learners:** Allows for visual information layout in different colours and fonts helping them emphasise key points and categorising information. **Auditory Learners:** Due to users being able to upload audio files, it allows Ss to listen to spoken explanations and instructions. **Kinaesthetic Learners:** Padlet allows Ss to physically interact with the screen through drag and drop, and resizing images. **Read/ Write Learners:**	https://padlet.com/ http://amow.boardofstudies.nsw.edu.au/ http://www.ipaustralia.gov.au/ http://www.dbcde.gov.au http://www.copyright.org Copyright in aus doc http://www.griffith.edu.ausafe_use_computer

	multimedia objects - copyrights and multimedia (Board of Studies NSW, 2008)	- author a multimedia Major Project - prepare all necessary sketches and working drawings required for the production of the Major Project (Board of Studies NSW, 2008)	Ss are to begin work on their Major Project. Ss are required to prepare an A3 portfolio which will include - Statement of Intent (specify design direction), - timeline (Gantt chart). These are live documents so are still in draft stages.	property Level 6 Define and plan information searches Level 6 Generate ideas, plans and processes Level 6 (ACARA, n.d.)	Allows Ss to write and engage with written information and the option to customise fonts to their preference to enhance readability. **Verbal Learners:** Verbal learners can benefit from listening to spoken explanations and presentations related to the content being shared on Padlet. This auditory input can enhance their understanding and retention of information.	Assessment Criteria

Annotations

Adjustments

Differentiated resources

- Below Standard: Provide simplified definitions of Copyright, Intellectual Property, and ethical/legal use with posters.
- Above Standard: Offer additional resources such academic papers discussing copyright law for deeper understanding.

Scaffolding

- Below Standard: Break down the task of documenting definitions on Padlet into smaller steps with guided templates or fill in the blank prompts.
- Above Standard: Offer optional advanced challenges like analysing real world scenarios such as recent copyright infringement cases.

Adjusted assessment criteria

- Below Standard: Modify expectations for the podcast by focusing on the clarity of ideas rather than complex design elements.

- Above Standard: Ss can create multimedia presentations or interactive websites which encourages creativity in expression.

Varied support options

- Below Standard: Offer peer tutoring sessions or additional video tutorials for ergonomics and eye strain prevention for Ss struggling with computer use conventions.
- Above Standard: Ss will be provided with access to online forums to dive deeper into computer safety topics.

Pedagogies

Constructivism

- Ss actively engage in constructing their understanding of intellectual property, copyright, and appropriate use of multimedia elements.
- Emphasises active engagement and sense making rather than passive reception of information.
- Encourages collaborative learning and reflection to deepen understanding.

Integrative

- Focuses on developing critical thinking skills for analysing, evaluating, and creating media messages.
- Empowers Ss to critically evaluate the credibility and reliability of multimedia materials.
- Provides opportunities for Ss to create their own multimedia presentations, applying media literacy skills in practical contexts.

Assessment

Formative Assessment

- Padlet
- Observing discussions during the review of safe computer use posters.

Diagnostic Assessment

- Assessing understanding of technical language conventions during computer safety discussions.
- Evaluating comprehension of project requirements and criteria.

Informal Assessment

- Review initial drafts of A3 portfolios and Statements of Intent.

Week	**Students learn about**	**Students learn to**	**Integrated Teaching and Learning Activities & Learning Goals**	**Teaching & Learning (Numeracy, Literacy & ICT)**	**Catering for Diverse needs**	**Resources**

2	– selection of appropriate materials, processes and resources – development of time and finance plans (Board of Studies NSW, 2008)	- Investigate and use a range of multimedia components in the development and publishing of the Major Project - apply principles of design in the planning and production of the Major Project - competently plan all processes and stages required to complete the Major Project - produce storyboards to plan presentations and the Major Project	T will individually discuss the Statement of Intent with every Ss. Ss will then discuss their statements with peers, facilitating Assessment for Learning. Ss are to review the Multimedia design process. Plicker to revisit what Ss require in folio: - Statement of Intent, - Brief - Investigation - Research - Idea Creation (storyboarding) - development - testing - creating the structure - functional aspects - place holders - Alpha and Beta testing - integration of media - Evaluations - Publication and distribution. (Board of Studies NSW, 2008) Ss will begin sketching then annotating storyboards. T will provide feedback on Ss ideas.	**Literacy** InT1 - shares simple ideas with peers CrT10 - uses discipline specific terminology to provide accurate and explicit information **Numeracy** MeT4 - constructs timelines using a time scale. (ACARA, 2020) **ICT** Generate ideas, plans and processes Level 6 Generate solutions to challenges and learning area tasks Level 6 Collaborate, share and exchange Level 6 (ACARA, n.d.)	**Storyboarding** **Visual Learners:** Allows for a visibly structured framework to organise ideas visually and allows them to use their creative ability. **Auditory learners:** Allows Ss to focus on developing a clear and engaging storyline with attention to dialogue, narration, and sound effects. **Kinaesthetic Learners:** Involves physically sketching or arranging visual elements onto a template allowing them to engage directly with the creation process **Read/Write Learners:** Includes annotations which provide read/write learners with written information	Storyboard booklets Past Ss portfolios https://podcasters.spotify.com/resources/learn/how-to/start-a-podcast Plicker on HSC Folio

		(Board of Studies NSW, 2008)	Ss will partake in individual research to being forming timelines of project development (Production timelines and detailed timelines) T to review and provide feedback to Ss. Ss will engage in storyboard creation, followed by teacher feedback and discussion. Research for project development, including detailed timelines and production schedules, should be completed by now. The teacher will review and provide feedback to students. Ss will research the design principles that are involved in designing products. In a table, Ss will document a review of a minimum of 4 existing products. There will be a class discussion about the types of software and their uses within multimedia Ss will participate in a discussion to clarify the targeted expectations for their HSC project. Ss will have the opportunity to view some past Ss portfolios. T will lead a workshop on Podcasting (video in resources) and revisit of assessment criteria.		about the content and context of each visual element, allowing them to process and understand the storyboard more effectively. **Verbal Learners** Involves the creation of a script, which involves writing dialogue, narration, and descriptions of audio elements. Verbal learners can leverage their strengths in written and verbal communication to develop engaging and effective scripts for multimedia content.	
Annotations						

Adjustments

Individualised Statement of Intent check ins

- Below Standard: Visual aids or simplified templates for Ss needing extra support in formulating their statements.
- Above Standard: Advanced prompts such as additional readings for Ss to develop more intricate project visions.

Differentiated Assessment Tools

- Below Standard: Simplified rubrics or checklist of essential components.
- Above Standard: Advanced assessment options such as self assessment reflections or peer evaluations for Ss capable of higher level analysis.

Varied Research Opportunities

- Below Standard: Guided research resources and list of recommended resources for Ss to gather information for their projects.
- Above Standard: Encourage independent research projects or advanced research tasks for high achieving Ss, such as investigating emerging trends or innovative techniques in multimedia design.

Flexible Instructional Methods

- Below Standard: Small group discussions or one on one guidance as Instructional support for Ss struggling with understanding design principles or software usage.
- Above Standard: Invite professionals from the multimedia industry to discuss cutting edge software tools and techniques.

Pedagogies

Project Based Learning (PBL)

- Engages Ss in authentic, real world projects.
- Facilitates collaboration and peer learning through sharing statements of intent and project development.
- Provides hands on, inquiry based learning activities throughout the multimedia design process.
- Promotes deeper understanding of multimedia concepts by applying them in meaningful contexts.

Assessment for Learning (AFL)

- Utilises assessment to support and enhance learning throughout the instructional process.
- Provides essential reminders and detailed timelines to guide Ss project development.
- Offers ongoing feedback and discussions to monitor student progress and address misconceptions.
- Uses tools like Plicker to assess student needs and provide timely feedback.

Assessment

Formative Assessment

- Plicker to check Ss understandings of requirements for their folio.

Informal Assessment

- Review and feedback on detailed project timelines to assess planning and time management skills.
- Sketching and annotating storyboards with T feedback.
- Discussion of skills, expectations, and software usage.

Peer Assessment

- Peer sharing of statements of intent and feedback.
- Collaborate in discussing podcasting skills and ongoing evaluations.

Self Assessment

- Reflect on progress and understanding at different project stages.
- Evaluate own work against provided assessment criteria.
- Self assess skills and understanding in podcasting and other tasks

Adjustments

Individualised Internet Search Strategies

- Below Standard: Structured guidance on basic search techniques, such as using simple keywords and refining search queries.
- Above Standard: Introduce advanced search operators like Boolean operators for Ss to refine searches further.

Diverse Project Help Options

- Below Standard: Templates or checklist for Ss to include troubleshooting tips and frequently asked questions in their project help documentation.
- Above Standard: Ss may explore by creating screencasts demonstrating specific project features.

Varied Multimedia Tools for Concept Reinforcement

- Below Standard: Structured tutorials using Adobe Animate to reinforce differences between vector and bitmap graphics.
- Above Standard: Challenge Ss with advanced exploration of Adobe Animate for creating complex animations or interactive projects.

Week	**Students learn about**	**Students learn to**	**Integrated Teaching and Learning Activities & Learning Goals**	**Teaching & Learning (Numeracy, Literacy & ICT)**	**Catering for Diverse needs**	**Resources**

3	- appropriate software relevant to the Major Project in the areas of: – publishing – video creation/ capture/editing – sound creation/ capture/editing – animation creation/ capture/editing – image creation/ capture/editing – text creation/ capture/editing – 2D/3D drawing • documentation – online help and manuals – user documentation *Text* • fonts:	- produce multimedia elements, identify scope of authoring software, produce and evaluate prototypes - solve problems through accessing and using online help and manuals (Board of Studies NSW, 2008)	To gain better knowledge of how to create filtered search strings, Ss are to read at the Help sections of Bing and Google. Ss should create HELP pages for their projects either through a dedicated website or via a link in their folio. Ss are to join a quizlet to check their understanding of what is needed in HELP documents. Adobe Animate will be utilised to visually debate the difference between Bitmap Graphics and Vector Graphics. Ss are to discuss their findings and appropriate uses of both. T will lead an introduction into Copyright and ethical use issues within multimedia. Ss will select a random graphic to save from Adobe Photoshop in various formats including BMP, GIF, TIFF, PNG, and JPEG. Ss are to maintain the same pixel size and resolution and examine each file, making observations in google docs on the graphic quality. Using Finder, Ss will locate the graphics file and document the file size, pixel size, print size, colour depth, resolution and screen size in the	**Numeracy** IRD2 - displays and describes one variable data in lists or tables IRD3 - collects, records and displays one variable data in a variety of ways such as tables, charts, plots and graphs using the appropriate technology. **Literacy** LiS7 - selects appropriate listening strategies for planned and unplanned situations UnT5 - draws obvious inferences by integrating print, visual and audio aspects of simple texts HwK7 - uses a range of digital applications to compose and edit (ACARA, 2020)	**Adobe Animate** **Visual Learners** Its panels, menus, and tools are designed to be easily understood and navigated by visual learners. The layout of the workspace allows users to see their designs and animations in real time as they work, which can aid comprehension and learning. **Kinaesthetic Learners** Due to it offering such a variety of drawing and design tools for creating characters, backgrounds, and other visual elements. Kinesthetic learners can explore these tools by physically drawing with a tablet or stylus, allowing them to translate their movements into digital artwork directly.	Google Quizlet on HELP documentation Adobe Animate Adobe Photoshop Google Docs Finder on Mac

	– serif, sans serif, decorative • formatting: – bold, italics, underline, alignment, indents, bullets, numbers, size, colour, stroke and fill, headings, subheadings, formatting paragraphs and documents pagination (Board of Studies NSW, 2008)		doc. T to lead discussion on the relationship between these factors.	**ICT** Define and plan information searches Level 6 Select and evaluate data and information Level 6 (ACARA, n.d.)	**Auditory learners** These Ss will benefit from incorporating sound effects, narration, or background music into their animations to reinforce learning concepts. **Verbal Learners,** It allows users to create and manipulate text directly within their animations. Verbal learners can benefit from this feature by incorporating textual elements such as titles, subtitles, captions, and dialogue directly into their animations. **Read/Write Learners** These Ss often benefit from visual aids such as bold, italic, underline, and different font styles. This software supports text formatting, enabling users to emphasise specific	

					words or phrases to aid with comprehension.	

Annotations

Pedagogies

Inquiry Based Learning (IBL)

- Encourages active student engagement and critical thinking skills.
- Guides Ss to read help documentation at Google and Yahoo for better Internet searching.
- Promotes self directed inquiry and problem solving.
- Ss create help documentation for their major project, fostering ownership of learning and peer support.

Experiential Learning

- Focuses on hands on, real world experiences.
- Uses Adobe Animate to demonstrate differences between vector and bit mapped graphics.
- Provides tangible, interactive learning experiences.
- Introduces ethical use and copyright issues through practical application in Adobe Photoshop.
- Develops critical thinking skills and understanding of multimedia production and ethical considerations.

Assessment

Informal Assessment

- Observing application of search strategies learned from Google and Yahoo Help.

Formative

- Quizlet

Self Assessment

- Self assessing understanding and application of vector vs bitmap graphics.

Adjustments

Individualised Internet Search Strategies

- Below Standard: Structured guidance on basic search techniques, such as using simple keywords and refining search queries.

- Above Standard: Introduce advanced search operators like Boolean operators for Ss to refine searches further.

Diverse Project Help Options

- Below Standard: Templates or checklist for Ss to include troubleshooting tips and frequently asked questions in their project help documentation.
- Above Standard: Ss may explore by creating screencasts demonstrating specific project features.

Varied Multimedia Tools

- Below Standard: Structured tutorials using Adobe Animate to reinforce differences between vector and bitmap graphics.
- Above Standard: Challenge Ss with advanced exploration of Adobe Animate for creating complex animations or interactive projects.

Week	**Students learn about**	**Students learn to**	**Integrated Teaching and Learning Activities & Learning Goals**	**Teaching & Learning (Numeracy, Literacy & ICT)**	**Catering for Diverse needs**	**Resources**
4	*Graphics* • graphic images: vector, bitmap • resolution: image size, colour depth, binary digits (bits), eg 8-bit, 16-bit, 24-bit • file size: in relation to screen size and colour depth • file formats: TIFF, BMP, PCX/PICT, JPEG, GIF, PNG	- investigate and competently use a range of suitable software in the creation, editing and publishing of the Major Project - apply a wide range of industry terminology, techniques and processes - utilise the features of a	T demonstration of Blender T will inform Ss about Clip Art libraries and Adobe's collection of copyright free stock images, as well as the risks of copyright infringement associated with using images sourced from the internet. To grasp the printing process, Ss will scan a photo and an image from a magazine at a high resolution. Ss are then to layer the two images on top of each other using blending and merging techniques. Ss can utilise auto correct tools and filters to increase the aesthetics of the final image.	**Numeracy** PrT6 - uses ratio and scale factors to enlarge or reduce the size of objects **Literacy** InT3 - asks relevant questions for clarification or to find out others' ideas UnT5 - uses visual and auditory cues to build meaning.	**Blender** **Visual Learner** Learners can easily navigate through different panels, menus, and options using icons, colour cues, and graphical representations. **Auditory Learner** This software offers audio feedback and cues to be provided on the visual feedback helping these Ss learn through multiple	www.blender.org https://www.adobe.com/legal/permissions.html Magazines Photos Scanner USB/ Hard drive

	• importing images: clip art, screen capture, scanning – graphics tablet – cameras - still - video – image libraries – stock photographs • object layering: text, other images, • image enhancements: – filters, special effects, anti-aliasing, – image manipulation: – stretch, skew, – colour adjustment (Board of Studies NSW, 2008)	range of storage devices - obtain, modify and use a range of pre-existing components - obtain, create and modify images, sound and text - prepare documentation to support the development of the Major Project - compose camera shots and operate still and video cameras (Board of Studies NSW, 2008)	Ss may overlay bitmap text onto the image to observe the effect of anti aliasing. Ss may play around with the image by using colour adjustment, skew and stretch tools. Ss will learn the importance of backing up their work by creating copies on the server in their personal devices, USB or portable hard drives.	(ACARA, 2020) **ICT** Manage digital data Level 6 Understand computer mediated communications Level 5 (ACARA, n.d.)	sensory channels. **Kinaesthetic Learner** As Blender is a 3D space, its hands-on approach provides kinesthetic learners with the opportunity to manipulate objects, change settings, and see immediate visual feedback. **Verbal Learners** Through the demonstration of how to use Blender, verbal learners can listen to the step by step process of using this software to then apply it to their own learning. **Read/ Write Learners** Blender has extensive documentation in written format about guides and tutorials which provides these Ss the opportunity to use their strengths to enhance their learning.	

Annotations

Pedagogies

Constructivist Learning

- Emphasises active engagement and hands on experiences to construct knowledge.
- Ss actively participate in Blender demonstrations to explore 3D modelling and animation.
- T raises awareness about copyright free image collections and copyright infringement, fostering ethical decision making.
- Ss engage in experiential learning and develop a deeper understanding of multimedia tools and ethical considerations.

Authentic Learning

- Provides real world tasks mirroring professional practice in multimedia production.
- Tasks include scanning images, applying filters, and creating multimedia compositions.
- Learning to back up work and developing a PC specification for multimedia reflects real world considerations.
- Prepares Ss for future careers by immersing them in authentic learning experiences and fostering transferable competencies.

Assessment

Informal Assessment

- Observing engagement and understanding during Blender demonstration.
- Assessing comprehension of copyright issues through discussion.

Formative Assessment

- Evaluating understanding of digital/analog video and photography through practical tasks.
- Assessing image manipulation skills and creativity.
- Evaluating application of image editing techniques.

Adjustments

Demonstration and Explanation

- Below Standard: Provide step by step demonstrations with simplified language and visuals for Blender, for easier comprehension.
- Above Standard: Introduce advanced Blender features or keyboard shortcuts for Ss interested in exploring further.

Varied Instructional Resources

- Below Standard: Provide a guide for Ss to follow when sourcing images to avoid copyright infringement.
- Above Standard: Encourage independent research on copyright laws and licensing agreements for Ss interested in exploring legal implications.

Differentiated Practical Activities

- Below Standard: Structured activities for practising image manipulation in Photoshop, with broken down instructions.
- Above Standard: Challenge Ss to create original digital artworks using advanced filters and effects.

Tailored Technology Exploration

- Below Standard: Providing a video tutorial for Ss to follow when backing up their work to different locations.
- Above Standard: Discuss benefits and drawbacks of different backup methods, encouraging exploration of alternative solutions.

Week	**Students learn about**	**Students learn to**	**Integrated Teaching and Learning Activities & Learning Goals**	**Teaching & Learning (Numeracy, Literacy & ICT)**	**Catering for Diverse needs**	**Resources**
5	Audio • sound waves: analogue and digital wave patterns – volume, frequency • converting analogue to digital sound • sampling: sample rate, sample size, 8-bit, 16-bit • relationship to file size: file compression	- select from a wide range of industry techniques and apply them in the production and presentation of the Major Project - obtain, create and modify images, sound and text (Board of Studies NSW, 2008)	Investigate what sound is (website idea in resources) Ss are to use the GarageBand app and use the microphone function to record an analog sound. Draw a sound wave, discuss the clarity of the sound, sampling sound and how analog can be converted to digital. T to lead discussion of the differences between 8-bit vs 16-bit sound. Save recorded files in various sample rates, bit rates, formats (MP3, WAV) and sample sizes. Compare file sizes and sound quality. Debate the use of MIDI. (websites available in resources to help debate)	**Numeracy** PrT5 - identifies, compares, represents and solves problems involving different rates in real world contexts. **Literacy** CrT9 - includes salient visual and audio features to complement written ideas. CrT10 - creates informative texts to explain and analyse.	**Garage Band** **Visual Learners** GarageBand has a visual interface with many graphical representations of musical instruments, virtual knobs, sliders, and buttons, allowing these learners to easily grasp concepts by observing these elements. **Auditory Learner** Learners can directly interact with virtual instruments, loops, and	www.howstuffworks.com Garageband on Apple http://www.soundswell.co.uk/pages/midi_debate.htm https://www.construct.net/en/forum/construct-3/how-do

	• file formats: WAV, AIFF, MP3, WMA , MIDI *Video* • video types: analogue, digital • file size considerations: frame rate, image size, colour depth • video compression: lossy, lossless – image quality – software • video players • file types: MPEG, MP4 • video editing: – import/export – titles – special effects, eg: twisting, zooming, rotating, slow motion, time		T demonstration of video editing, special effects and exporting techniques. Ss are to capture videos on their phones and school cameras using different sizes, different frame rates, and zoom. Ss are to partake in a kahoot on common codecs such as RealMedia, Quicktime, Microsoft and H264 Ss are to play around with Leonardo.ai which is a Morphing Software. T will provide an opportunity for Ss to produce and edit a video, utilising software such as iMovie and Adobe Premiere Pro. (at home task).	InT4 - interacts to extend and elaborate ideas in a discussion. (ACARA, 2020) **ICT** Manage digital data Level 6 Select and use hardware and software Level 5 Understand ICT systems Level 5 (ACARA, n.d.)	audio tracks. This hands on approach allows them to experiment with different sounds and arrangements, catering to their need for auditory stimulation. **Kinaesthetic Learner** Provides a hands on interaction by manipulating instruments and dragging on screen control allowing them to better engage with the software. **Verbal Learner** These learners will benefit from being verbally guided through the use of this software via the T to help them gauge an understanding of what is required. **Read/ Write Learners** This software provides comprehensive tutorials and help resources that cater to verbal learners.	-i-8/midi-debate-175502 https://developer.mozilla.org/en-US/docs/Web/Media/Formats/Video_codecs https://www.codecguide.com/ https://www.youtube.com/watch?v=iMll8dR4lIE Cameras Kahoot

	lapse, distorting • synchronising sound • filters: – colour balance – brightness – contrast – blurring – Morphing (Board of Studies NSW, 2008)				These tutorials often include step by step written instructions and explanations.	

Annotations

Pedagogies

Experiential Learning

- Emphasises hands on, immersive experiences.
- Ss investigate sound concepts through website resources and record analogue sounds using GarageBand.
- Experimentation with different parameters (bit rates, sample rates, etc.) allows for practical exploration and analysis.
- Develops critical thinking skills as Ss analyse the impact of various factors on sound quality and file size.

Project Based Learning (PBL)

- Engages Ss in extended, real world projects.
- Ss create a multimedia publication incorporating graphics, text, and sounds, distributed using a USB package.
- Debate on MIDI and video editing and production using software like iMovie and Adobe Premiere Pro provide authentic, project based learning experiences.
- Develops collaboration, problem solving, and communication skills essential for multimedia production.

Assessment

Informal Assessment

- Observing engagement and understanding during sound investigation and GarageBand recording.
- Monitoring comprehension of sampling and digital conversion processes.
- Assessing participation in MIDI debate and experimentation with Leonardo.ai Morphing Software.

Formative Assessment

- Assessing creation and publication of multimedia publication with USB package.
- Evaluating understanding of video editing techniques and experimentation with different parameters.
- Evaluating outcomes of Leonardo.ai Morphing Software experimentation.
- Assessing video editing and production skills using iMovie and Adobe Premiere Pro.

Adjustments

Catered exploration of Sound Concepts

- Below Standard: Break down sound waves using interactive simulations for easier comprehension.
- Above Standard: Advanced readings on sound sampling and digital conversion processes.

Varied Audio Recording and Editing Activities

- Below Standard: Guided tasks in GarageBand for basic sound recording and editing, focusing on clarity and studio techniques.
- Above Standard: Ss may experiment with different file formats and bitrates to explore nuances in sound quality.

Differentiated Multimedia Publication Projects

- Below Standard: Scaffolds and guided instructions for creating simple multimedia publications, for Ss with limited technical skills.
- Above Standard: Opportunities for Ss to design their own multimedia publications, incorporating interactive elements or presentations.

Modified Video Editing and Production Tasks

- Below Standard: Structured tutorials for iMovie or Adobe Premiere Pro for basic video editing, focusing on fundamental techniques.
- Above Standard: Ss may experiment with special effects and transitions to enhance the visual appeal of videos.

Week	**Students learn about**	**Students learn to**	**Integrated Teaching and Learning Activities & Learning Goals**	**Teaching & Learning (Numeracy, Literacy & ICT)**	**Catering for Diverse needs**	**Resources**

6	*Animation* • 2D animation – cel animation (stop motion, claymation) – path animation – morphing and tweening – frame rates – transitions – looping • 3D animation – modelling – wire frame – rendering – morphing – warping – motion capture • virtual reality – simulators – walkthroughs – navigable scenes (Board of Studies NSW, 2008)	- evaluate the characteristics and features of a range of animation techniques - identify and discuss animation requirements, scope of 2/3D animation software (Board of Studies NSW, 2008)	Ss are to explore 2D animation. Ss are to investigate the rich history of 2D Disney animation. Ss will explore the features of Stop Motion Studio. Ss will create a path animation, using Adobe Animate which will help them gain an understanding of morphing and keyframes techniques. Ss will build on their knowledge by creating a basic camera path animation within Animate. Ss will continue with basic Camera path animations but will begin using Blender. Ss will assess the difference between the two programs and justify their preferred choice on padlet. T will conduct directed lessons on various advanced topics including simulators, Virtual Reality (VR), game engines, and sophisticated architectural software. Ss may use software like the X Plane flight website to explore online simulators.	**Numeracy** UGP3 - represents shapes and objects (animation characters) **Literacy** UnT11- Ss critically evaluate visual elements in multimedia texts UnT9 - summarises the text identifying key details InT5 - interacts to critically evaluate ideas and refine meaning (ACARA, 2020) **ICT** Understand computer mediated communications Level 6 Generate solutions to challenges and learning area tasks Level 6	**XPlane Flight Simulator** **Visual Learners** These learners will benefit from the visual demonstration of how to use this software as well as the T-directed lessons demonstrating the use of the different software. **Kinaesthetic learner** This software allows users to connect physical flight controls. They can benefit from the tactile feedback provided by these physical controls, enhancing their learning experience. **Verbal Learners** These types of learners will directly benefit from the T guided elements of this week's structure as they can listen to instructions and then ask questions to reinforce their knowledge and understanding.	http://www.stopmotionpro.com/ www.blender.org http://www.x-plane.com/about.html Adobe Animate https://padlet.com/ https://www.x-plane.com/

				(ACARA, n.d.)	**Read/Write Learner** Learners will be able to engage with the manuals within this software to enhance their understanding through reading instructions **Auditory Learner** This software offers realistic sounds, and instructional audio for auditory learners to listen to as a way of helping them develop their skills using this software.	

Annotations

Animate offers 2D animation whereas Blender offers 3D. Allowing Ss to explore both gives them

Pedagogies

Active Learning

- Engages Ss through hands on activities and inquiry based exploration.
- Researches 2D animation history and explores stop motion software.
- Uses Animate to create path based and camera path animations, applying animation principles practically.
- Encourages deeper understanding and skill development through active manipulation of elements.

Social Development Theory

- Fosters a supportive environment for learning from peers and constructing knowledge together.

- Ss compare and evaluate path based animations created in Animate and Blender, justifying their preferred choice on Padlet.
- Promotes critical thinking and peer discussion as Ss assess different tools and techniques.
- T directed lesson introduces various multimedia applications, encouraging collaboration in exploring their capabilities and potential use.

Assessment

Formative Assessment

- Assessing comprehension of key animation concepts in Adobe Animate.
- Observing student applications of creating camera path animations in Adobe Animate and Blender.
- Evaluating quality of path based animations created in Adobe Animate and Blender.
- Assessing ability to compare and justify preferred software choices using Padlet.

Informal Assessment

- Evaluating comprehension during XPlane flight simulator demonstration.

Peer Assessment

- Peer assessment of differences between animations created in Adobe Animate and Blender, with justifications.

Adjustments

Modified Investigation of 2D Animation

- Below Standard: Simplified resources such as structured worksheets for learning 2D animation basics as well as pre selected articles on the history of Disney animation .
- Above Standard: Encourage advanced exploration by providing access to case studies on innovative uses of 2D animation in modern media.

Differentiated Animation Creation Tasks

- Below Standard: Scaffolded tutorials on creating simple animations with Animate, focusing on basic techniques of keyframes and tweening.
- Above Standard: Challenge Ss to create complex path based animations with custom effects using advanced features of Animate.

Varied Technology Demonstrations

- Below Standard: Guided walkthroughs on navigating Blender's interface and creating simple camera animations.
- Above Standard: Opportunities for Ss to explore advanced animation tools in Blender and create custom camera animations.

Modified Discussion on Advanced Multimedia Tools

- Below Standard: Present examples of how VR and simulators are used in different industries.
- Above Standard: Encourage Ss to research and present case studies of innovative uses of VR or game engines in fields like architecture or aviation.