| **Concept and Analysis Guide** | |
| --- | --- |
| **Study name** | UCR NRT SPEAKS |
| **Date of plan** | 01/31/23 |
| **Analysis plan developed by** | Elizabeth Svoboda & Alicia Castro |
| **Team members assisting with analysis** | Zack Crowley & Edgar Chambers V |
| **Report** | Annual Report |

| **Data Set Details** | |
| --- | --- |
| **Data sets used (link)** | [Baseline survey data](https://docs.google.com/spreadsheets/d/1O0eSLbG1JCx5nQPYKGAzbZo5I0kdqltM/edit?usp=drive_link&ouid=115334214965848245367&rtpof=true&sd=true)  [Annual survey data](https://docs.google.com/spreadsheets/d/1ctmpaX0mhyIbKlB755sdsz_p2db7SkXD/edit?usp=drive_link&ouid=115334214965848245367&rtpof=true&sd=true) |
| **Codebooks (link)** | [Baseline survey](https://docs.google.com/spreadsheets/d/1IY5FKiEbdE5xSyP6MX94DAdw7hO2YYrd/edit?usp=drive_link&ouid=115334214965848245367&rtpof=true&sd=true)  [Annual survey](https://docs.google.com/spreadsheets/d/1DL1GNv35XsLSoPU9nVV4so0fAKaw5k-R/edit?usp=sharing&ouid=115334214965848245367&rtpof=true&sd=true) |
| **Analysis software used** | R |
| **Packages needed** | tidyverse, ggpubr, rstatix , psych |
| **Working directory** | G:\1335\_UCR-NRT\Phase 2 - Evaluation |
| **Exclusion criteria for participants** |  |

| **Timeline** | | |
| --- | --- | --- |
| **Date** | **Task** | **Assigned to:** |
| 01/31/23 | Review Concept and Analysis Guide | Elizabeth/Alicia |
| 02/01/23 | Begin data analysis | Alicia |
| 06/01/23 | Turn in all pending R markdowns | Alicia |
| 06/01/23 | Submit all pending data visualizations | Alicia |
| 06/30/23 | Submit report for SE review | Elizabeth |
| 07/05/23 | Submit report for internal review | Elizabeth |
| 07/15/23 | Submit report to PI | Elizabeth |

| **Instructions:** | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| * Please submit R Markdown in HTML or PDF format. * For pre-post comparisons use a matched sample, for all other comparisons use the full sample. * ^ indicates items to be reverse coded. * For visuals, if n<10 use number, if equal to or >10 use percentages. * For open ended responses, please provide findings in a separate word or excel document. * Do not perform any analysis shaded in gray. * Feel free to change any of the visual types if you feel another visual works better. | | | | | | | | |
| **Baseline and Annual survey** | | | | | | | | | |
| **Participant Descriptives** | | | | | | | | | |
| **Data Source** | **Variable ID** | **Survey question** | | **Scale** | | **Analysis type** | **Data viz** |
| Annual | Gender\_post | With which gender do you most closely identify? | | 1= Male  2= Female  3= Other  4= Do not wish to specify | | Frequencies (n and %) | Combined demographics table |
| Annual | ethnicity\_pre | With which ethnic or racial background do you most closely identify? [Check all that apply] | | Check all that apply:   * Hispanic or Latino * American Indian or Alaska Native * Asian * Black or African American * Native Hawaiian or other Pacific Islander * White (Caucasian) * Prefer to disclose * Do not wish to specify | | Frequencies (n and %) |
| Annual | first\_gen | Are you a first-generation college student? | | Yes  No  I’m not sure | | Frequencies (n and %) |
| **Goal 1: Progress made toward producing new knowledge and research at the interface of STEM and public policy** | | | | | | | | | |
| **Improved trainees’ skills in STEM and public policy (e.g., context of data, scientific interpretation, public policy, societal impact)** | | | | | | | | | |
| **Data Source** | **Variable ID** | | **Survey question** | | **Scale** | **Analysis type** | **Data viz** |
| Baseline & Annual | knowledge\_pre  knowledge\_post | | With your main STEM field of interest in mind, to what extent are you knowledgeable in conducting public policy research in that STEM field? | | 1 = Not knowledgeable at all  2 = A little knowledgeable  3 = Somewhat knowledgeable  4 = Very knowledgeable  5 = Extremely knowledgeable | Frequencies (n and %)  Pre/post comparison: Examines scores to see if there is significant change (t-test or Wilcoxon) |  |
| Baseline & Annual | Confidence  pre:  confidence\_pre\_1  confidence\_pre\_2  confidence\_pre\_3  confidence\_pre\_4  confidence\_pre\_5  confidence\_pre\_6  confidence\_pre\_7  confidence\_pre\_8  confidence\_pre\_9  confidence\_pre\_10  confidence\_pre\_11  post:  confidence\_post\_1  confidence\_post\_2  confidence\_post\_3  confidence\_post\_4  confidence\_post\_5  confidence\_post\_6  confidence\_post\_7  confidence\_post\_8  confidence\_post\_9  confidence\_post\_10  confidence\_post\_11 | | Please rate your level of confidence in performing the following research tasks on a scale from not at all confident to extremely confident.   * Research relevant background literature * Identify a scientific problem * Develop testable and realistic research questions * Develop a falsifiable hypothesis * Design an experiment/Create a research design * Conduct technical execution of experiments * Use appropriate methods to analyze results * Conduct quantitative data analysis * Develop appropriate visual representations of data * Interpret findings and making recommendations * Scientific or technical writing | | 1 = Not at all confident  2 = Slightly confident  3 = Somewhat confident  4 = Very confident  5 = Extremely confident | Frequencies (n and %)  Pre/post comparison: Examines scores to see if there is significant change (t-test or Wilcoxon)  Examine individual items to see if anything is notable | Stacked bar chart for pre and post scores |
| Baseline & Annual | Ability  pre:  ability\_pre\_1  ability\_pre\_2  ability\_pre\_3  ability\_pre\_4  ability\_pre\_5  ability\_pre\_6  post:  ability\_post\_1  ability\_post\_2  ability\_post\_3  ability\_post\_4  ability\_post\_5  ability\_post\_6 | | Please rate your ability to do the following on a scale from minimal to extensive.   * Judge the value of new information or evidence presented to me * Approach complex issues in a variety of ways * Weigh both sides of an argument * Identify analogies between theories * Eliminate extraneous variables when designing experiments * Rephrase the arguments of others in my own words | | 1 = Minimal  2 = Slight  3 = Moderate  4 = Good  5 = Extensive | Frequencies (n and %)  Pre/post comparison: Examines scores to see if there is significant change (t-test or Wilcoxon)  Examine individual items to see if anything is notable | Stacked bar chart for pre and post scores |
| Baseline & Annual | Impact  pre:  impact\_pre  post:  impact\_post | | To what extent do you agree that you have developed skills during your SPEAKS training that have improved your ability to positively impact society through STEM public policies? | | 1 = Strongly disagree  2 = Disagree  3 = Neither agree nor disagree  4 = Agree  5 = Strongly agree | Frequencies (n and %)  Pre/post comparison: Examines scores to see if there is significant change (t-test or Wilcoxon) |  |
| Annual | impact\_post\_text | | [LOGIC: If answered agree or strongly agree to previous question] Please describe the specific skills that you have developed. | | OE | code for themes |  |
| Annual | policy\_post | | To what extent do you agree that advancements in STEM fields have led to positive societal impact through the implementation of public policy? | | 1 = Strongly disagree  2 = Disagree  3 = Neither agree nor disagree  4 = Agree  5 = Strongly agree | Frequencies (n and %) |  |
| Annual | policy\_post\_text | | [LOGIC: If answered agree or strongly agree to previous question] Please describe the specific advancements that have led to positive societal impact through the implementation of public policy. | | OE | code for themes |  |
| Baseline & Annual | Networking/collab:  pre:  collab\_pre\_1  collab\_pre\_2  collab\_pre\_3  collab\_pre\_4  collab\_pre\_5  collab\_pre\_6  collab\_pre\_7  post:  collab\_post\_1  collab\_post\_2  collab\_post\_3  collab\_post\_4  collab\_post\_5  collab\_post\_6  collab\_post\_7 | | Please rate your ability to do the following on a scale from minimal to extensive.   * Participate in activities/discussions that will enable me to meet and learn from others * Network with other students and faculty to facilitate future collaborative work * Ask questions to generate discussion with others * Share ideas and information with others * Work with individuals from other fields on research projects * Discuss ideas with individuals from other fields to make joint research-related decisions * Share innovative ideas and solutions with other students and faculty | | 1 = Minimal  2 = Slight  3 = Moderate  4 = Good  5 = Extensive | Frequencies (n and %)  Pre/post comparison: Examines scores to see if there is significant change (t-test or Wilcoxon)  Examine individual items to see if anything is notable | Stacked bar chart for pre and post scores |
| **Goal 2: Progress made toward enhancing trainees’ workforce development in the fields of STEM and public policy through the development of professional skills and broadening participation** | | | | | | | | | |
| **Improved trainees’ professional skills (written and oral communication, management, time management, teamwork/conflict resolution, ethical decision-making etc.)** | | | | | | | | | |
| **Data Source** | **Variable ID** | | **Survey question** | | **Scale** | **Analysis type** | **Data viz** |
| Baseline & Annual | Discussing own research topic with others  pre:  discuss\_pre\_1  discuss\_pre\_2  discuss\_pre\_3  discuss\_pre\_4  discuss\_pre\_5  post:  discuss\_post\_1  discuss\_post\_2  discuss\_post\_3  discuss\_post\_4  discuss\_post\_5 | | Please rate your ability to do the following on a scale of minimal to extensive.   * Explain my research in a variety of different ways, depending on my audience * Take complex concepts and information and explain them in a way that is understandable to people who are not familiar with the subject * Confidently give a conference talk * Talk about my research to people outside my field while keeping them interested in the topic * Talk confidently about my research to colleagues in my field | | 1 = Minimal  2 = Slight  3 = Moderate  4 = Good  5 = Extensive | Frequencies (n and %)  Pre/post comparison: Examines scores to see if there is significant change (t-test or Wilcoxon)  Examine individual items to see if anything is notable | Stacked bar chart for pre and post scores |
| Baseline & Annual | Understanding others’ research  pre:  understand\_pre\_1  understand\_pre\_2  understand\_pre\_3  post:  understand\_post\_1  understand\_post\_2  understand\_post\_3 | | Please rate your ability to do the following on a scale of minimal to extensive.   * Ask questions after someone presents information and/or findings to me * Talk to other researchers to learn about new ideas * Make mental or physical notes of key points when listening to someone speak | | 1 = Minimal  2 = Slight  3 = Moderate  4 = Good  5 = Extensive | Frequencies (n and %)  Pre/post comparison: Examines scores to see if there is significant change (t-test or Wilcoxon)  Examine individual items to see if anything is notable | Stacked bar chart for pre and post scores |
| Baseline & Annual | Time management skills:  pre:  time\_manage\_pre\_1  time\_manage\_pre\_2  time\_manage\_pre\_3  time\_manage\_pre\_4  post:  time\_manage\_post\_1  time\_manage\_post\_2  time\_manage\_post\_3  time\_manage\_post\_4 | | Please rate your ability to do the following on a scale of minimal to extensive.   * Budget time for a project * Budget time for specific tasks within a project * Prioritize tasks * Balance my time between multiple projects | | 1 = Minimal  2 = Slight  3 = Moderate  4 = Good  5 = Extensive | Frequencies (n and %)  Pre/post comparison: Examines scores to see if there is significant change (t-test or Wilcoxon)  Examine individual items to see if anything is notable | Stacked bar chart for pre and post scores |
| Baseline & Annual | Teamwork/conflict resolution skills  pre:  teamwork\_pre\_1  teamwork\_pre\_2  teamwork\_pre\_3  teamwork\_pre\_4  teamwork\_pre\_5  post:  teamwork\_post\_1  teamwork\_post\_2  teamwork\_post\_3  teamwork\_post\_4  teamwork\_post\_5 | | Please rate your ability to do the following on a scale of minimal to extensive.   * Work in collaboration with others * Present my ideas to team members * Incorporate team member ideas into a project * Identify strengths of team members * Effectively resolve conflicts within a team | | 1 = Minimal  2 = Slight  3 = Moderate  4 = Good  5 = Extensive | Frequencies (n and %)  Pre/post comparison: Examines scores to see if there is significant change (t-test or Wilcoxon)  Examine individual items to see if anything is notable | Stacked bar chart for pre and post scores |
| Baseline & Annual | Ethical decision-making  pre:  ethics\_pre\_1  ethics\_pre\_2  ethics\_pre\_3  ethics\_pre\_4  ethics\_pre\_5  post:  ethics\_post\_1  ethics\_post\_2  ethics\_post\_3  ethics\_post\_4  ethics\_post\_5 | | Please rate your agreement with the following statements on a scale from strongly disagree to strongly agree:   * I understand the different aspects of ethical research * I am able to adhere to ethics in research * I know where to find resources on ethical research conduct * I am knowledgeable in ethical research conduct * I can conduct ethical research | | 1 = Strongly disagree  2 = Disagree  3 = Neutral  4 = Agree  5 = Strongly agree | Frequencies (n and %)  Pre/post comparison: Examines scores to see if there is significant change (t-test or Wilcoxon)  Examine individual items to see if anything is notable | Stacked bar chart for pre and post scores |
| **Framing Needs- and Stakeholder-Based Research** | | | | | | | |
| Baseline & Annual | frame\_pre  frame\_post | | To what extent do you agree that your SPEAKS training has improved your ability to frame research questions based on the needs in your field? | | 1 = Strongly disagree  2 = Disagree  3 = Neither agree nor disagree  4 = Agree  5 = Strongly agree | Frequencies (n and %)  Pre/post comparison: Examines scores to see if there is significant change (t-test or Wilcoxon) |  |
| Annual | frame\_post\_text | | [LOGIC: If answered agree or strongly agree to previous question] Please describe how your SPEAKS training has improved your ability to frame research questions based on the needs in your field. | | OE | Code for themes |  |
| Baseline & Annual | stake\_pre\_1  stake\_pre\_2  post:  stake\_post\_1  stake\_post\_2 | | Please rate your confidence level in the following statements on a scale from not at all confident to extremely confident.   * I am able to identify stakeholders relevant to my research interests * I am able to incorporate stakeholder perspectives into my research | | 1 = Not confident at all  2 = Slightly confident  3 = Somewhat confident  4 = Very confident  5 = Extremely confident | Frequencies (n and %)  Pre/post comparison: Examines scores to see if there is significant change (t-test or Wilcoxon)  Examine individual items to see if anything is notable |  |
| **Goal 3: Progress made toward developed and expanded institutional capacity to support the training of graduate students and implement societally beneficial, translational research** | | | | | | | | | |
| Implementing Socially Beneficial, Translational Research | | | | | | | | | |
| **Data Source** | **Variable ID** | | **Survey question** | | **Scale** | **Analysis type** | **Data viz** |
| Baseline & Annual | pre:  career\_path\_pre\_1  career\_path\_pre\_2  career\_path\_pre\_3  post:  career\_path\_post\_1  career\_path\_post\_2  career\_path\_post\_3 | | Please rate your agreement with the following statements on a scale from strongly disagree to strongly agree:   * I understand the day-to-day work related to career pathways in sustainable transportation * I am aware of the personal growth opportunities related to sustainable transportation career pathways * I am aware of the professional growth opportunities related to sustainable transportation career pathways | | 1 = Strongly disagree  2 = Disagree  3 = Neither agree nor disagree  4 = Agree  5 = Strongly agree | Frequencies (n and %)  Pre/post comparison: Examines scores to see if there is significant change (t-test or Wilcoxon) |  |
| Baseline & Annual | pre:  diversity\_pre\_1  diversity\_pre\_2  diversity\_pre\_3  diversity\_pre\_4  post:  diversity\_post\_1  diversity\_post\_2  diversity\_post\_3  diversity\_post\_4 | | Please rate your agreement with the following statements on a scale from strongly disagree to strongly agree:   * Individuals from diverse backgrounds are represented in sustainable transportation * Sustainable transportation creates an inclusive environment where everyone can thrive or contribute * Current transportation options in my community meet the needs of all residents * Do work that can “make a difference” in people’s lives | | 1 = Strongly disagree  2 = Disagree  3 = Neither agree nor disagree  4 = Agree  5 = Strongly agree | Frequencies (n and %)  Pre/post comparison: Examines scores to see if there is significant change (t-test or Wilcoxon) |  |
| Annual | diversity\_pre\_text | | Please explain your rating. | | OE | code for themes |  |
| Baseline & Annual | pre:  interest\_career\_pre\_1  interest\_career\_pre\_2  interest\_career\_pre\_3  interest\_career\_pre\_4  post:  interest\_career\_post\_1  interest\_career\_post\_2  interest\_career\_post\_3  interest\_career\_post\_4 | | Please rate your interest level with the following statements on a scale from not at all interested to extremely interested.   * I am interested in pursuing an academic career related to STEM * I am interested in pursuing an academic career related to public policy * I am interested in pursuing a non-academic career related to STEM * I am interested in pursuing a non-academic career related to public policy | | 1 = Not at all interested  2 = Slightly interested  3 = Somewhat interested  4 = Very interested  5 = Extremely interested | Frequencies (n and %)  Pre/post comparison: Examines scores to see if there is significant change (t-test or Wilcoxon) |  |
| **Implementing Socially Beneficial, Translational Research** | | | | | | | |
| Baseline & Annual | pre:  fairness\_pre\_1  fairness\_pre\_2  fairness\_pre\_3  fairness\_pre\_4  post:  fairness\_post\_1  fairness\_post\_2  fairness\_post\_3  fairness\_post\_4 | | Please rate your confidence level in the following statements on a scale from not at all confident to extremely confident.   * I am able to identify multi-context factors that may impact STEM research * I am able to conduct equitable research * I am able to develop policies that promote equity and fairness * I am able to implement translational research in STEM fields | | 1 = Not confident at all  2 = Slightly confident  3 = Somewhat confident  4 = Very confident  5 = Extremely confident | Frequencies (n and %)  Pre/post comparison: Examines scores to see if there is significant change (t-test or Wilcoxon)  Examine individual items to see if anything is notable |  |
| Baseline & Annual | contribute\_pre  contribute\_post | | To what extent do you agree that your SPEAKS training has improved your ability to conduct research that addresses societal needs and contributes to the greater good?\* | | 1 = Not confident at all  2 = Slightly confident  3 = Somewhat confident  4 = Very confident  5 = Extremely confident | Frequencies (n and %)  Pre/post comparison: Examines scores to see if there is significant change (t-test or Wilcoxon) |  |
| Baseline & Annual | pre:  career\_confidence\_pre\_1  career\_confidence\_pre\_2  career\_confidence\_pre\_3  career\_confidence\_pre\_4  career\_confidence\_pre\_5  career\_confidence\_pre\_6  post:  career\_conf\_post\_1  career\_conf\_post\_2  career\_conf\_post\_3  career\_conf\_post\_4  career\_conf\_post\_5  career\_conf\_post\_6 | | Please rate your confidence level in the following statements on a scale from not at all confident to extremely confident.   * I am able to do scientific research * I am able to craft public policy * I will obtain a PhD * I will succeed in an academic career related to STEM/public policy * I will succeed in a non-academic career related to STEM/public policy * I know what my career goals are | | 1 = Not confident at all  2 = Slightly confident  3 = Somewhat confident  4 = Very confident  5 = Extremely confident | Frequencies (n and %)  Pre/post comparison: Examines scores to see if there is significant change (t-test or Wilcoxon)  Examine individual items to see if anything is notable | Stacked bar chart for pre and post scores |
| **Formative Evaluation** | | | | | | | | | |
| **Science to Policy Course feedback** | | | | | | | | | |
| **Data source** | **Variable ID** | | **Survey question** | | **Scale** | **Analysis type** | **Data viz** |
| Annual | s2p\_course | | Have you completed the Science to Policy (S2P) course? | | Yes  No | Frequencies (n and %) |  |
| Annual | s2p\_satis | | Please rate your overall satisfaction with S2P course on a scale of very dissatisfied to very satisfied. | | 1 = Very dissatisfied  2 = Dissatisfied  3 = Neutral  4 = Satisfied  5 = Very satisfied | Frequencies (n and %) |  |
| Annual | s2p\_applic  s2p\_applic\_oe | | To what extent was the information presented in the S2P course applicable to your research?  Please explain your rating. | | Not at all applicable  Somewhat applicable  Moderately applicable  Very applicable  Extremely applicable  OE | Frequencies (n and %)  Code for themes |  |
| Annual | s2p\_useful\_oe | | Please describe the most useful aspect of the S2P course. | | OE | Code for themes |  |
| Annual | s2p\_improve\_oe | | Please provide any suggestions for improvements for the S2P course. | | OE | Code for themes |  |
| **Program feedback** | | | | | | | |
| **Data source** | **Variable ID** | | **Survey question** | | **Scale** | **Analysis type** | **Data viz** |
| Annual | activity\_post\_1  activity\_post\_2  activity\_post\_3  activity\_post\_8  activity\_post\_9  activity\_post\_10  activity\_post\_11  activity\_post\_12  activity\_post\_13 | | Please rate the usefulness of participating in the following activities during the half-day orientation in September prior to beginning of Fall quarter classes on a scale from not useful at all to extremely useful. If you did not participate in an event this year, please select “Did not participate.”   * SPEAKS 101: Overview of the SPEAKS Graduate Student Traineeship Program * Introductions and Q&A with SPEAKS Faculty and Advisory Board * DEI training - Ahmed Eldawy, UCR Associate Professor Computer Science & Engineering, BCOE * University Library Research & Technology Resources - Zhiwu Xie, UCR Assistant * Sustainable Transportation in Municipal Government - Nathan Mustafa, Deputy Public Works Director, City of Riverside * Discussion: What falls within the scope of sustainable transportation * Sustainable Transportation student research presentations from Osten Anderson Ph.D. Candidate; Jacqueline Garrido. Ph.D. Candidate * CE-CERT Tour * Driving research cars | | 99 = Did not participate  1 = Not useful at all  2 = Slightly useful  3 = Somewhat useful  4 = Very useful  5 = Extremely useful | Frequencies (n and %) |  |
| Annual | pro\_per\_dev\_1  pro\_per\_dev\_2  pro\_per\_dev\_3 | | Please rate the usefulness of participating in the following Professional and Personal Development Events on a scale from not useful at all to extremely useful. If you did not participate in an event this year, please select “Did not participate.”   * Change to Responsible Conduct of Research/CITI online training * NSPS (National Science Policy Symposium) * Policy Discussion Groups | | 99 = Did not participate  1 = Not useful at all  2 = Slightly useful  3 = Somewhat useful  4 = Very useful  5 = Extremely useful | Frequencies (n and %) |  |
| Annual | use\_aspect\_text | | Please describe the most useful aspect of the workshop(s). | | OE | code for themes |  |
| Annual | useful\_opt\_prgm\_ele\_1  useful\_opt\_prgm\_ele\_2  useful\_opt\_prgm\_ele\_3  useful\_opt\_prgm\_ele\_4  useful\_opt\_prgm\_ele\_5  useful\_opt\_prgm\_ele\_6 | | Please rate the usefulness of participating in the following optional “Meet SPEAKS” zoom event program elements on a scale from not useful at all to extremely useful. If you did not participate in a program activity/component this year, please select “Did not participate.”   * "Meet SPEAKS" Zoom event * GradEdge/Jumpstart * Science 2 Policy (S2P) Student Cabinet * Policy hackathons * Policy slam pitch competitions * Visits to policy offices | | 99 = Did not participate  1 = Not useful at all  2 = Slightly useful  3 = Somewhat useful  4 = Very useful  5 = Extremely useful | Frequencies (n and %) |  |
| Annual | act\_other\_text | | Did you participate in any other activities this past year that were not listed above? If so, please list below and explain what you found most useful about it. | | OE | code for themes |  |
| Annual | act\_useful\_text | | Of the activities you attended this past year, which ones did you find the most useful? Please explain why. | | OE | code for themes |  |
| Annual | future\_workshops | | What topics for future workshops/events/trainings would you find useful or beneficial? (select all that apply)   * Peer mentoring of new SPEAKS students * Career Development workshops * Postdoc workshop * Speaker series * Other, please specify: | |  | Frequencies (n and %) |  |
| Annual | expectations\_met | | Has the UCR SPEAKS program met your expectations? | | OE | code for themes |  |
| Annual | benefits\_text | | What have been the benefits of participating in the UCR SPEAKS program? | | OE | code for themes |  |
| Annual | support\_text | | In what ways could you have been better supported by UCR SPEAKS to develop your professional or technical skills? | | OE | code for themes |  |
| Annual | feedback\_text | | Is there anything else you would like to communicate to the project directors? | | OE | code for themes |  |

**Example #1:**

A graph of a survey

Description automatically generated with medium confidence