WYRKSHOP MOBILE MAKERSPACE

Make and Donate

ESTIMATED TIME: 30 MINUTES

OBJECTIVES:

- Identify the social problem/a problem in the community to organize a fund-raising event (For example elderly care, donation to food bank, warm clothes donation during Christmas, etc.)- (it can be any project)
- Encourage group coordination and collaboration
- Engage the participants in collaborative and mindful decision-making process

LIFE SKILLS LEARNED:

LEVEL: 3

MATERIALS NEEDED:


Laptop with Cura Slicer


USB drive

PLA Filament


3D printer


Key chains (if making key rings)

ACTIVITY OUTLINE:

THIS PROJECT IS DIVIDED INTO TWO PHASES

FIRST PHASE: PROJECT DEVELOPMENT
SECOND PHASE: PROJECT IMPLEMENTATION

PHASE 1: PROJECT DEVELOPMENT

STEP 1:

Think of an idea on how you want to make use of the makerspace and what equipment you want to use there for your project. Remember that this is a group project and decisions should be made on the consensus of the majority.

STEP 2:

For your reference, you can use any 3D printer, Cricut, Laser cutter, etc.

STEP 3:

Think of a date when fund-raising events can be organized.
For example, Thanksgiving Day- How can we express our gratitude to people around us; through gratitude towards parents, teachers, or their school bus drivers, gratitude to anyone they wish to. Suggested to read https://www.rootsofaction.com/community-service-ideas-for-youth/ (why community service matters?).

STEP 4:

You can either make 3D printed objects to sell during the fund-raising event or you can customize special objects to give to the person you are thankful towards.

Some examples: a bottle opener, survival whistle, cable holder, phone stand, fidget spinner, key ring, stickers, or decorative pieces. These are the materials that people use on an everyday basis and are affordable.

STEP 5:

Assign each group member with a different roll. You will need a project coordinator, project engineer, quality assurance person and a sales person.

Project Coordinator- Make sure everyone is on task. Communicate between the other team members. Get all the materials ready.
Project Engineer- Find the 3D design or model one. Print all the objects. Make sure machines are working properly.
Quality Assurance- Get materials off printer and look over to make sure there are no flaws.
Sales- Know the uses of the product. Price product based on research of similar objects or to recoup resources used.

STEP 6:

Now that you have picked your roles, think about the quantity of items you need to produce and your timeline.

STEP 7:

Project engineers, you can search some printable items in the Thingiverse or you can model your own object using CAD software like Tinkercad.

NOTE

It should be noted that makerspace is a place open to use for the public, so only a single person or a group cannot hold it for long hours. It also might not be feasible to print materials in large quantities. Hence, it is the responsibility of the group to decide the right time to book the space and equipment for the maximum usage.

DISCUSSION

- Share your thoughts on how and why you selected specific materials for the project. For example, the dynamics of group decision
- How did you arrange your printing schedule? Or booking makerspace equipment. What worked best?
- What were the challenges and how did you address them?
- What was the good aspect of working in a team?
- How are you going to make use of printed materials in your fund-raising event? (You can think of other activities. Fund raising event is just for an example) How is it going to benefit the cause?
- How did this overall project make you feel?

PHASE 2: PROJECT IMPLEMENTATION

STEP 1:

Finalize the event day

STEP 2:

Identify organizations and people you need to collaborate with for the event (For example: booking the venue, preparing and distributing flyers).

STEP 3:

Assign communication tasks to different team members and start communicating with those organizations and people.

STEP 4:

BIG DAY: EVENT DAY!