

The Path of Least Resistance: Changing Mode to Boost Response Rates in an Establishment Survey

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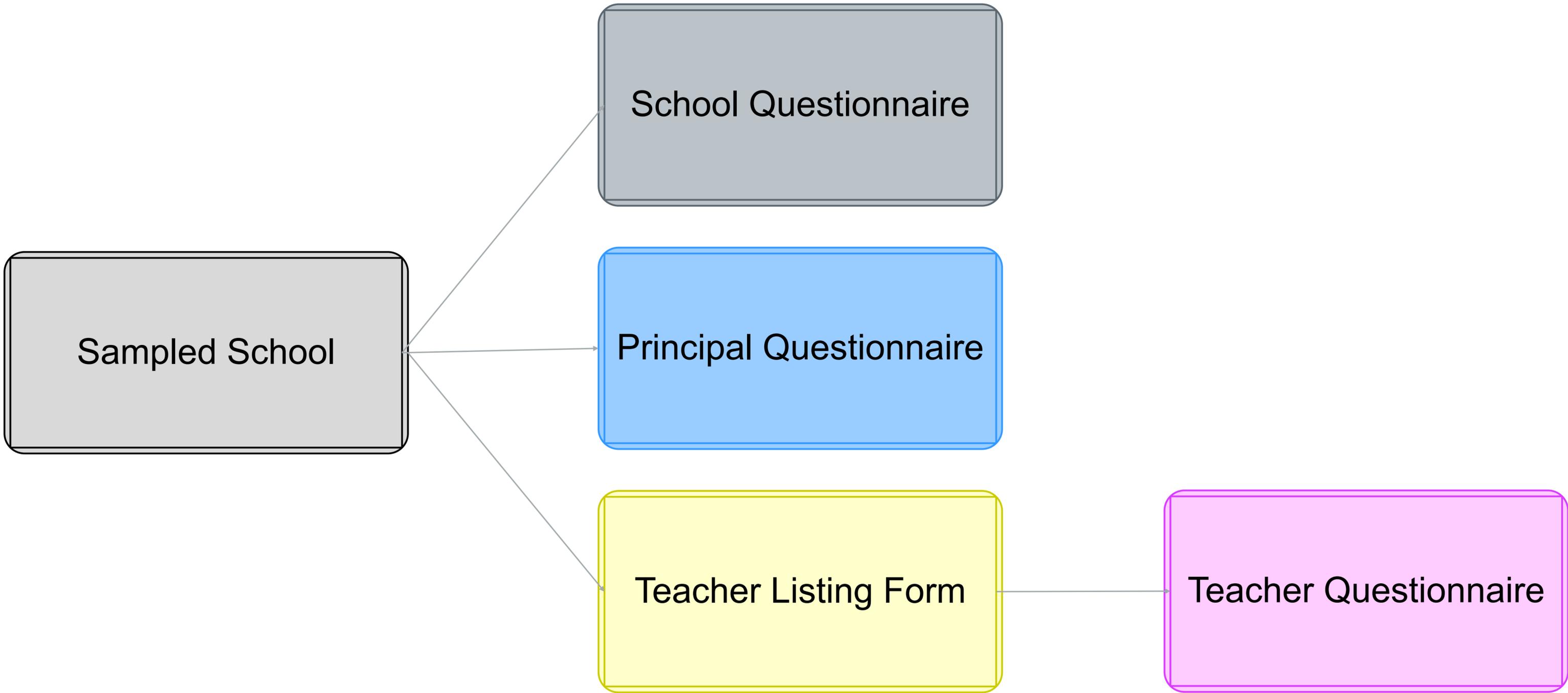
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This presentation is intended to promote ideas. The views expressed are part of ongoing research and do not necessarily reflect the position of the U.S. Department of Education or the U.S. Census Bureau.

Overview of National Teacher and Principal Survey (NTPS)

- Coordinated surveys of schools, principals, and teachers
 - Follow-up surveys of principals and teachers in selected collections
- Conducted every 2 to 3 years
- Nationally representative (public) in 2015-16
- State representative (public) and nationally representative (private) in 2017-18 and 2020-21
- NTPS serves as the U.S. Department of Education's (ED) primary source of information on K-12 schools from teacher and administrator perspectives.
- Data allow analysis of trends over time
 - Collected beginning in 1987-1988 school year (Schools and Staffing Survey, SASS)
 - Questions repeated over multiple administrations



Experimental goals

- Will early field operations boost private sector response rates for surveys administered early in the data collection period?
 - School Questionnaire (SQ)
 - Principal Questionnaire (PQ)
 - **Teacher Listing Form (TLF)**
- Will early field operations boost private sector response rates for the Teacher Questionnaire (TQ), administered after early field operations?
- Is this data collection strategy cost-effective?

Experimental Design

- Hard-to-reach “priority” schools
- 60% of sampled private schools eligible for this experiment
- Overall production sample of about 4,000 private schools (larger than a typical sample, to allow for sufficient power), with about 1200 priority private schools per treatment group
- Matched pairs randomly assigned to early field operations or traditional data collection path

Data Collection Paths

Early field operations

- September 7, 2017: Advance letter mailed
- September 18 – October 20: Field Representative (FR) **visited and/or called** sampled schools. FRs provided TLFs and login information to complete SQ and PQ. FR followed-up with schools and collected completed TLF if needed.
- October 31: Login information to complete TLF, SQ, and PQ (if outstanding) **mailed** to schools

Subsequent mail, e-mail, telephone, and field operations

Standard data collection procedures

- September 7: Advance letter mailed
- September 27, 2017: Login information to complete TLF, SQ, and PQ **mailed** to schools
- October 2: Login information to complete TLF, SQ, and PQ **e-mailed** to schools
- October 16: Login information to complete TLF, SQ, and PQ (if outstanding) **mailed** to schools
- October 18,: Login information to complete TLF, SQ, and PQ (if outstanding) **e-mailed** to schools

Subsequent mail, e-mail, telephone, and field operations

Response rates after early field operations (October 31, 2017)

Private school questionnaire	Standard	Early Field	Difference
School (SQ)	26.5%	34.1%	+7.6
Principal (PQ)	23.2%	33.0%	+9.8
Teacher Listing Form (TLF)	28.5%	33.3%	+4.8

Early field operations **increased EARLY** response rates for each questionnaire type.

Statistically significant differences ($p < .05$) are bolded

Final response rates

Private school questionnaire	Standard	Early Field	Difference
School (SQ)	60.9%	60.2%	-0.7
Principal (PQ)	58.5%	58.1%	-0.3
Teacher Listing Form (TLF)	66.7%	71.2%	+4.6
Teacher (TQ)	79.3%	75.0%	-4.2

School and Principal response rates **not different** by the end of data collection.

Teacher Listing Form response rates remained **higher**, but the survey sent to teachers sampled from those lists had a **lower** response rate.

Statistically significant differences ($p < .05$) are bolded

Early field vs. standard final response rates by school affiliation

Questionnaire	SQ	PQ	TLF	TQ
All private schools	-0.7	-0.3	+4.6	-4.2
Catholic	+6.2	+4.8	-1.2	-2.4
Other religious	+1.3	+0.9	+5.5	-2.7
Nonsectarian	-5.3	-3.2	+4.0	-6.2

This pattern did not hold for all private school affiliations.

Power to detect differences by other characteristics was limited, particularly because some types of schools were disproportionately categorized as priority or non-priority, but generally trended in the same direction.

Statistically significant differences ($p < .05$) are bolded

Estimating Cost

What is included?

- Mailout costs
- Field operations costs
- Telephone operation costs

What is excluded?

- Fixed overhead costs
- Mailout assembly labor costs

Cost ratio for priority vs. standard operations

Private school case costs	SQ	PQ	TLF
Cost per case	1.69		
Cost per response	1.73	1.70	1.60

Early field operations increased the cost per completed SQ and PQ by 70-73%.

TLF cost per response was 60% higher than standard data collection procedures.

Summary

- Field operations most advantageous in a short data collection period
- When high response rates do persist, they may not carry over to other respondents within the same institution
- Benefits vary by school characteristics, and a field push may be associated with lower response rates for some types of schools
- Increased costs may be appropriate for critical hard-to-reach institutions or when early responses are critical, but should be considered carefully as a broad-based approach

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