PFE Exit Survey Report

June 4, 2024

Contents

9-12 Survey Results	. 2
Cluster Analysis	.4
K-8 Survey Results	.7
Mentor Survey Results	. 8

9-12 Survey Results

Of the 220 surveyed PFE 9-12 participants

- **98.2%** Believe they understand the PFE requirements.
- **90.4%** Feel the requirements for the PFE program are reasonable.
- **90.0%** Would recommend PFE to friends and classmates.
- **70.9%** Enjoy having different reflection questions each week.

My Relationship With My Mentor Has Grown More Important To Me Strongly Agree 58.6% 1.4% Strongly Disagree 40.0%



I Plan To Stay In Contact With My Mentor After PFE Ends Strongly Agree





Cluster Analysis

The following graph presents an analysis of survey responses using clustering techniques, visualized through a heatmap. Clustering is a statistical method used to group data points that exhibit similar characteristics.¹ In this context, it allows us to identify trends in answers to survey questions. It is important to note that the values in this graph represent standard deviations from the mean. Thus, while a certain cell may have a negative value, this does not imply that that cell's average is negative, but rather that it falls below the mean.

For the short answer responses, a numeric value was generated for each response using sentiment analysis. Sentiment analysis is a language processing technique that scores the positive and negative emotional sentiment in a piece of text.² For this process, NLTK's sentiment analysis library was used.

The heatmap illustrates three clusters of survey responses. Each row represents a cluster, and each column corresponds to a specific survey question. The color intensity indicates the strength and direction of the association between the clusters and

¹ <u>https://www.geeksforgeeks.org/clustering-in-machine-learning/</u>

² https://www.geeksforgeeks.org/what-is-sentiment-analysis/

the questions: red signifies a strong positive association, blue indicates a strong negative association, and lighter shades represent weaker associations.



General Findings

Several notable findings emerge from this heatmap. Firstly, the question regarding understanding PFE requirements appears to strongly influence students' survey responses, with higher ratings on this question correlating with more positive responses across other areas. Additionally, questions related to building a relationship with the mentor, intentions to maintain contact, and the perceived value of time spent together with mentors significantly impact the responses to other survey questions, with lower ratings on these questions correlating with less favorable responses overall.

Cluster 0 (82 Responses)

Respondents in Cluster 0 expressed ratings below the mean in all respective questions.

Cluster 1 (66 Responses)

Respondents in Cluster 1 expressed ratings above the mean in all respective questions.

Cluster 2 (72 Responses)

Respondents in Cluster 2 show mixed ratings in certain questions but stick closer to the mean than the other clusters.

K-8 Survey Results

From the 518 surveyed PFE K-8 parents

- 97.6% Report that their children look forward to seeing their mentor each week.
- 90.4% Think their child will continue seeing their mentor after PFE ends.
- **90.0%** Think their child learned something valuable from their mentor.
- 93.6% Would like their child to continue PFE next year.
- 99.4% Would recommend PFE to other families.
- 100% State they understand the PFE requirements.
- 97.6% Believe the PFE requirements are reasonable.



Note: Multiple choices could be selected for this question

Mentor Survey Results

From the 125 surveyed PFE mentors

- 97.6% Believe they helped their mentee grow as a person.
- 87.2% Understand their role as mentors.
- **85.6%** Plan to continue their role as mentors.
- **75.2%** Report adequate communication from the PFE team.







Being a Mentor Has Positively Influenced my State of Mind $\underset{Agree}{\mathsf{Agree}}$



