

SCIENCE FAIR 2024

LOGBOOK

Abrar Almishri
Research Project

Issued: October 23rd
Finalized: March 5th

October 23rd → I had a thorough conversation with my father about what I should do for my science fair project. I expressed how I wanted to do something related to economic science and that merged us into the conversation of Inflation and a recent radio story we heard about people having to choose between mortgage and food.

I considered doing a project on how famous food brands market but it felt too bland, so I thought more about budgeting in general.

December 1st → The Science fair was introduced and I chose to work solo, along with finalizing my topic: Affordability Rates of University Students. I started doing some rough research on Universities in Alberta.

December 5th → Over the course of that week, I thought about possible survey questions and decided on my four sections: Basic Information, Finances, Housing and Lifestyle.

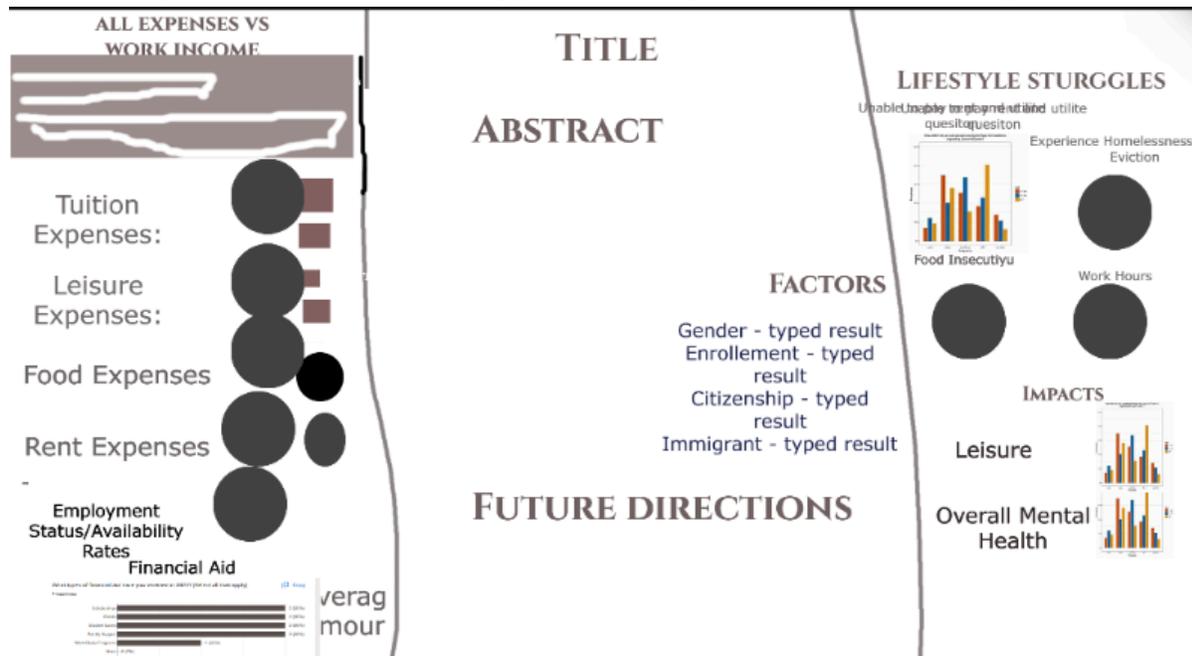
December 15th → I began to come up with the survey questions themselves. I wrote down scrap questions on paper and took a few days to consider what questions would be meaningful.

December 19th → I compiled everything onto a Google Form, designed it into sections and sent the rough copy to my Dad.

December 25th → My dad sent me his revisions and comments about my survey. I spent the next few days shortening the questions, switching things around and editing. I had to ensure the questions would be meaningful.

January 10th: I took a short break from the Science Fair to work on my other projects and extracurriculars. However I continued to work on my survey, while also coming up with the rough

layout for my trifold. It wasn't a final copy and it was quite messy, but it was a good start.



January 16th - My Dad helped me design a poster flier to hand out to students. I made my version first, which was all pretty with a QR code maker I found online but my dad just ended up printing his own version. It was everything I wrote, just without the cool purple background design. It's okay though, I don't mind- it was still my work.

January 17th - My older brother Ali offered to help by taking a dozen of my posters and hanging them up around campus. Azza and Aizah also recommended my survey to people they knew, and my dad gave a poster or two to random students he met at work. In the end, I got 4-5 responses and a hunch of feedback to decrease the length of my project questions.

January 23rd - Preparing to hand flyers out, my dad gave me a suggestion. To motivate students, I could add a little headline saying that if they share their thoughts, they could win a \$10 gift card. Then no matter how long it is, they'll have an incentive if they wish. We added it to the top of my poster headline in bright green.

January 24th - After finally refining my project to the best I could, I set out on my first expedition. We went around 6:00 pm, after praying Asr and eating dinner. We wandered the University of Calgary plaza and started from the Olympic Oval. I found a few students at this calm staircase area plaza to test out my shyness. It was easier than interviewing people for my last year project.

Then I went to a student hub area with three floors and went around the first 2-3 floors handing them out to people in groups. I found a Palestine conference going on, which I thought was really cool!

. Students were coming up to me, saying the QR code was asking them to pay. Based on what their screen looked like- and knowing that I tested it out myself several times- I thought it was simply a problem with their app.

After giving out around 50 flyers, another person showed me their screen with the same issue. The fact it was repetitive meant something was wrong and as I looked into it, I realized what it was.

The little QR code maker I found online was one of those shady, free trial apps that only let 4-5 people scan it before charging you to renew it. I was incredibly frustrated, knowing that I just handed out 50 useless flyers.

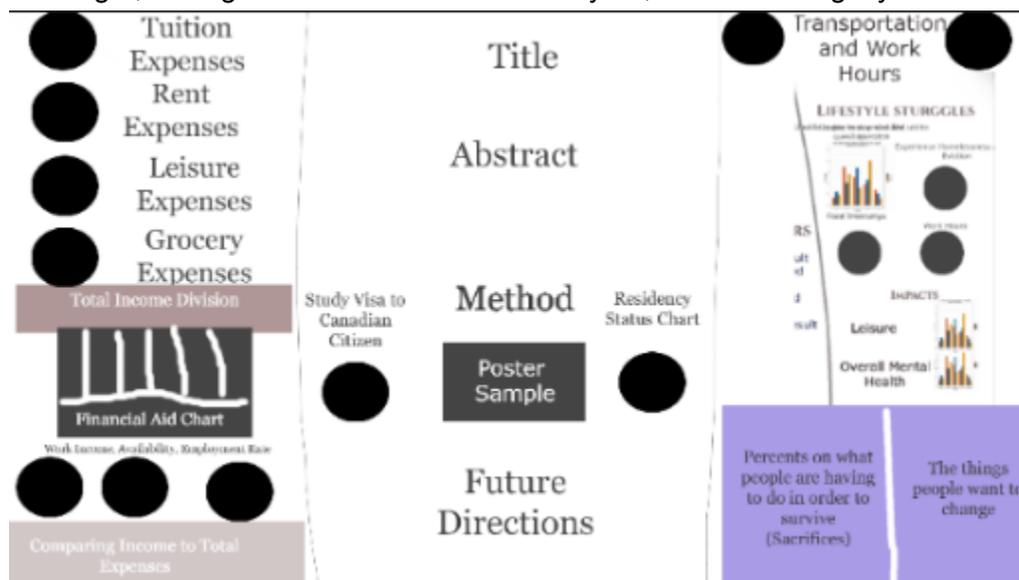
After my little disaster, we went to two different dollaramas to find my trifold, along with some decorative markers.

I went home knowing I had to do two things:

The first was to get a new QR code, in which my older brother Ali helped me with. He's studying Computer Science and managed to just code me my own custom code so it had no other alternate sites attached to it.

The second thing was to add a link onto the poster- just in case we ran into an issue where the code was glitching again. This way, if they can't scan, I can have some bare hope for responses.

That night, I designed a second draft trifold layout, which was slightly better.



January 25th - Right after basketball practice, we went on our second expedition, around the same timeframe. I picked this time of day because nobody was particularly occupied. Everyone who chooses to come is in a peaceful mood, relaxing with their friends and studying. Nodies in a rush for classes. My dad printed me out 100 flyers, and I began. I went back to the same hub, used all three floors, then moved on to the library. Some floors were incredibly quiet, so quiet I got nervous to disturb the peace. On one floor, there was a cafe, so it was a decent split of quiet and little conversation. I even met these two girls who were really encouraging and gave

me their own advertisement in return. On one of the library floors, everyone was yelling and messing around, which we can live up to the interpretation of whether that is good or not. I met a guy who offered to post it in his large group chat, which helped a lot! After a solid hour, I handed out all of my flyers successfully and went back home to find 70 responses in my inbox! That was way more than I expected.

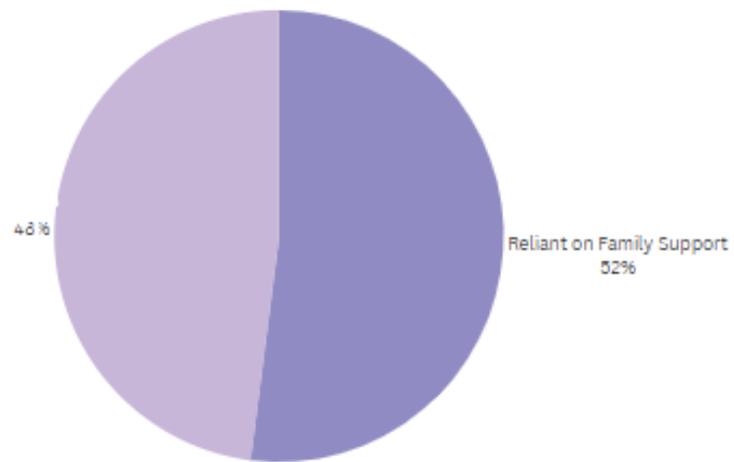
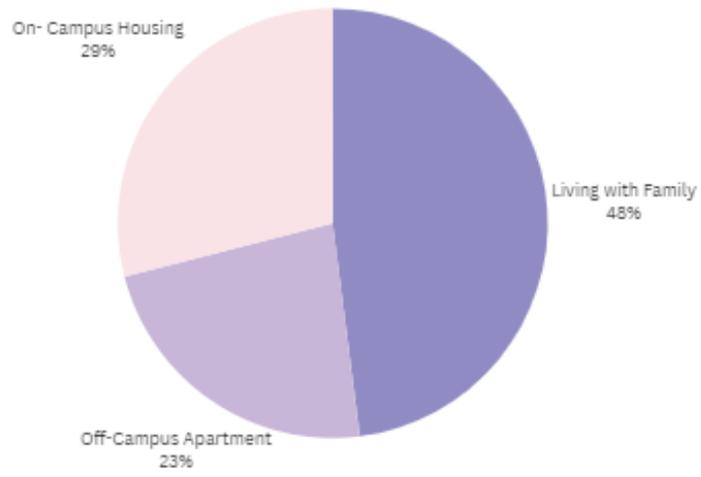
January 26th - Now I'm at 91 responses. I got feedback from my science teacher, Ms Deb on my layout and abstract. She approved of it, agreeing that it was good and besides a few sentence structure flips, there wasn't much she had to say about it. I emailed my Dad the same layout, and he told me that it might be a little too info-heavy. For a project, it's better to have a light layout with only the most mind-breaking details. I agreed, so I switched it up again

January 27th -29th - I turned all my data into graphs and extracted what I thought was valuable information. I figured that I could take everything from my second layout and just sum it up. For example, instead of splitting up how much was paid for tuition, rent, leisure and groceries, I could make a comparison graph between the total expenses versus how much they were making. I made an entire slideshow to submit to my teacher to prove my data analysis, but I only wanted to select a few.

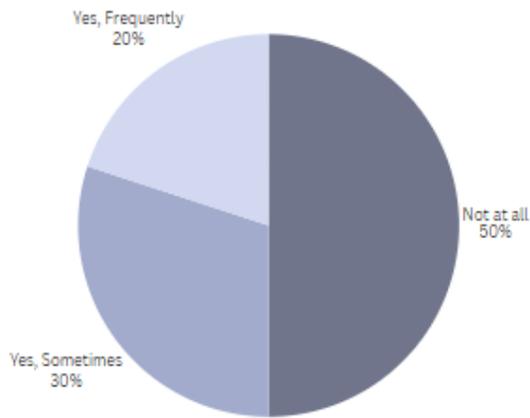
January 30th- I now established a solid 96 responses. I chose to present data on the following things:

- ★ Total Income compared to their Total Expenses
- ★ Study Visa students having to pay extra compared to Canadian Citizens
- ★ The food insecurity rates of students
- ★ How much students are reliant on their families. This was to be presented by showing how much financial aid they expect from families and how much of them are living with family.
- ★ What students are doing to accommodate with the heavy inflation
- ★ What students believe should be done about their issues.

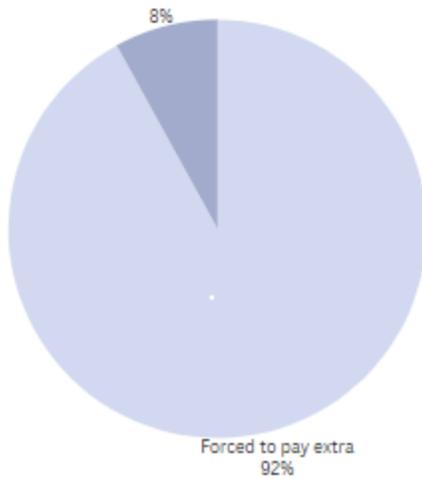
I made the following Pi Graphs →



Has anyone ever experienced food insecurity?



Study Visa Students



And made little info squares to present what students want done about their issues and what they've been doing to cope with it.

Needs for Action
(Suggestions to improve)

- A strong 65% of respondents declare a need to lower tuition costs
- Roughly 50% of respondent want more scholarship and grant opportunities
- Approximate 16% of Respondents call for more job opportunities and 15% request Governmental intervention (subsidies, tuition freezes or increased funding)
- Around 8% of Students want more awareness and opportunities regarding financial aid

International Students are simply calling for more attention on their dilemmas. Their fees are the highest and yet their jobs are the least prioritized.

Sacrifices

(What are people doing to accomodate)

Over 50% of people are cutting their expenses

Roughly 32% of people cut down on entertainment and leisure activities.

Nearly 30% are increasing their work hours

Approximately 16% are being forced to adjust their living arrangements

Other Common Tactics include

- Consistent Dependency on Parents
- Buying in Bulk, Cooking at home and scavenging for sales
- Desperately securing new higher paying jobs
- Eating Less (therefore losing more weight)
- Walking more

January 31st- February 1st:

I reviewed my idea and made a third trifold layout →

Total Income: Less than 5K a year

Total Spendings: \$14,800 - \$23,600 a year

The following expenses make up their total spendings:

- Tuition takes up 47%
- Rent takes up 41%
- Leisure and Groceries take up 12%

Title

Abstract

Method

Poster Sample

Future Directions

Percents on what people are having to do in order to survive (Sacrifices)

The things people want to change

Residency family support

●

●

family support

●

In this layout, I took out the study visa graph. This was because that night, I made a fake layout of my trifold and went over it with my dad. He liked a lot of it, but said that the study visa graph wasn't particularly eye-catching. Prior to this project, I didn't know International students had to

pay extra to go to University, so I put it as my personal discovery. But to present that to the judges wouldn't exactly be pleasant since it's an obvious fact. I also did the total spending chart incorrectly (as in I didn't calculate it properly) So clearly, I wasn't as ready as I wanted to be.

February 2nd: I worked on refining my charts and making some edits to my design. I decided to switch out the study visa graph with a little table I made recording the financial aid rates- attached to it being the employment rates. Figuring out that 70% were working and were still struggling was mind-blowing. I sent my papers to be reprinted and after a minor glue fiasco with my previous trifold, my mother bought me a new trifold just in case my lack of artistic ability failed with the first one. (Azza, my friend, made me two paper roses to decorate with!!) I wasn't as productive today since I always have busy Friday schedules, but I made it work.

February 3rd: I finalized everything regarding my printing. Half of it I already had printed from the night before, so I cut those out and laid them temporarily on my trifold. Tomorrow, I plan to receive the second piece in which all I have to do is put them on my trifold and I'm complete.

February 4th: Throughout this project, I've been consistently working on a science fair script because my teacher's forcing me to. In my opinion, it isn't completely helpful because I often just memorize my key points and elaborate from there- but now I have to design an entire script with key vocabulary. I finished designing my trifold after getting my printouts, and now it's fabulous. I've also finished my useless script. I've completed my project!!!!

February 15th: I have an official month between now and the CYSF deadline. The thing is though, my dad told me that my project as it is now is more than enough

ACKNOWLEDGMENTS

Thanks to Azza and Aizah, for tolerating my pestering and convincing University Students they knew to do my survey.

Thanks to Ms Deb, for being patient as I skimmed over the presentation deadline. I promise it was worth it.

Thanks to my older brother Ali, for making my QR code.

My biggest thanks go to my Dad. He was there with me every step of the way, from brainstorming the project idea to helping me get responses. Without him, I'd

probably still be sitting here, wondering when I'd get started.

Shortened Version of Bibliography

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