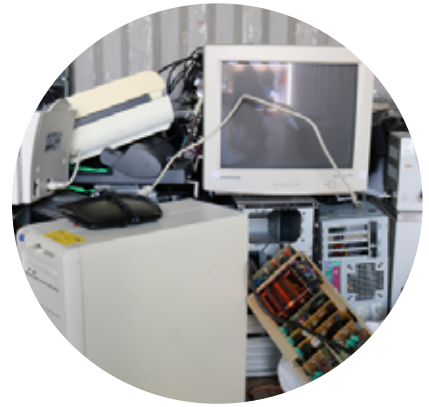


# ACCESS TECH Student Reuse Event: Understanding Student Motivation & Experience in Upcycling Technology



Donated technology from McMaster University  
 Photo credit: Jessica Radko

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## Overview

Given that the current technological industry follows a linear economic model, the end result leads to electronic waste with few sustainable resolutions to mitigate the environmental impacts.<sup>1</sup> Upcycling — upgrading and recycling — is a way to reduce electronic waste<sup>2</sup> and is a method employed by McMaster University. The ACCESS Tech Initiative at McMaster aims to collect, reuse, and donate technology to community members in need.<sup>3</sup> Following electronics collection and hard drive sanitization, the highest quality items are donated to community members in need. All remaining items, many of which are still of great quality, are offered to students during the ACCESS Tech Student Reuse Event. Our goal was to enhance the Student Reuse Event and to improve the student experience by understanding the underlying motivations of students in upcycling technology.

## Objectives

1. Collect data on the student experiences of upcycling technology
2. Analyze the data and identify common themes
3. Refine findings and present recommendations to decision-makers

## Reporting

To achieve our first objective, we developed five core interview questions that focused on students' experience at the event, if they were looking for something specific, what they hoped to use the technology for, their perceived value of the event, and feedback to improve future events. We attended the ACCESS Tech Student Reuse Event on September 29th, 2022, and recruited 21 students to participate in our interview. Interview data was collected through either an audio recording or a hand-written transcription.

To achieve our second objective, the transcribed interview data were analyzed to identify key themes. Each student researcher reviewed their interview transcriptions and coded the data accordingly. Using qualitative thematic analysis, we came up with two distinct groups for the themes: experience and motivation. After, we counted the prevalence of each code across all interviews and recorded the most prominent ones. This was summarized into four key themes under the motivation category and three key themes under the student experience category.

To achieve our third objective, we refined our findings and presented them to the ACCESS Tech working group on March 15th, 2023. During the presentation, we proposed three recommendations based on the findings of our research, which are to implement a time-slot system where students sign up and come to the event at specific times, to broaden the list of items being offered to upcycle, and to increase the purchase of technology with modular designs at McMaster University. These recommendations target the improvement of student experience and the promotion of circular economic practices.

## Collaborators

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