# 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

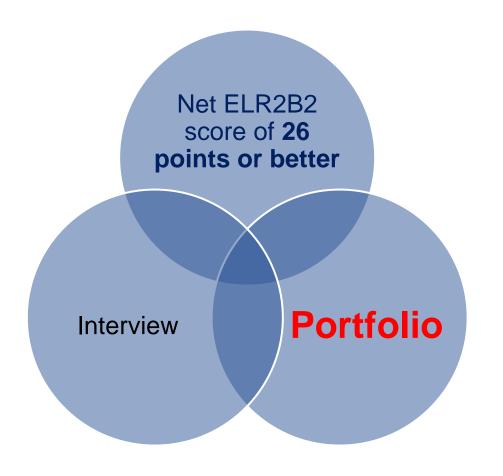
- ★Interest: creating, making, designing
- ★Strength: drawing, design, creative, analytical and critical thinking skills, hands-on
- ★Career Aspiration: engineer, architect, product designer, interior designer, etc

### **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** 

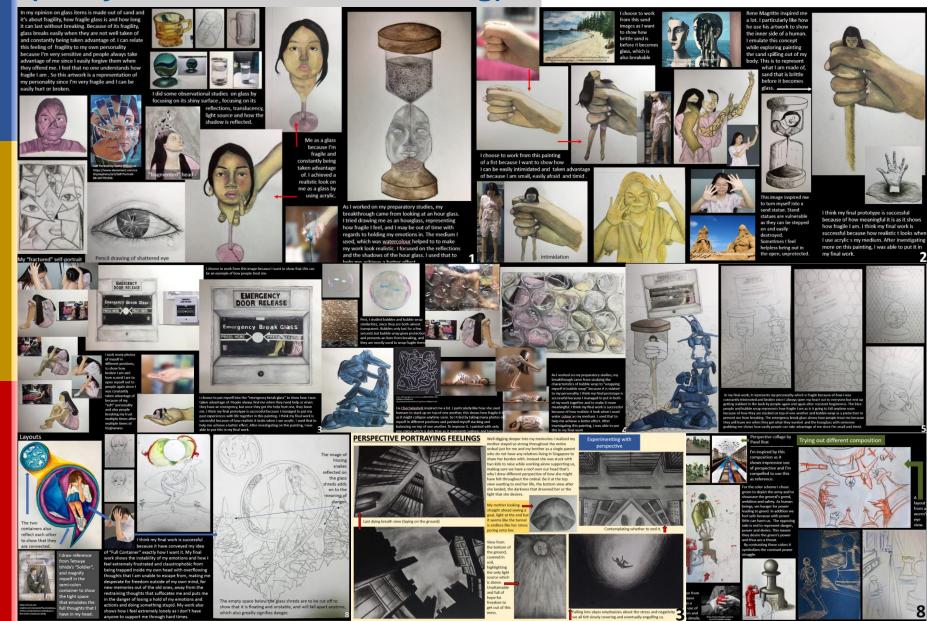




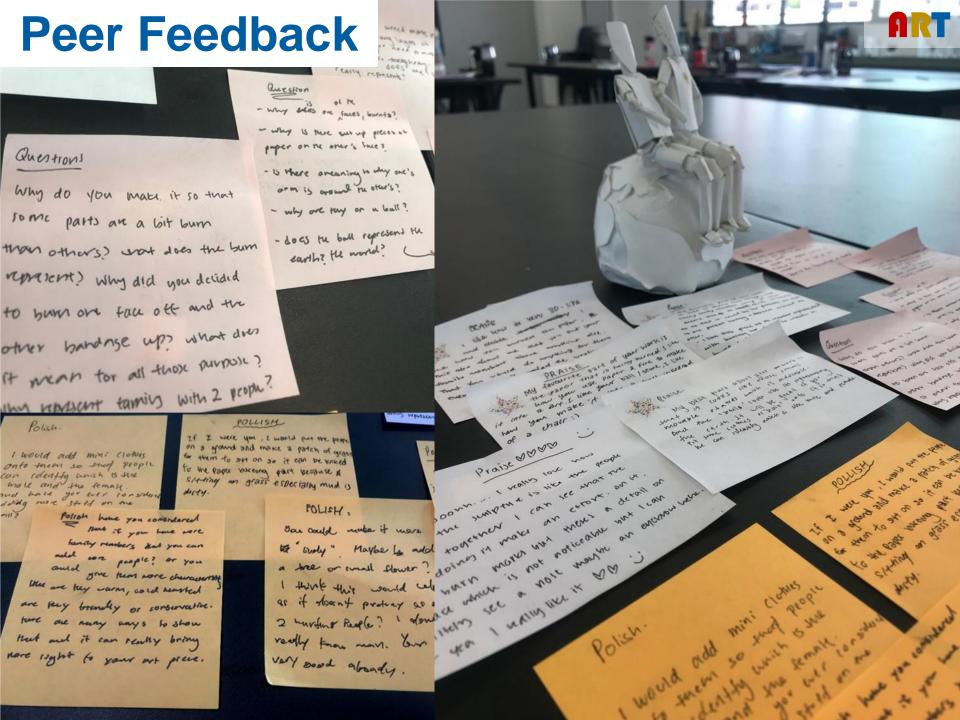
# **Artistic Processes**

### 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)

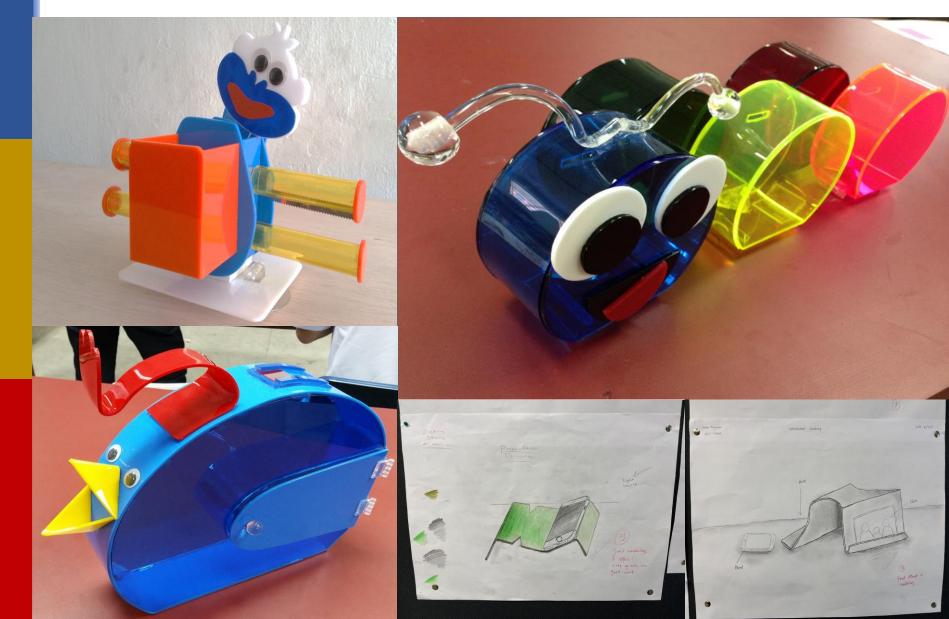


# **Journaling**





# **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.

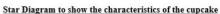
#### Observation table:

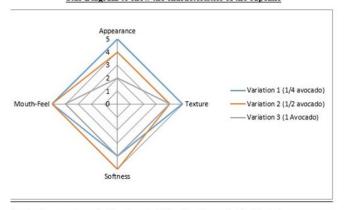
	V1 (1/4 avocado)	V2( ½ avocado)	V3(1 avocado)	
Appearance	Golden brown	Golden brown with a	A distinctive green	
		light green colour		
Texture	Smooth texture	Slightly smooth	Slightly smooth texture	
200 C 200 C		texture	1000 100	
Taste	Moist and light	Moist, light and	Very distinctive taste of	
	3.0	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		10)		

### 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	let	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

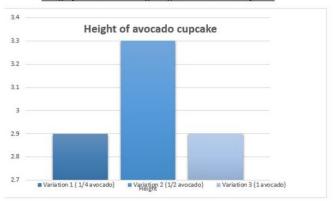






The star diagram shows that the characteristics of each cupcake like the texture, appearance, oftness and mouth-feel. All of the variables gave a dome shaped like but the variation 3 gave the nost domed shaped. The taste of the variation 1 is the tastiest and it doesn't have the strong wocado taste.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

