Art Design & Technology (D&T) Nutrition & Food Science (NFS)



Inquiry-based Learning

Because of the nature of the subjects offered by the Craft & Technology Department, inquiry-based learning is adopted across **Art** (Art Inquiry Model), **Design & Technology** (Design Thinking Model) and **Nutrition & Food Science** (Problem-based Learning).

Through IBL, you would experience active learning that starts by posing questions, problems or scenarios.

The inquiry-based instruction is very closely related to the development and practice of thinking and problem solving skills.

Coursework Subjects Focus



Character Development

- Responsibility, perseverance, resilience, taskfocus, appreciation mindset.
- Creativity, self-management, dare-to-think, dareto-do spirit, time management.



Academic Excellence

 Through the inquiry approach, students are able to internalize concepts through solving problems, critical and analytical thinking, as well as application of knowledge, which leads to better learning outcomes.



Requirement

- Self-disciplined and determination throughout the coursework process.
- Good attendance, as coursework stretches over 7-8 months

Which Coursework Subject Is Best Suited For Me?

<u>Art</u>

- ★Interest: drawing & painting, design, digital art, solving problems through divergent thinking
- ★Strength: drawing & painting, design, creative, analytical and critical thinking skills
- ★Career Aspiration: art educator, museum/gallery curator, animator, illustrator, motion graphic artist, game designer, fashion designer, interior designer, filmmaker, photographer, etc.

D&T

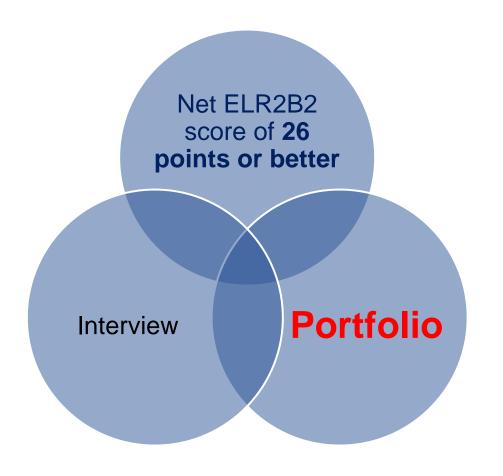
- ★Interest: creating, making, designing
- ★Strength: drawing, design, creative, analytical and critical thinking skills, hands-on
- ★Career Aspiration: engineer, architect, product designer, interior designer, etc

NFS

- ★Interest: health, nutrition, sustainable produce, cooking, science experiments, food science
- ★<u>Strength</u>: analytical and critical thinking skills, language skills, innovative thinking, passion in cooking
- ★<u>Career Aspiration</u>: food technologist, nutritionist, dietician, sports nutritionist, food & beverage specialist, chef, restaurant owner, etc

EAE (Early Admission Exercise) for Coursework Subjects

Up to 50% of students can be admitted to polytechnic EAE:



Art, D&T & NFS assignments, and participation in subject-based national competitions in lower and upper can be included in the portfolio for EAE.



Some Relevant Courses in Art Universities

(LASALLE College of the Arts)



ANIMATION

Be at the forefront of one of the most rapidly developing areas of the creative industries and technical development.

DESIGN FOR COMMUNICATION AND **EXPERIENCES**

Acquire the thinking capacity and creative skills to boldly design the future.

BROADCAST MEDIA

Be among the next generation of highly versatile moving image creatives for media-related industries in Singapore and around the world.

CREATIVE DIRECTION FOR FASHION

Develop your creative vision and create otherworldly images for fashion media.

https://www.lasalle.edu.sg/programmes/diploma

Relevant Courses in Art Universities

(Nanyang Academy of Fine Arts)

FOUNDATION

- ELMAB3 (English Language, Mathematics, Best 3 other subjects) aggregate score of 15 points or better, excluding CCA Bonus Points, for Secondary 4 Normal (Academic)
- · Possess potential and passion in the arts

DIPLOMA

- GCE O-Level, GCE A-Level, IB Diploma, Singapore Integrated Programme, Full-time NITEC/Higher NITEC
- 16 years of age and above in the year you are enrolled into Year 1 of the diploma course
- · International applicants need to complete at least 10 years of education
- · Possess potential and passion in the arts

DEGREE

- · GCE A-Level, IB Diploma, Singapore Integrated Programme, Diploma
- 18 years of age and above in the year you are enrolled into Year 1 of the degree course
- International applicants need to complete at least 12 years of education

DIPLOMA

3D Design

- · Diploma in Design (Furniture and Spatial)
- · Diploma in Design (Interior and Exhibition)
- Diploma in Design (Landscape and Architecture)
- Diploma in Design (Object and Jewellery)

Design and Media

- · Diploma in Advertising
- · Diploma in Graphic Communication
- · Diploma in Illustration Design with Animation
- · Diploma in Screen Media

Fashion Studies

- Diploma in Fashion Design
- · Diploma in Fashion Merchandising and Marketing

Fine Art

- · Diploma in Art Teaching
- · Diploma in Fine Art

Relevant Polytechnic Courses for Art and Design & Technology

Built Environment

- Architecture
- Landscape Architecture

Business & Management

Arts Business
 Management

Information & Digital Technologies

- Digital Visual Effects
- Game Design & Development
- Game Development & Technology
- Multimedia & Animation

Relevant Polytechnic Courses for Art and Design & Technology

Design & Media

- 3D Interactive Media Technology
- Advertising & Public Relations
- Animation
- Apparel Design & Merchandising
- Arts & Theatre Management
- Communication Design
- Design for User Experience
- Digital Animation
- Digital Film & Television
- Digital Game Art & Design
- Environment Design
- Experience & Product Design
- Film, Sound & Video
- Industrial Design

- Interactive & Digital Media
- Interior Architecture & Design
- Interior Design
- Mass Communication
- Media Production & Design
- Motion Graphics & Broadcast Design
- Product & Industrial Design
- Product Design & Innovation
- Space & Interior Design
- Visual Communication & Media
 Design
- Visual Effects & Motion Graphics

Relevant Polytechnic Courses for NFS

Applied Sciences

- Baking & Culinary Science
- Food Science & Nutrition
- Sports Science and Wellness
- Health Management and Promotion
- Sports & Exercise Science

Business & Management

- Culinary & Catering Management
- Food & Beverage Business
- Restaurant & Culinary Operations
- Hospitality Management









- Coursework
 (2D or 3D Fine Arts and Design, Lens-based, Digital or Multimedia) + Prep Boards
- Drawing and Painting
 + Prep Studies

Assessment Weightage

- 60% on Coursework (over 7 months for 'N' Level , 8 months for 'O') Level
- 40% on Drawing & Painting Paper
 (3 weeks prep)



Museum-based Learning



Drawing and Painting

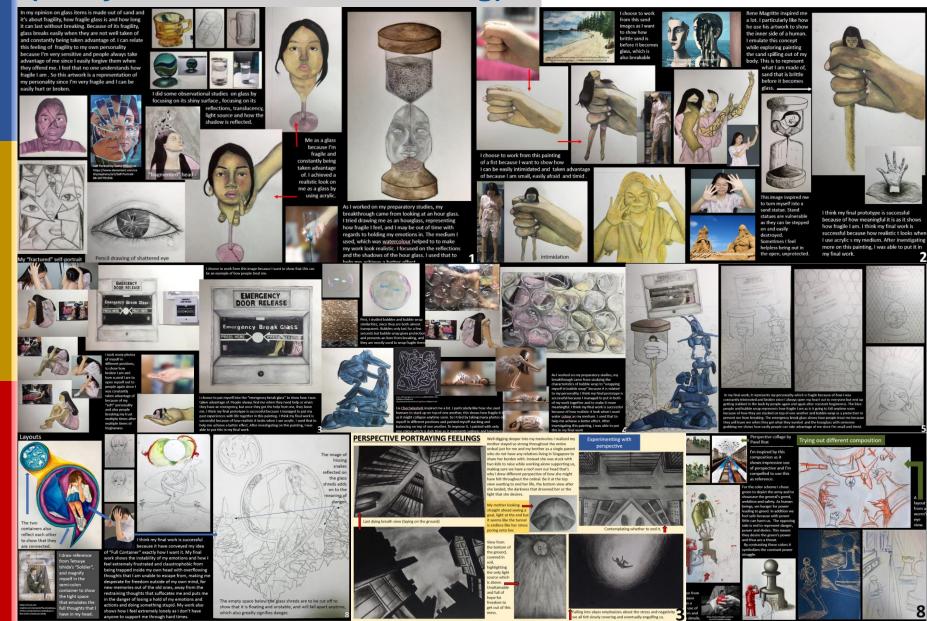




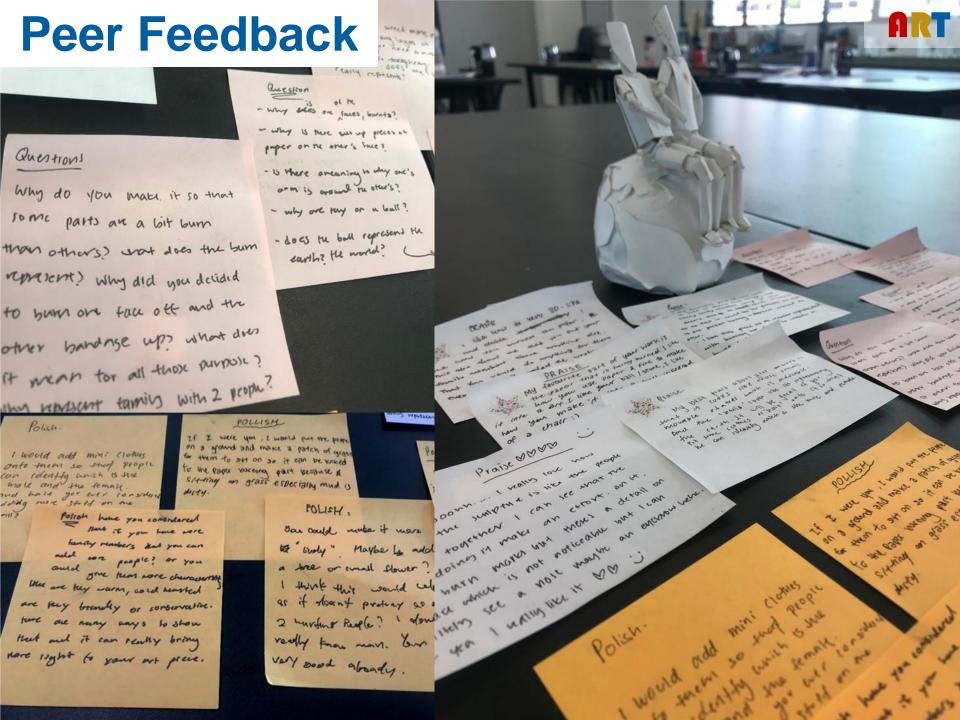
Artistic Processes

ART

(analytical and critical thinking)







Design & Technology







- Coursework (Prototype + Journal + Presentation Board)
 - Design & Technology Theory
 [3 Technologies: Mechanism, Electronics, Structure
 (O Level Only)]

Assessment Weightage

- 60% on Coursework (over 7 months)
- 40% on Written Exam
 (2 hrs & 1.5 hrs for O and N Level respectively)

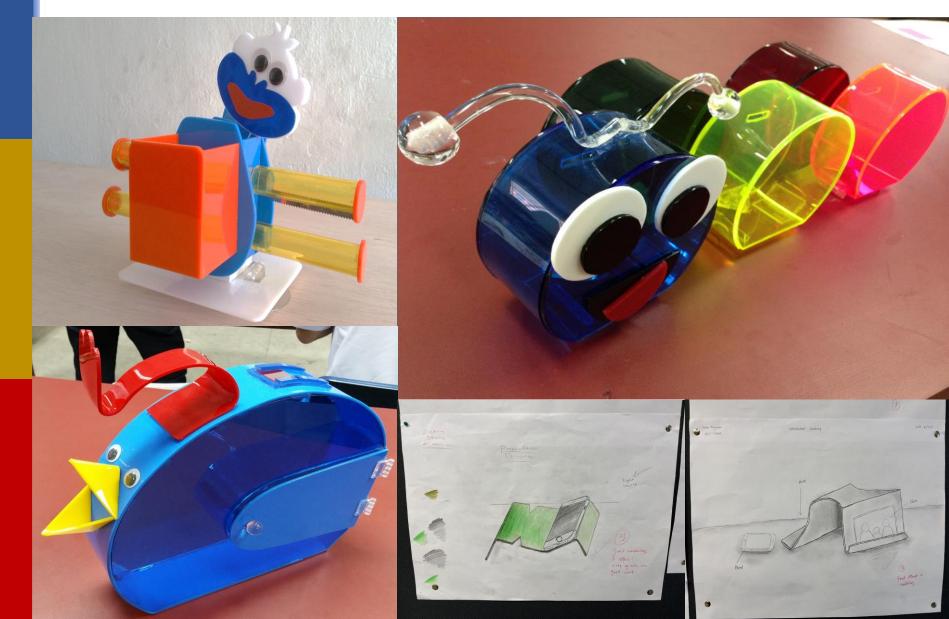


Journaling





Prototypes & Rendering



Nutrition & food Science







Coursework

(Themed Research + Investigation & Data Analysis (O Level only) + Meal & Food Prep Planning + Execution + Evaluation)

N Level - 30 pages, O Level - 50 pages

 Food & Nutrition Theory : Food Sciences

(Nutrients, Meal Planning, Food Commodities, Food Prep, Cooking, Food Safety & Preservation)

Assessment Weightage 60% on Coursework

(over 7 months)

40% on Written Exam

(2 hrs & 1.5 hrs for O and N Level respectively)

Themed Research

A) Information Synthesis

After conducting the experiment on (date), I will move on to the next component which is the information synthesis. In this component, I will tabulate the data collected from the experiment and present it in a form of bar graph. Also, I will make conclusion whether cooking does affect physical and chemical changes to the cupcake.

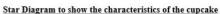
Observation table:

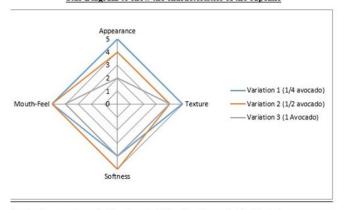
	V1 (1/4 avocado)	V2(½ avocado)	V3(1 avocado)	
Appearance	Golden brown	Golden brown with a	A distinctive green	
		light green colour		
Texture	Smooth texture	Slightly smooth	Slightly smooth texture	
27.17		texture	1000 00	
Taste	Moist and light	Moist, light and	Very distinctive taste of	
		slight taste of	avocado	
		avocado	2-9-00-00-00-00-00-00-00-00-00-00-00-00-0	
Softness	Very soft and spongy	Soft and spongy	A little soft but a little hard	
Average	2.9cm	3.3cm	2.9cm	
Height	Service Control	12		

Description of criteria for rating characteristics in the experiment:

100	1	2	3	4	5
Appearance	Greenish-	Light green	Light golden	Light golden	Golden
	golden brown cracked	es:	brown with light green	brown	brown and dome shaped
Texture	Very grainy	Grainy	Smooth and a little grainy	smooth	Very smooth,
Taste	Very strong distinctive taste of avocado/ dense and dry	Strong taste of the avocado	Light taste of avocado	Smooth and creamy	No taste of avocado, creamy/moist and light
Softness	Very soft and spongy	Soft and spongy	A little soft but a little hard	Hard and firm	Very hard and firm

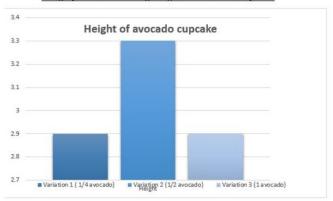






The star diagram shows that the characteristics of each cupcake like the texture, appearance, oftness and mouth-feel. All of the variables gave a dome shaped like but the variation 3 gave the nost domed shaped. The taste of the variation 1 is the tastiest and it doesn't have the strong wocado taste. Variation 3 also gave the darkest color among the other 2 variables.

Bar graph shows the average height of the avocado cupcakes



a









Effect of Sugar on Baked Product



Meal Planning and Execution







Thank You

