

Calgary Youth Science Fair
Foundations for the Future, Charter Academy
Arshnoor, Gurleen – Logbook
Started: October 16, 2024

October 2024

October 16, 2024

- Deciding on the topic of the science fair
- Main topic/general = neurology/psychology
- Neuroplasticity - Dementia patients: Why do they lack this factor?
- The low attention span of teenagers vs dementia patient
 - Which is worse and why? What it does to the generation
- Memory scans-brain

October 18, 2024

- Placebo effect
- Brainwashing
- Is the placebo effect self-brainwashing?

October 22, 2024

- Went through the scientific method

Experiment	▼	Abductive reasoning	▼	Applied research	▼
Basic research	▼	Descriptive research	▼	Hypothesis	▼
Observation	▼	Qualitative research	▼	Quantitative research	▼

- Different types of the Scientific method
- Experiment: An experiment is a procedure to support or refute a hypothesis, or determine the efficacy or likelihood of something previously untried.
- Basic Research: **Basic research** is also called “pure” science, which is grounded in the scientific method and is not expected to have any immediate practical application

November 2024

November 6th, 2024

- Science fair check-in during school hours
- Minimised discussion on further research

November 10th, 2024

- Are there similarities in graphology in individuals convicted of related crimes?

November 13th, 2024

- Science fair check-in during school hours
- Deadlines discussion

November 14th 2024

- Finalizing question/hypothesis
- Changing the question to be more specific.
- Are there similarities in graphology in individuals convicted of alike crimes?

November 20th, 2024

- Science fair check-in during school hours
- (Weekly check-in)

November 21, 2024

- Finished filling out the ethics due form, and basic project info

November 27, 2024

- Science fair check-in during school hours

December 2024**December 4th, 2024**

- Weekly check-in, and further reminders of science fair/due dates.

December 11th, 2024

- Science fair check-in during school hours
- Deadlines discussion

December 18th, 25th, 2024

- Science fair check-in during school hours
- Deadlines discussion

January 2025**January 3, 2025**

- Researched the history of graphology, what is graphology, and what is a pseudoscience.
- Looked into forensic sciences and the basics of it
- Figuring out how to manage our time – Basing the probability of receiving actual samples to carry out an experiment.

January 6th 2025

- Finalized Question.
- Starting the introduction to Graphology

- Looking at different types of slants/figures in graphology therefore to pertain better knowledge.
- Finding different sources to help our understanding.

January 8th, 2025

- Logbook check with Ms. Mckowen
- Further Guidance based on Science Fair/Research
- More into background research: What to consider when analyzing graphology.
- Different sample sizes/requirements.
- Upper case, Lower case, Central case analysis
- Indicators of handwriting and basic Origin
- Relating the origin of forensic science to psychology and the brain further intact our research.
- Pseudoscience further research

January 9th, 2025

- Further analysis of size and characteristics between handwriting samples
- Connecting the size of handwriting to psychology and how a person may act/their characteristic traits
- Starting the History of Graphology and dating back to the 1600s

January 15th, 2025

- Science fair check-in during school hours
- Logbook check and brainstorming/time management to meet the deadlines

January 22nd, 2025

- Science fair check-in during school hours
- Deadlines discussion

January 29th, 2025

- Tri-fold order and slight planning/preparation
- Science fair check-in during school hours
- Deadlines discussion and what to expect at the convention

January 30th, 2025

- Extended work on background/history research on graphology and psychology
- Timeline for everything
- Dating back to the 300 B.C

January 31st, 2025

- Connection to the brain analysis
 - Connecting the brain with graphology and a detailed description of the brain
 - Brain – bio-types
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February 2025

February 1st, 2025

- Handwriting pressure analysis
- The pressure of the stroke indicators
- Firm, loose, light, deep, alternating, soft analysis
- Connecting each to the brain and human characteristics
- Depth research on the brain and different processes/hand and motor analysis
- FMRI

February 2nd, 2025

- In-depth analysis of the brain (primarily left side)
- Brain scans of where handwriting correlates
- Different Areas

February 3rd, 2025

- More brain research and analysis
- Broca's Area (brain)
- Wernickes' Area
- Visual Cortex, Hippocampus, Frontal Lobe, Left Hemisphere

February 5th, 2025

- Discussed deadline dates, and tri-fold ordering with Ms. Fan
- Science fair check-in during school hours
- Logbook check and brainstorming/time management to meet the deadlines

February 9th, 2025

- Starting to find similarities in personality traits and behavior
- Deadline and reminder for CYSF

February 12th, 2025

- Science fair check-in during school hours
- Logbook check and brainstorming/time management to meet the deadlines

February 13th, 2025

- Extending research on connections/similarities in personality traits and behaviour
- Top 5 most common personalities
- Comparison to criminal personality traits/behaviours.
- Different pathways/childhoods that may affect an individual to pursue violent crimes
- The personality effect of each.

February 18th, 2025

- Analysis of personality change throughout the development of children/individuals
- The possibility of a strong change in personality.

- Similar behaviours are shown in criminals.

February 19th, 2025

- Looking around for more research sites and samples
- Science fair check-in during school hours
- Logbook check and brainstorming/time management to meet the deadlines

February 24th, 2025

- Figuring out further steps to increase our knowledge and background research.
- Extending research on the brain
- Analysis of criminals, locating samples of handwriting.

February 26th, 2025

- Science fair check-in during school hours
- Logbook check and brainstorming/time management to meet the deadlines

March 2025

March 5th, 2025

- Science fair check-in during school hours
- Logbook check and brainstorming/time management to meet the deadlines
- Finding solid database

March 7th, 2025

- Looking for guidance on to further complete our research
- Maybe the question changes/ the consideration
- Handwriting sample database.
- Handwriting samples analysis and using information collected to determine personality traits

March 8th, 2025

- Slight confusion/stuck on how to continue the science fair
- Database
- Reaching out to different forensic labs requests for samples of handwriting

March 9th, 2025

- Differences between non-offenders and offenders (criminals)
- Personality puzzles and friendship types
- Handwriting traits in criminals

March 12th, 2025

- Science fair check-in during school hours
- Logbook check and brainstorming/time management to meet the deadlines
- Different characteristics are needed on the tri-fold.
- Tri-fold arrival

March 14th, 2025

- Continuing the analysis of different samples
- Samples were all completed anonymously.
- Slight change in the questions

March 19th, 2025

- Completing the science fair portal and finalizing everything
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(Spring break used to work on Trifold.)