The Art of DVC

Presentation resources can be found here

Tim Armstrong: tarmstrong@shcs.school.nz

Course Outline

- Who am I
- What I teach (course design)
- Strategies I use

Break

- Activity part one
- Activity part two
- Why make a subject website?

Disclaimers

I am at the TESAC Conference to learn and to share

I acknowledge how DVC is taught can vary a lot and you are free to take or leave any of the strategies I discuss

I acknowledge I am really lucky in my current job and realise not everyone has the support I do

I recognise DVC teachers come from different backgrounds and have different strengths. I acknowledge that your strengths may differ from mine

I welcome your questions I understand there is a lot of knowledge in the room

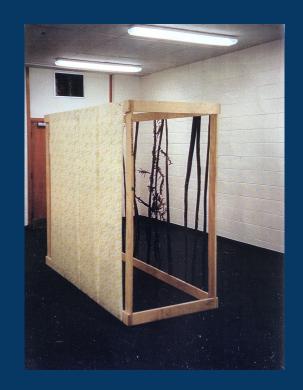
If I am telling you how to suck eggs please forgive me!

Who am I

Tim Armstrong Timeline

- Grew up in Christchurch (St Thomas of Canterbury College) 1999
- Studied Fine Arts with a Major in Sculpture at Massey in Wellington
- Teachers College at Victoria University in Wellington
- Was asked to teach Graphics in my first job (without having done it at school!) 2009
- Moved to Auckland
- Taught DVC and Art for several years, including senior Painting and Photography
- Moved to Dunedin did lots of LTR work (which included teaching L1 Digital Technology and L3 Art
 History
- Did Mindlab Post Graduate Diploma in Digital and Collaborative Learning
- Started working full time as a DVC teacher
- Was appointed Head of Technology at St Hilda's Collegiate 2022

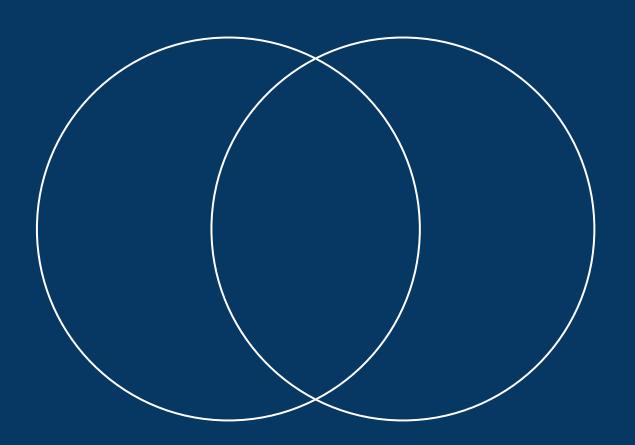
Creative Practice







Other Subjects & DVC: Venn Diagram



Art & DVC: Venn Diagram

The development of outcomes to explore the human experience



The development of outcomes to meet the functional and aesthetic needs of people

What I teach

DVC Programmes in a Nutshell

Year 9: School Bag Tag (Lots of 2d drawing and design process) - 3 hours per week for a third of a year

Year 10: Container Building Models - 4 hours per week half year

Year 11: (Not NCEA) - 4 hours per week full year

L2 Year 12: Monarch Wildlife Cruises Terminal and Public Seating

L3 Year 13: Spatial or Product + Exhibition

YEAR 10

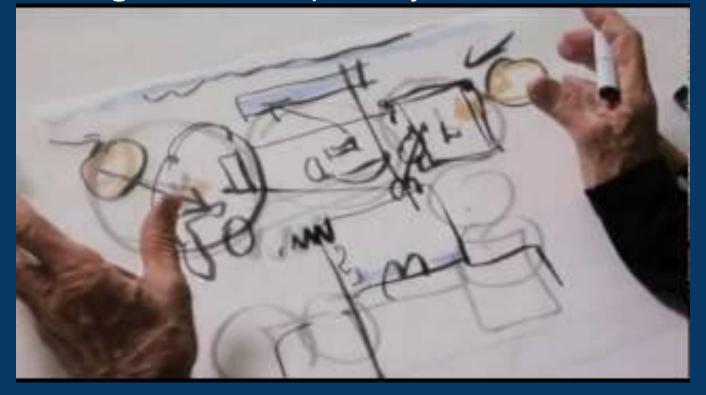
Year 10 Container Building Project

Learners;

- have choice around the purpose of their building
- develop their own specifications
- develop understanding of scale in floor plans and models
- consider exterior, interior and landscaping
- develop awareness of the importance of building sites in spatial design



Bubble Diagrams - floor plan layout and site awareness



https://www.youtube.com/watch?v=vmHoGicPQQQ&t=1s

Model Making Tools

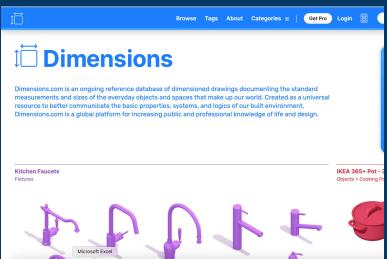


- 3mm foam board
- Cutting mats
- Measuring tapes
- Tin snips or pliers
- Sand paper
- Plain popsicle sticks
- Coloured popsicle sticks
- Match sticks
- Scale rulers
- Steel rulers
- Scissors
- Craft knives
- Hot glue guns and sticks
- Masking tape
- OHT sheets
- Glue sticks
- Coloured paper or printing
- NO PAINT!

Figuring out measurements

Dimensions.com

Sharing the (linked) dimensions.com website will help learners to discover appropriate dimensions for interior details



YEAR 11

L1 NCEA Standards Year 11 course is based on...

Pūrāku Letterbox

AS92001: Use representation techniques to visually communicate own product or spatial design outcome

AS92003: Use instrumental drawing techniques to communicate own product or spatial design outcome

Letter box and

boat shed

projects linked via local context

and inspiration

Boatshed Office Redevelopment

AS92000: Generate product or spatial design ideas using visual communication techniques in response to design influences

AS92002: Develop product or spatial design ideas informed by the consideration of people

Year 11 Starting Point

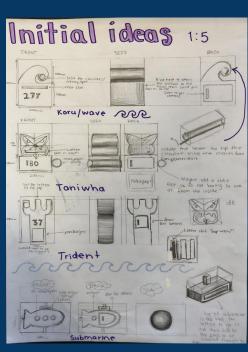


https://www.youtube.com/watch?v=m1SxyJG8E4w

Year 11 Process



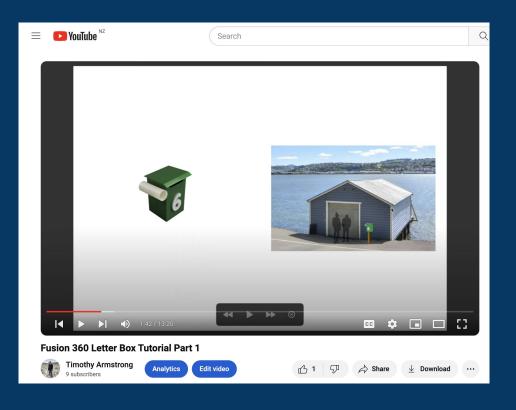




Inspiration - Shapes - Forms - Ideas

Getting to Grips with Fusion 360

Fusion 360 Letterbox Tutorials

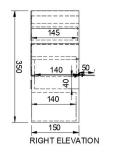


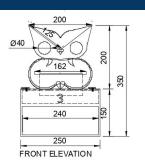
Your own tutorials help learners come to terms with the software make yourself and them aware of the pitfalls and "glitches"

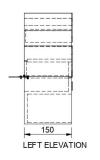
Fusion 360 for 92001 & 92003

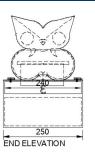














PLAN

Dept	SCALE 1:5	Olivia Priemus 20/03/24	Approved by
		D ocument type OR THOGRAPHIC PROJECTION	Documentstatus
		T idea	DWG No.
		Taniwha Letterbox	1
			Rev. Date of issue Sheet 1/1

3d Printing + Models & Adobe Indesign





YEAR 12

Year 12 Course Structure

Monarch Terminal

AS91341: Develop a spatial design through graphics practice

No 91340 Design Era

Monarch Terminal Seating

AS91342: Develop a product design through graphics practice

Presentation

AS91343: Use visual communication techniques to compose a presentation of a design

External

AS:91337: Use visual communication techniques to generate ideas

Projects are linked

Year 12 Monarch Wildlife Cruise



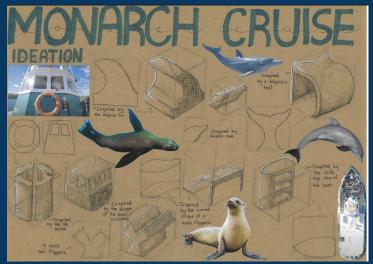


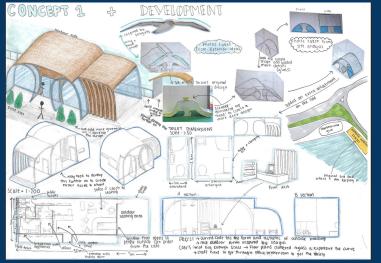
Going on the cruise allows understanding of staff & customers needs





Wildlife and landscapes are used as a starting point for ideation





GILZAPLANS ZZA DEATION

SHAPE & FORMS

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anger

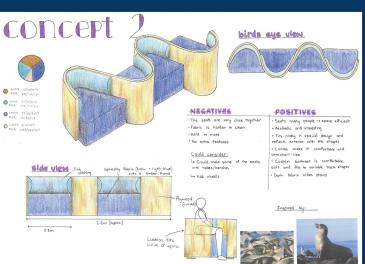
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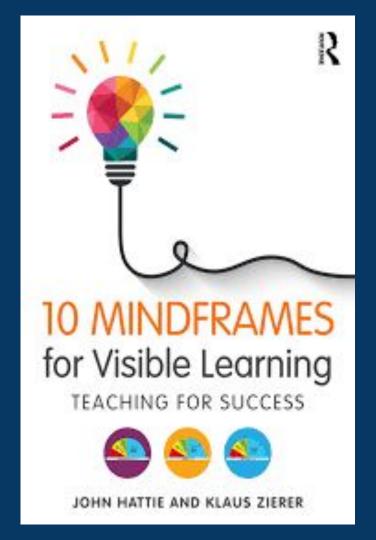
Facetime



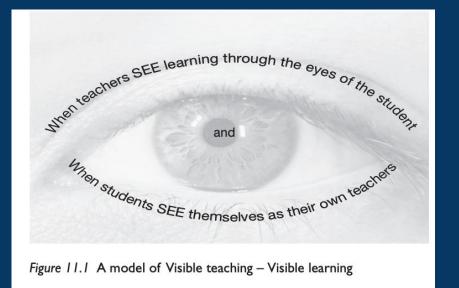
Monarch
Ideation used
starting point
for spatial
and product
design
projects

Learners do a one page analysis of an architect of their own choosing. Can be used in ideation and development

Strategies I use

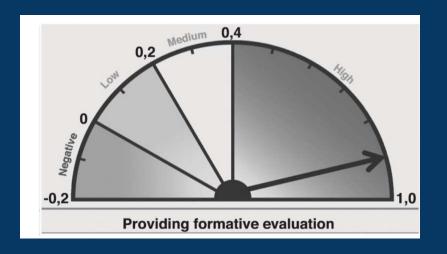


Reading Hattie and Zierer's 10 Mindframes made me consider how I could employ the most effective teaching and learning strategies in teaching DVC



Feedback - Feedforward

Formative Feedback Effectiveness



"The single most powerful modification that enhances achievement is **feedback**"

John Hattie



Single Point Feedback

Design and Visual Communication: Use visual communication techniques to generate design ideas (91337 3 Credit External)

Develop a spatial design through graphics practice (91341 6 Credit Internal)

Develop a product design through graphics practice (91342 6 Credit Internal)

Use visual communication techniques to compose a presentation of a design (91343 4 Credit Internal)

Note: This is a feedback tool and Evidence of Meeting Standard does not guarantee specific grades in the above Internal or External. This is important to recognise in relation to the External as I do not have responsibility for assessment of it.

Evidence of Meeting	Standard	Areas that Need
Standard	Requirements	Improvement
	Use visual communication techniques to explore functional and aesthetic qualities means examining different design ideas (that could be variations of a single concept or a range of concepts in response to a	

Link to L2 Single Point Feedback

Single Point Milestone Feedback Principles

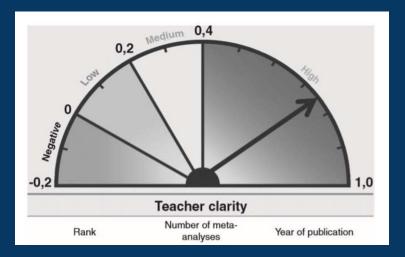
Feedback is;

- timely, regular and ongoing
- impersonal and non-judgmental
- identifies evidence or lack of it
- identifies what needs to be worked in relation to the assessment criteria
- A frequently used phrase is "not yet"
- Feedback is confidential (Assignment on Google Classroom with a copy for each learner)
- Sharing digitally offers learners the opportunity to ask questions and make comments

Teacher Clarity

MOE - Teacher Clarity Definition

For students to progress confidently and be responsible for their learning, it is essential that teacher and students have shared clarity about what is to be learnt. They need to be clear about the big picture of learning, and the day-by-day learning steps towards it.



https://assessment.tki.org.nz/Assessment-for-learning/Assessment-for-learning-in-practice/Clarity-about-the-learning

Learner Instructions

2.INSPIRATION IMAGES & IDEATION/ NGA AROARO (Divergent)

Collect images associated with Monarch Wildlife Cruises and Tours and bird and sea life and landscapes in the Otago Harbour. Along with images from influential architect

Explore shapes and forms from inspiration using a range of drawing techniques with a range of media. Physical models that have been photographed or forms made in Sketch Up can be used to explore ideas

*Inspiration images can be interwoven with ideation or stand stand alone

3.INITIAL EXTERIOR IDEAS / NGA AROARO (Divergent)

Looking at your research and ideation to develop several 3d ideas for the exterior of your passenger terminal. Include doors and windows, surrounding areas and figures to explain these as architecture and convey the building's size. This can be done with physical drawing methods, Sketch Up, card models or any combination of methods. Place card models on satellite images of the site to convey size and context

*Design pages can be made with freehand drawing methods, model-making, digital tools or a combination

4.USER ANALYSIS MIND MAP / TIROHANGA (Divergent)

Develop a MIND MAP to consider the users of the Terminal's needs. Consider both the workers and customers' needs. Use the following guiding questions to help you consider these needs and wants;

- What might workers need / want for office, working spaces and customer service areas?
- What might a tourist need / want in waiting areas and customer service areas?

5.SITE ANALYSIS / TIROHANGA (Divergent)

One page exploring the site, look at <u>sunlines</u>, <u>prevailing wind direction</u>, consider views, <u>accessibility</u> and <u>surrounding business and landmarks</u>. Research a range of images relating to your site, use Google Earth.

Student instructions

are broken into

clearly defined chunks



Hattie identifies that adding imagery to learner instructions serves as a distraction that can add to cognitive load

Boatshed Office Redevelopment

techniques in response to design influences

· Develop spatial design ideas informed by the consideration of people

Due: Friday November 29

SITUATION / AHUATANGA

Boatshed 6052 at 124 Portobello Road has been sold. The new owner is seeking concepts to redevelop the shed into an office for a self employed person. The new owner (your client) thinks the current shed is run down and wants a complete rebuild, the build needs to be on the original building platform but can be widened up to 1.5 meters on all sides.

BRIEF /NGA TOHUTOHU POTO

You have been asked by the owner (your client) to come up with ideas for the redevelopment of Boatshed 6052 to turn the shed into an office for a self employed person. The new owner is interested in the puraku (Maori myth) of how the Otago Peninsula was formed and wants this to be reflected in some way through the building.

BRIEF SPECIFICATIONS / HOA WHAKATAKORANGI

The owner wants designs that:

- · Take advantage of the spectacular views and sunlight offered by the site and provide shelter from cold prevailing winds
- . Have space for storing bikes as the shed is on the cycle path and the owner would like to cycle to work
- Has space for storing sea kayaks
- Has deck for entertaining and (space for bbq and seating etc)
- · Made from materials suitable for marine conditions
- · Design could include a mezzanine to add space

ARCHITECT RESEARCH / TIROHANGA (1 page)

Choose one Aotearoa Architect featured on the SHCS DVC website. You are to then develop 1 A3 page on your chosen architect. Your page should have;

- . Basic biographical information where were the from, when were they alive and design ethos etc
- · Images of their buildings
- Annotations that highlight the aesthetic functional characteristics of the buildings (Use arrows with annotations to show where you can see these characteristics in the images of their buildings)

*Note: This can be done on paper or in the slide



SITE ANALYSIS / TIROHANGA (1 page)

One page exploring the site, look at sunlines prevailing wind direction, consider views, accessibility and surrounding business and landmarks. Research a range of images relating to your site, use Google Earth.

CLIENT AVATAR/ TIROHANGA(1 page)

A client avatar is a made up person that you can use to help figure out what you need to consider when developing a design outcome.

Think about who your client might be;

- · Are they male or female?
- How old are they?
- · What do they do for a living?
- · What is their family situation? Do they have pets?
- What do they need to do their job?
- What are their hobbies and interests? What is important to them in terms of aesthetics?
- · What is important to them in terms of function?



Look back at the SITUATION and BRIEF SPECIFICATIONS to develop your avatar page.

*Note: Use the template in the slide

INSPIRATION IMAGE BOARD / NGA AROARO (1 page)

Find images that relate to your architect and how the Otago Peninsula was formed

*Note: This can be done on paper or in the slide.

Inspiration Image Board task can be combined with Ideation pages

IDEATION / NGA AROARO(1-2 pages)

Note: Ideation done in the letterbox project can be used for this task

Look at your 'Inspiration Images' to develop 1-2 pages exploring 2d shapes and 3d forms You are not copying the images! You are making your own shapes and forms that are inspired by the images.

Ideation should demonstrate understanding of;

- · Construction lines and outlines in the development of 2d shape and 3d forms
- Combinations of paper types and media i.e black and brown paper combined with black and white media
- . Understanding of rendering with light direction and cast shadows



Keeping instructions basic encourages learners to read and allows learners to make their own meaning



Year Planners

Year planners;

- are given at the start of the year with work expectations for each week outlined
- Week's tasks are based on learner instructions
- are visible with them being displayed in the classroom, physical copies given to students and available online
- include formative and summative assessment dates
- Include public holidays

People make plans and God laughs -Jewish Proverb

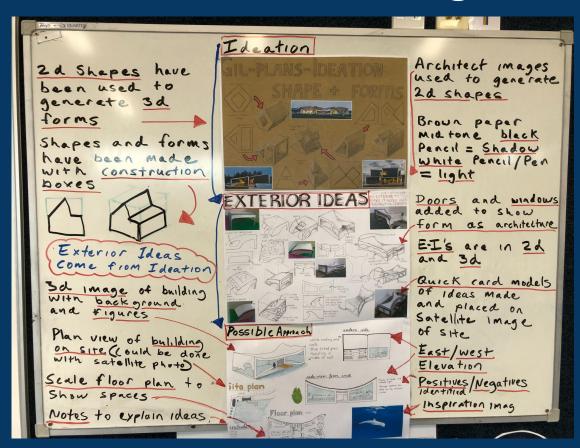
Planning Calendar

Term 1 2024: Level 2 DVC Planning Calendar

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11
29/1	5/2	12/2	19/2	26/2	4/3	11/3	18/3	25/3	1/4	8/4
Level 2: Develop a spatial design through graphics practice AS:91341 Version 4 (6 Credit Internal) 1.INFLUENTI AL ARCHITECT RESEARCH/TIROHANGA (Divergent) Choose an architect from the SHCS DVC (architects web page). Students then develop a research poster answering the following questions	Waitangi Day Tuesday 6th 1.INFLUENTIAL ARCHITECT RESEARCH! TIROHANGA 2.INSPIRATION IMAGES & IDEATION IMAGES & IDEATION! NGA AROARO (Divergent) Collect images associated with Monarch Wildlife Cruises and Tours and bird and sea life and landscapes in the Otago Harbour. Along with images remained in the Otago Harbour. Along with images architect	2.INSPIRATION IMAGES & IDEATION: NGA AROARO	3.INITIAL EXTERIOR IDEAS / NGA AROARO (Divergent) Looking at your research and ideation to develop several 3d ideas for the exterior of your passenger terminal. Include doors and windows, surrounding areas and figures to explain these as architecture and convey the building's size MILESTONE FEEDBACK FEEDBACK FEEDBACK FEIDAY FEBRUARY 23	3.INITIAL EXTERIOR IDEAS / NGA AROARO	4.USER ANALYSIS MIND MAP / TIRCHANGA (Divergent) Develop a MIND MAP to consider the users of the Terminal's needs. 5.SITE ANALYSIS / TIRCHANGA (Divergent) One page exploring the site, look at sunlines, prevailing wind direction, consider views, accessibility and surrounding business and landmarks.	5.SITE ANALYSIS / TIROHANG	5.SITE ANALYSIS / TIROHANGA 6.POSSIBLE APPROACHES/ NGA AROARO (Divergent) Convergent) Convergent ocncepts for your terminal building; these can be exterior ideas explored in more detail, or new ideas that have been informed by your ideation and research MILESTONE FEEDBACK FRIDAY MARCH 22	Otago Anniversary Monday 25th Good Friday 29th 6.POSSIBLE APPROACHES/ NGA AROARO	Easter Monday 1st 6.POSSIBLE APPROACHES/ NGA ARQAR	Z. DEVELOPMEN I BRAINSTORM/ NGA AROARO WHANAKETAN GA (Divergent/ Convergent) Look at POSSIBLE APPROACHES and use the following guiding questions to evaluate your design and progress your design ideas. 8. DEVELOPMEN I.& REFINEMENT / NGA AROARO WHANAKETAN GA (Convergent) Look at your DEVELOPMENT BRAINSTORM and use Graphics Practice* to explain progression and refinement of your design ideas visually

Year planners
given at the start of
the year with work
expectations for
each week outlined

Annotating Exemplars



Breaking down what has been included in exemplar pages to make them successful

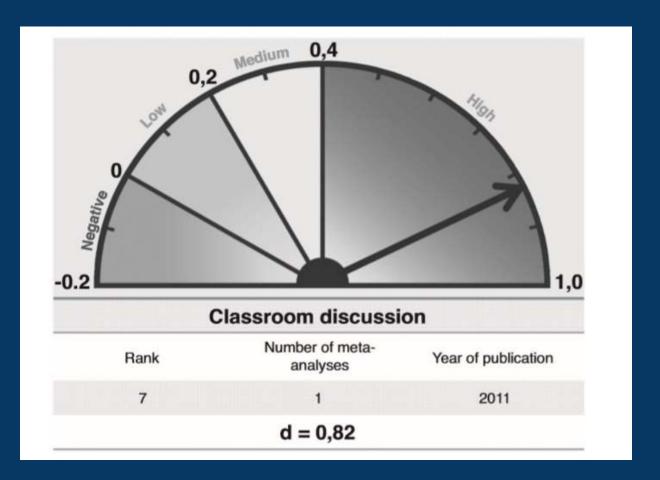
Break Time

Understanding Success

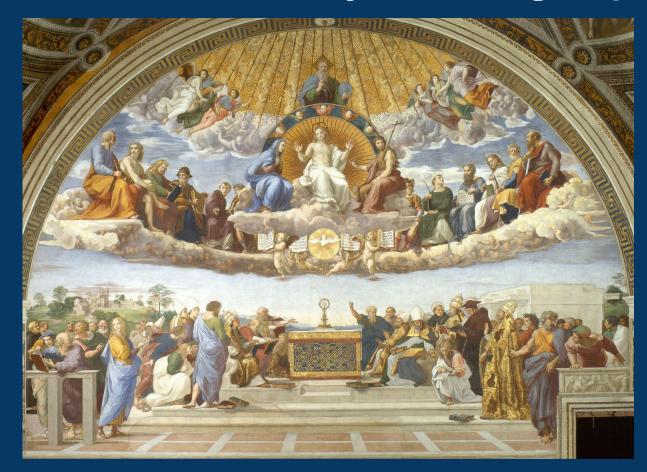
How do we help students to understand the intention of the lesson and

show them what success might look like at the end?

Classroom Discussion Effectiveness

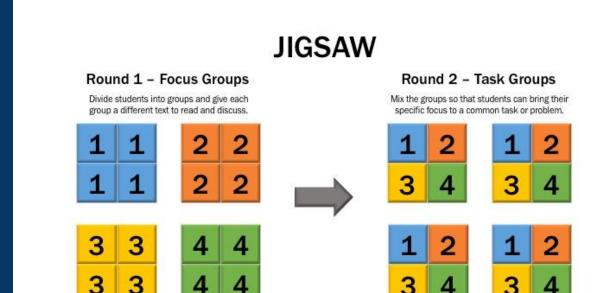


Art History Teaching Experience



I was in a situation where I had to teach students a lot of content in a short space of time

Jigsaw Activities



Had been reading about Jigsaw activities and decided that my Art History class was the perfect place to use it



Jigsaw developed by Aronson (1978)

Jigsaw in Action



- the triangle is used to highlight God, Jesus, A vigin many and John the Babbut, uses the idea of 315

- popes on earth are god's representatives

- number of vinitar to Leonardo Da times Vinitary with 35 and 45

- the setting is the outskirts of Rome however there are classical buildings seen

on either side of the pointing at the bottom there are 2 people seen turning away this symbolists the fact that

Some people turn their backs on Cristianty, however their are people beside them attempting to draw them back in

this was the time when people started to
this was the time when people started to
Tebel against the church hit of these
painting by Paphael were used an propaganda
for Pope Julian II the in an attempt to bring
people but into the church

Disputation of the Holy Sacrament by Paphael (1509-1510)

500 cm × 770 cm

- located in the Stanza library

(IDEAL PLACE)

- the circles are used repeated throughout the painting, mainly to highlight people of importance such as god and jesus and the dave which represents the Spirit, these make up the trivity.

the therebs in the middle represent the 4 books of northern, man by track luke and John (the 4 to new tistiments) also can represent the

I the final circle represents the "host" its what connects the real world to the ideal world above

- sitting on either side of Christ is the blessed virgin many and John The British Babtist, these people are Seen with halo's above from -there are desisted in Classical Renaissance (Lathing, similar its plate and arrivated Learners were given texts relating to their groups painting and they annotated pages as a group

In this example learners looked at individual paintings in groups by Raphael in the Papal Papal Palace

DVC Jigsaw



Have started applying the Jigsaw method in DVC

Learners use guiding questions to analyse exemplars

Example Guiding Questions

- Identify and describe inspiration for ideas
- Identify and describe media and drawing techniques
- Identify and describe 2d shapes and 3d forms that have been explored
- Identify and describe the design principles that have been applied
- What are the key ideas that are emerging?

Making it Visible

- Learners present their findings additional observations with the aid of teacher questions recorded
- Display in classroom
- Catalogue in Google Classroom
- Allow students to photograph*
- Make paper copies for students

"I hear I forget,

I see and I remember,

I do and I understand".

Confucius



What's your flavour?



= IDEATION (3 pages) + 1 repeated



= ARCHITECTURAL DEVELOPMENT (5 pages)



= INTERIOR DEVELOPMENT (2 pages) + 1 repeated page

= PRESENTATION (2 pages) + 1 repeated

Jigsaw Activity Part One

Work with your flavour group to analyse examples of;



ARCHITECTURAL DEVELOPMENT

INTERIOR DEVELOPMENT

PRESENTATION

Jigsaw Activity Part Two

Make a group with at least one representative of all 4 flavour groups and share your findings



Why make a subject website?

Google Site vs Google Classroom for Resources

Google Site	Google Classroom			
 User interface easy for learners to navigate Resources are available from one year to the next User interface makes the context for video resources and weblinks more evident Allows for 'curated choice' 	 Resource can become lost in the 'stream' Resources need to be uploaded fresh each year Context for resources can be unclear due to user interface 			

SHCS DVC WEBSITE



"Have no fear of perfection - you'll never reach it."



Salvador Dali