

How to Build a Better Survey

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TEXAS A&M UNIVERSITY

COMMERCE

Begin With The End In Mind

- Clearly formulate your intent and your intended research question.
- Determine who has the information you need to answer that question.
- What kind of data would be actionable?

Who Has The Information I Need?

- In a university context the answer is usually students, faculty, or staff.
- You likely have the option of surveying the entire relevant population.
- Will your audience be available to answer your survey at the time that you distribute it?

Build Your Survey

Write Simple, Comprehensible Questions.

- ➔ **Ambiguous:** open to more than one interpretation
- ➔ Keep individual survey questions brief and clear.
- ➔ Avoid ambiguous terms and discipline-specific jargon.
- ➔ Provide an in-line explanation of necessary jargon even if you think your audience is likely to understand the language. **Jargon:** Special words or expressions that are used by a particular profession or group and are difficult for others to understand.
- ➔ Use carefully chosen examples if explanations are too complex.
- ➔ Avoid jumping between general topics without transition or explanation.
- ➔ **A Respondent** is someone who is responding to your survey
- ➔ Respondents who become confused tend to provide lower-quality responses or abandon the survey entirely.
- ➔ The language on this very slide is too long and complicated to be used in a survey.

Use Positive, Affirmative Language

- Ask how often a student has **attended** summer classes, not how often they have **skipped** summer classes.
- Ask how many meals a person **eats** on a typical day, not how many meals they **skip**.
- Ask how **long** a student's study sessions are, not how **short** they are.

Question Types

Multiple Choice

- ➔ Multiple choices should not overlap
- ➔ Cover all possible responses if reasonable.
- ➔ If comprehensive answers are not possible, be sure to include an “Other” option.

While enrolled at A&M-Commerce, I worked:

- On Campus
- Off Campus
- Both
- Neither

Multiple Selection

- ➔ “Check all that apply”
- ➔ Can provide broad information about a number of topics, but that information is shallow.
- ➔ In a long list, response quality will be weaker toward the bottom.

While enrolled at A&M-Commerce, I worked:

- In the Library
- At the Recreation Center
- For Residential Living and Learning
- For my Academic Department
- Etc...

Attitudes and Opinions

- To collect information about respondents' subjective feelings on a topic use a **Likert-Scale** Question.
- Composed of a statement or question and a range of incremental responses.
- Includes balanced positive and negative response options where possible.
- Traditionally a neutral option is included, but there is evidence that neutral options are sometimes misused by respondents.

Overall, I had a satisfying educational experience at A&M-Commerce

Strongly Disagree



Disagree



Agree



Strongly Agree



Left-Side Bias

- On Likert Scale questions, respondents may disproportionately select the first option if that option is “positive.”
- Left-side bias can prevent you from collecting information that you need to make improvements by covering up areas for improvement.

Overall, I had a satisfying educational experience at A&M-Commerce

Strongly Agree



Agree



Disagree



Strongly Disagree



“Other” Open-Ended Questions

- In multiple-choice questions it is a good idea to include an “Other: [text entry]” option to help you find unexpected responses.
- If an “Other” response is particularly popular, consider adding it as a standard multiple-choice option in future surveys.
- Character length limits can help dissuade respondents from making off-topic statements.

Essay Questions

- Use an essay question when you are looking for unexpected insights, or when you have a small survey population that is invested in your objective.
- Respondents are less likely to respond because they require more effort.
- Example:

Please provide any suggestions concerning how we can improve the dashboards for your purposes.
- Essay contents may trigger mandatory reporting under Title IX.

Question Structure Example:

- How you compose a question has consequences on the results.
- Let's consider three versions of the same basic question in an Alumni Survey:

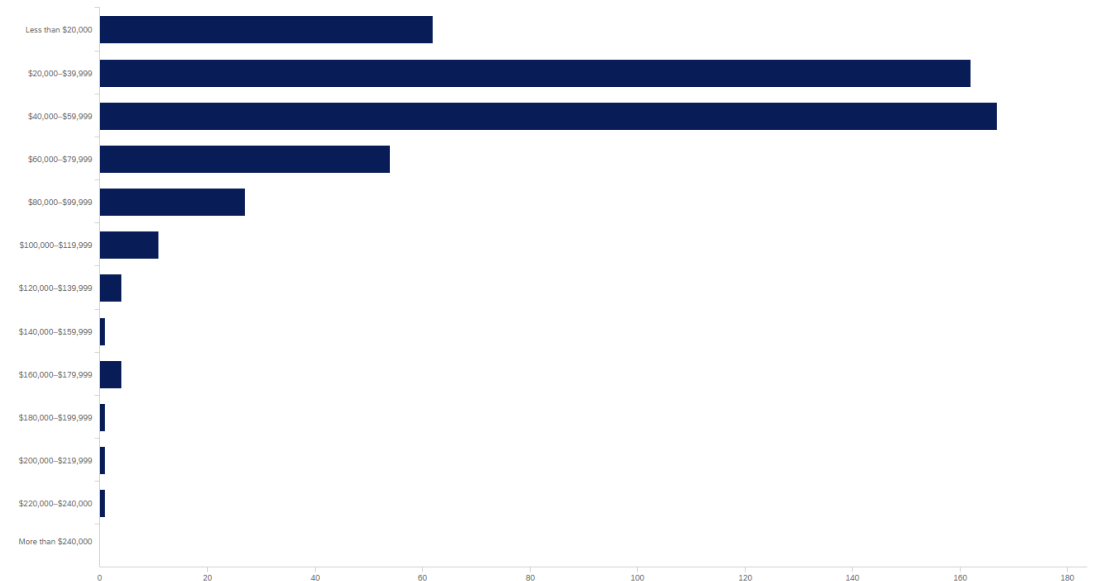
- **How much money do you make?**

- (If you need information about this topic specifically – we ask one version of this question in our routine Alumni Survey)

Option 1: Multiple Choice

“What is your annual salary?”

- Less than \$20,000
\$20,000 to \$29,999
\$30,000 to \$39,999 etc...
- Good for distribution analysis.
- Rounding biases are built into the results.
- You cannot produce a valid average salary



Option 2: Text Field

Enter your annual salary: _____

- Allows collection of specific values.
- You may collect responses like “About 50K,” “\$25/hour,” “None of your business,” or “I’m not paid on salary.”
- All answers must be processed manually
- This format has few redeeming qualities for this specific question.

Option 3: Numerical Field

Enter your annual salary: \$0.00

- Allows collection of specific values.
- You can calculate average and median salary.
- Rounding bias is significant. Responses will overwhelmingly be in increments of 5,000.
- Nonsense answers can significantly affect the resulting data.
 - One response of \$100,000,000 will skew the average.
 - Respondents may mistakenly answer \$20 (Meaning per hour).
- Attempting to remove nonsense answers by hand damages the integrity of the data.

What Not To Do

Don't ask what you already know

- Any information recorded in Banner can potentially be collected as part of the student list and built into the survey.
- Questions about age or major or program lengthen the survey and create an opportunity for incorrect or missing responses.
- Don't ask these questions unless you are specifically looking for answers that may deviate from Banner records.
- Are you a TAMUC Student?
- What is your Major?
- What is your gender?

Loaded Questions

- ⦿ Don't ask questions that include unfounded assumptions.
- ⦿ “How was your last experience with campus disability services?”
(Do you already know that I've interacted with them?)
- ⦿ “How often do you engage in acts of academic dishonesty?”
(I don't, but even if I did I wouldn't tell you.)
- ⦿ “Have you stopped cheating on your taxes?”
(This is not a question, it's a personal attack.)
- ⦿ “Where do you go to unwind after class?”
(I don't go anywhere. Should I be going somewhere?)

Loaded Questions

- Can leave the respondent with no valid choices, forcing a random answer or causing them to abandon the survey.
- Can alter a respondent's genuine feelings on a topic or influence their estimation of objective facts.

Leading Questions

- Leading questions don't force a statement on the respondent, but they do suggest a desirable response, or make certain responses too unpalatable or narrow to be selected honestly.
- “How terrible is the food at the cafeteria?”
- “How often do you think responsible students speak with their advisors?”
- “Do you always eat fast food?”

Leading Questions

- Can prompt the respondent to validate your assertion, respond dishonestly, or base their answer on other factors.
- Providing examples is a less obvious form of leading question. It primes the respondent to think about the question in a specific way.
- “What do you think is the most valuable academic discipline? (Physics, Engineering, Mathematics, etc...)”

Leading and Loaded Question Exceptions

- Can be helpful if there is evidence that the topic draws dishonest results.
 - Example: It is normal for students to miss class occasionally. How often do you miss class in a given semester?
- If you genuinely know something about a respondent it is preferable to use questions loaded with that information.
 - Example: “How was your last experience with campus disability services?”
[Question sent only to students who signed in at the Disability Services office recently]

Double-Barreled Questions

- “What is the fastest and cheapest restaurant on campus?”
- Respondents may weigh speed and price differently, with no guidance from you.
- You could ask each question separately.
- You may be asking the wrong question entirely:
 - “Which restaurant on campus do you visit most often?”
 - “Which restaurant on campus is your favorite?”
 - “Which restaurant on campus is the most convenient for you?”

Ranking (It's complicated)

- Be especially mindful of how you intend to analyze the results from ranking questions.
- Average ranking is a legitimate measure for very short ranked lists.
- In longer lists only a few items at the top and a few at the bottom are likely quality responses.
- Consider having respondents rate each item individually using a Likert Scale question.

Bad Ranking Example: Favorite Commerce Restaurant

- ➔ Long lists can force random answers.
 - ➔ Los Mochis is ranked 4th without any experience.
- ➔ Allowing unranked answers promotes items because they are familiar.
 - ➔ Braum's would be ranked 4th despite being disliked by the respondent.

- ➔ Luigi's
- ➔ Burger King
- ➔ McDonalds
- ➔ Los Mochis
- ➔ Taco Bell
- ➔ Lone Star
- ➔ Taco and Burrito Express
- ➔ Omegas
- ➔ Lulu's
- ➔ Subway
- ➔ Sonic
- ➔ McKay's Country Kitchen
- ➔ Dos Laredos
- ➔ Braum's
- ➔ Tokyo Express

- ➔ I love Luigi's!
- ➔ Way Better than McDonalds!
- ➔ But McDonalds is good too!
- ➔ People have told me this is good
- ➔ I never go here, but I used to before I moved to Commerce
- ➔ Oh yeah, that one is by Walmart.
- ➔ This option not changed from the default order
- ➔ This option not changed from the default order
- ➔ This option not changed from the default order
- ➔ This option not changed from the default order
- ➔ This option not changed from the default order
- ➔ Where is this?
- ➔ I've never heard of that
- ➔ I hate ice cream
- ➔ I'm scared of Sushi

Good Ranking Example: Restaurant Decision Making

- Short lists when respondents are likely to be familiar with all options, and to have an opinion about them.
- Good for questions about priorities or widely-known services or locations in direct competition with one another.

Please rank the following factors in order of how important they are to your dining choices.

- Close to Campus
- Fast Service
- Quality Food
- Low Price

Ranking

- Ranking questions raise a number of issues.
 - How to analyze the data
 - How to minimize data bias
 - Need to predict all likely (or possible) responses
- If you don't need a ranking question, don't use one.
 - Multiple Likert-Scale questions will serve most goals that might lead you to using a ranking question.
 - If the responses are not in direct priority competition, you probably don't need a ranking question.

Wrap-Up



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Summary

- Know who your audience should be
- Know what you want to do with the data
- Can you get this information from an objective source instead?
- Be clear, brief, and careful with your language
- Keep your survey as short as possible

Thank You