End-User Activities

This resource was developed as part of an Applied Technology CPD 2018/2019 CPD workshop which took place during the 2018/2019 school year. All materials used during this workshop can be viewed in the Technologies section of www.jct.ie within the CPD Workshops tile.

Website Link:
https://www.jct.ie/technologies/cpd_supports_applied_technology_cpd_workshops_2018_2019

The learning experiences below were showcased as part of a unit of learning during this CPD workshop and focused on the importance of the end-user in design. This sample resource may assist you in planning and developing suitable learner experiences for your student's context. Reference to this activity can be found on slide 41 of the Applied Technology 2018/2019 CPD workshop presentation and on page 16 of the Applied Technology 2018/2019 learning log.

What is included in this PDF?

1. Sample unit of learning

Included is a sample unit of learning developed by the Applied Technology team using a generic school context. Contained in the unit of learning plan are the learning outcomes and key learning activated by engaging with the learner experience below.
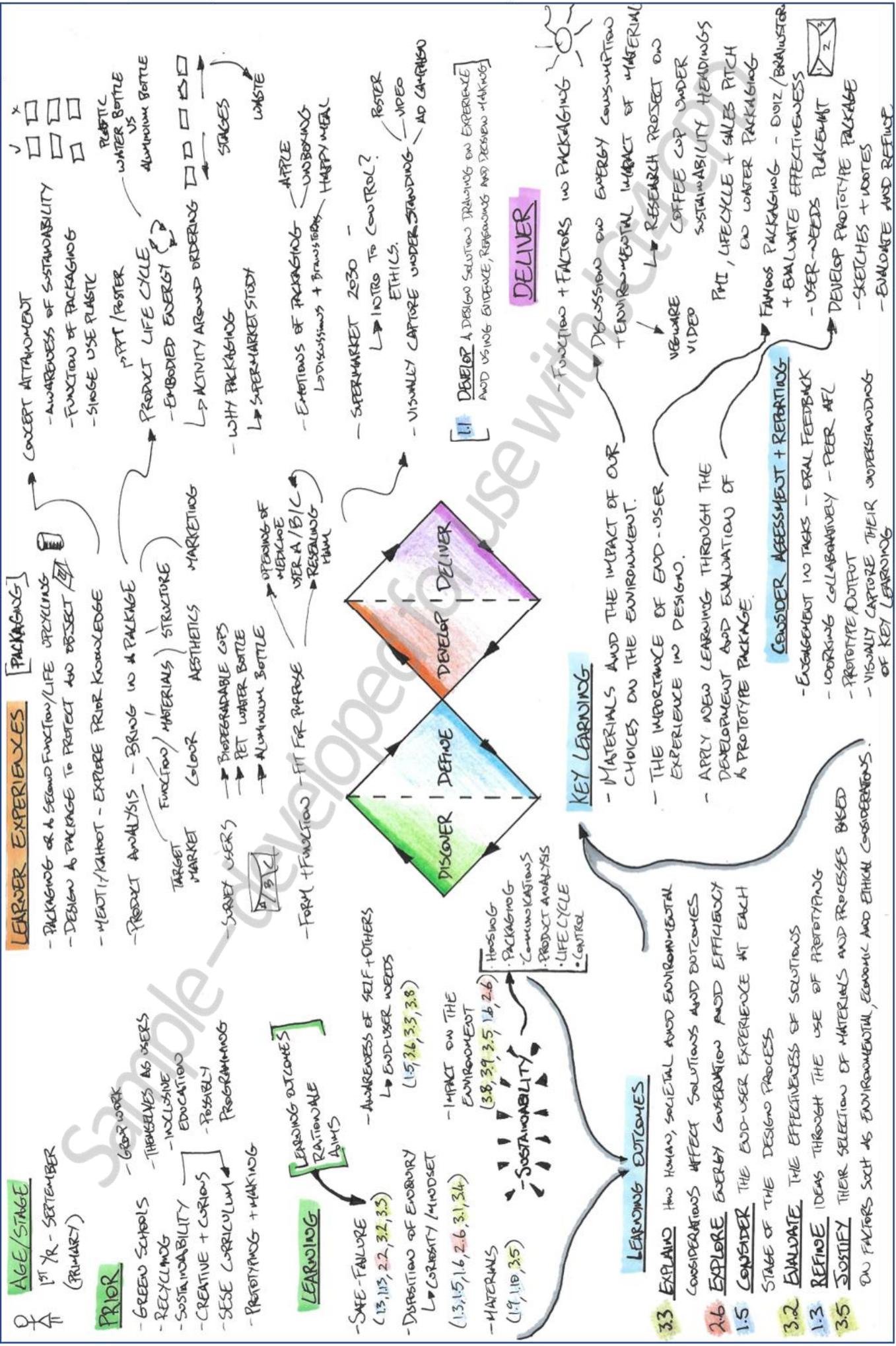
2. Sample end-user activities.

Included in this resource are sample end-user activities for students' engagement. It is important to take note of the learning outcomes, key learning and the action verbs in the unit of learning plan which contextualise this worksheet activity.

Link to Resource

Note: It is recommended that you view the CPD workshop materials in conjunction with using this resource to contextualise the resource and develop a better understanding of how the unit of learning was developed.

AGE/STAGE

1ST YR - SEPTEMBER
(PRIMARY)

PRIOR

- GREEN SCHOOLS
  - GEOG WORK
- RECYCLING
  - THEMSELVES AS USERS
- SUSTAINABILITY
  - INCLUSIVE EDUCATION
- CREATIVE + CURIOUS
  - POSSIBLY
- SESE CURRICULUM
- PROTOTYPING + MAKING
  - PROGRAMMING

LEARNING

LEARNING OUTCOMES
RATIONALE
AIMS

- SAFE-FAILURE
  (1.3, 1.15, 2.2, 3.2, 3.5)
- DISPOSITION OF ENDEAVOUR
  CURIOSITY/MINDSET
  (1.3, 1.15, 1.6, 3.1, 3.4)
- MATERIALS
  (1.9, 1.11B, 3.5)

- AWARENESS OF SELF + OTHERS
  - END-USER NEEDS
  (1.15, 2.6, 3.3, 3.8)

- IMPACT ON THE ENVIRONMENT
  (3.8, 3.9, 3.5, 1.6, 2.6)

→ SUSTAINABILITY

- HOUSING
- PACKAGING
- COMMUNICATIONS
- PRODUCT ANALYSIS
- LIFE CYCLE
- CONTROL

LEARNER EXPERIENCES   [PACKAGING]

- PACKAGING OR A SECOND FUNCTION/LIFE UPCYCLING
- DESIGN A PACKAGE TO PROTECT AND DISSECT

- MEDT/KAHOOT - EXPLORE PRIOR KNOWLEDGE
- PRODUCT ANALYSIS - BRING INTO A PACKAGE

  FUNCTION/MATERIALS / STRUCTURE
  TARGET MARKET   COLOUR   AESTHETICS
                          MARKETING

→ CONCEPT ATTAINMENT
  - AWARENESS OF SUSTAINABILITY
  - FUNCTION OF PACKAGING
  - SINGLE USE PLASTIC
    PLASTIC WATER BOTTLE vs ALUMINIUM BOTTLE
    PPT / POSTER

→ PRODUCT LIFE CYCLE
  - EMBODIED ENERGY
  - ACTIVITY AROUND ORDERING
  STAGES
  WASTE

- WHY PACKAGING
  - SUPERMARKET STUDY

- EMOTIONS OF PACKAGING
  - DISCUSSIONS + BRAINSTORM
  APPLE
  UNBOXING
  HAPPY MEAL

- SUPERMARKET 2030 -
  - INTRO TO ETHICS
  CONTROL?
  POSTER
  VIDEO
  AD CAMPAIGN

- VISUALLY CAPTURE UNDERSTANDING

- SURVEY USERS
  - BIODEGRADABLE CUPS
  - PET WATER BOTTLE
  - ALUMINIUM BOTTLE
  OPENING OF MEDICINE USER A/B/C
  RESEALING FILM

- FORM + FUNCTION - FIT FOR PURPOSE

DISCOVER   DEFINE   DEVELOP   DELIVER

DELIVER

1.1 DEVELOP A DESIGN SOLUTION DRAWING ON EXPERIENCE AND USING EVIDENCE, REASONING AND DESIGN-MAKING

- FUNCTION + FACTORS IN PACKAGING
- DISCUSSION ON ENERGY CONSUMPTION
  - ENVIRONMENTAL IMPACT OF MATERIAL
  - RESEARCH PROJECT ON COFFEE CUP UNDER SUSTAINABILITY HEADINGS
  WE SHARE VIDEO

- PMI, LIFECYCLE + SALES PITCH ON WATER PACKAGING

- FAMOUS PACKAGING - DIGIT/BRAINSTORM
  + EVALUATE EFFECTIVENESS
  - USER NEEDS PLACEMAT
- DEVELOP PROTOTYPE PACKAGE
  - SKETCHES + NOTES
  - EVALUATE AND REFINE

KEY LEARNING

- MATERIALS AND THE IMPACT OF OUR CHOICES ON THE ENVIRONMENT.

- THE IMPORTANCE OF END-USER EXPERIENCE IN DESIGN.

- APPLY NEW LEARNING THROUGH THE DEVELOPMENT AND EVALUATION OF A PROTOTYPE PACKAGE.

CONSIDER ASSESSMENT + REPORTING

- ENGAGEMENT IN TASKS - ORAL FEEDBACK
- WORKING COLLABORATIVELY - PEER AFL
- PROTOTYPE OUTPUT
- VISUALLY CAPTURE THEIR UNDERSTANDING OF KEY LEARNING

LEARNING OUTCOMES

3.3 EXPLAIN HOW HUMAN, SOCIETAL AND ENVIRONMENTAL CONSIDERATIONS AFFECT SOLUTIONS AND OUTCOMES

2.6 EXPLORE ENERGY CONSERVATION AND EFFICIENCY

1.5 CONSIDER THE END-USER EXPERIENCE AT EACH STAGE OF THE DESIGN PROCESS

3.2 EVALUATE THE EFFECTIVENESS OF SOLUTIONS

1.3 REFINE IDEAS THROUGH THE USE OF PROTOTYPING

3.5 JUSTIFY THEIR SELECTION OF MATERIALS AND PROCESSES BASED ON FACTORS SUCH AS ENVIRONMENTAL, ECONOMIC AND ETHICAL CONSIDERATIONS.

*Learning Experience B

Key Learning: The importance of end-user experience in design.

Group discussion:

- What needs to be considered in the design of packaging when thinking about the end-user?

<u>Focus on Form</u>

Identify the famous packaging.

Questions to consider:
- Why are they so recognisable?
- Are they effective packaging solutions? Why/Why not?
- What did each of these companies consider when designing their packaging?

<u>Focus on end-user experience</u>

Questions to consider:
- What do these companies want their packaging to achieve? Are there commonalities across the companies?
- What kind of feelings do the companies want to evoke?
- How do they achieve it?

<u>End-user – Specific needs</u>

- Observe three different users (e.g. old person, child, left-handed person) opening and resealing a chosen piece of packaging (e.g. cereal box, ham, chocolate bar etc.)
- Record each users specific needs/experience on the placemat.
- Record common needs in the middle of the placemat.
- Design a modified solution to cater for the three users.