

REVISING THE NCES PRIVATE SCHOOL SURVEY: A METHOD TO DESIGN A SYSTEMATIC CLASSIFICATION OF PRIVATE SCHOOLS IN THE UNITED STATES

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INTRODUCTION AND BACKGROUND

The Private School Survey (PSS) is a paper-and-pencil survey administered by mail to approximately 27,000 private schools throughout the United States under the auspices of the National Center for Education Statistics (NCES), U.S. Department of Education. The PSS form is generally completed at the private school site by the school principal or administrative assistant. The PSS is used for many purposes, including the identification and classification of U.S. private schools. Specifically, five PSS items are used to classify private schools into one of nine categories comprising a typology scheme designed to enhance federal-level statistical reporting about U.S. private school education.

The Bureau of Labor Statistics (BLS) was requested by NCES to conduct a series of tests on specific PSS questions to improve their ability to capture accurate information and improve the classification of U.S. private schools. Of particular concern was a question asking schools about their membership status relative to a series of school associations, which has, in the past, led to respondent burden and possible underreporting. BLS developed a cognitive testing plan to address questions raised by NCES regarding the PSS. The purpose of the testing plan was to evaluate the language and visual construction of the five PSS questions, the sequencing between and within questions, and the manner in which respondents interpret the questions.

The cognitive testing plan is scheduled to be completed in two years of activities. The purpose of Year 1 activities was to conduct developmental questioning and directed probing to obtain information about the respondent's response process, and included a total of eighteen interviews with private schools and eleven educational experts. Year

1 activities were composed of three pretesting waves: Wave 1 and Wave 3 involved interviews with private schools, respectively. Wave 2 consisted of interviews with eleven educational experts

Feedback obtained from all Year 1 respondents was used to develop revision(s) of PSS questions, which will be field-tested using a large national representative sample during Year 2 of the study. The results of Year 2 field-testing will yield a final set of items to be incorporated within NCES's Private School Survey. This paper summarizes findings obtained through the first year of pretesting conducted during Waves 1-3. Final recommendations resulting from Year 1 testing are also included in this document.

METHODOLOGY

Wave 1 Testing: The overall purpose of Wave 1 testing was to obtain preliminary information regarding how respondents answered PSS items, identify problems resulting from the response process, obtain information about how PSS information is collected at the private school site, and compile suggestions offered by participating school personnel. The original PSS items and an interview protocol was administered to nine private school respondents. Data collected from Wave 1 testing was used to develop preliminary revisions of the PSS items that could be tested in latter waves of testing.

Participating Schools: Private schools were categorized using grade level [kindergarten, elementary, and secondary] and type of affiliation [formal religious, informal religious, and non-sectarian] as major variables. The intersection of these two variables (and their three levels, respectively) resulted in the generation of a 3 X 3 matrix. One school was selected to represent each

matrix cell. Wave 1 private schools were selected randomly from a computer-generated listing produced by NCES, which comprised all private schools in Miami, FL, Atlanta, GA, Boston, MA, and Minneapolis-St. Paul, MN. Private schools were selected from all four states, such that each of the nine cells in the 3 X 3 matrix would be represented.

Data Collection Procedures: Wave 1 respondents were administrators and/or administrative assistants responsible for completing the PSS on behalf of the school. Participants were contacted by telephone and appointments were scheduled at a mutually convenient time. Interviews conducted at the private school site lasted approximately one hour. Respondents participated voluntarily and were not paid for their participation.

Cognitive Interviews: Interviews consisted of face-to-face cognitive tasks and the administration of an interview protocol. Respondents were queried about several aspects of the PSS, including: definitions of the terms “orientation,” “purpose,” or “affiliation,” and “school association;” and the process by which schools become members of a school association. Respondents completed a card sort task in which they clustered 38 private school associations into groups and labeled them and provided a list of associations with which the school was affiliated. Results and feedback were used to develop preliminary revisions of the PSS items.

Wave 2 Testing: Wave 2 testing involved the conduct of cognitive interviews with eleven educational experts, representing national-level educational and religious school associations, based primarily in the greater metropolitan Washington D.C. area. Experts were consulted regarding the original PSS items, preliminary revisions of the PSS items, conceptual definitions, and their insights into private education. Their feedback and recommendations were used to modify the preliminary revisions of the PSS items and improve their efficacy and appropriateness for future testing.

Data Collection Procedures: Eleven association representatives were contacted by telephone and appointments were scheduled at a mutually convenient time. Interviews were conducted face-to-face at the association site and were approximately one hour in length. Respondents participated in the study voluntarily and were not compensated for their participation. All interviews were conducted within the greater metropolitan Washington, D.C. area (including Maryland and northern Virginia) and the state of Missouri.

Cognitive Interviews: Experts were queried about the PSS questions, conceptual

definitions, and their insights into private education. Experts completed the original PSS items as though they were staff members in one of the schools belonging to their association. Many experts had been teachers and/or school principals and were able to accomplish this task easily. Experts provided feedback regarding the effectiveness of the original items. Experts also evaluated preliminary revisions of the PSS items, and provided their opinions about the effectiveness of the proposed revisions. Their responses and additional comments were used to generate a final version of the PSS items to be tested with private schools during Wave 3 testing.

Wave 3 Testing: The major objective of Wave 3 testing was to test the effectiveness of the newly revised PSS item revisions and compare their effectiveness to the original PSS items, as part of an interview conducted with private school respondents. Respondents were encouraged to offer comments and suggestions regarding the effectiveness of the revised versions of the PSS items.

Participating Schools: The 3 X 3 matrix used during Wave 1 was also used to identify Wave 3 private schools. Nine private schools were randomly selected from a computer-generated listing provided by NCES of all Washington, D.C. area private schools (including Maryland and Northern Virginia). Private schools were selected to ensure greater representation of private schools across the nine-part typology used by NCES, including a home school, an Islamic school, an Orthodox Jewish school, a Montessori program school, and a school that only serves students with learning disabilities.

Data Collection Procedures: Wave 3 respondents were administrators and/or administrative assistants responsible for completing the PSS on behalf of the school. Appointments, scheduled at a mutually convenient time at the school site, lasted approximately forty-five to sixty minutes. Respondents participated in the study voluntarily and were not be paid for their participation.

Cognitive Interviews: The nine interviews consisted of a face-to-face cognitive interview and a brief, customized set of questions geared to the specialized needs of the participating private school. Respondents completed the original and revised version of Item 15(a)-15(d) and the original and two revised versions of PSS [16]. Respondents evaluated each version of the PSS items, and offered suggestions to make the PSS more relevant to the specialized needs of their school. These informal interviews were designed to obtain additional information about the diverse and varied group of private schools who participated in the study.

RESULTS AND MODIFICATIONS

Response problems associated with completing each PSS item were identified during pretesting. These response problems were addressed in the final modification of each PSS item.

15(a): *Does this have a religious orientation, purpose, or affiliation?*

Response Issues: Pretesting identified the following potential sources of response error:

- Respondents generally distinguished the terms religious “orientation” and “purpose” from “affiliation,” which was perceived to refer to a formal relationship with an established religious group, institution, or denomination, with possible implications for school finances, curriculum, and hiring practices.
- Many respondents had difficulty distinguishing religious “purpose” from “orientation,” which were perceived to be virtually synonymous, and generally agreed that a school with a religious orientation or purpose is not necessarily beholden in any way to a religious institution or group. Those respondents who distinguished “purpose” from “orientation” reported that a private school’s purpose stems from its orientation or vice versa.
- Some respondents reported that some private schools have a formal affiliation with a religious organization, yet have no actual religious orientation or purpose. Often originally founded by an established church, these schools no longer maintain a religious orientation, purpose, or programming, and differ from schools that maintain a religious affiliation with a religious organization or body, and/or a religious orientation or purpose expressed in the school’s daily life.
- Experts also identified problems in distinguishing the three terms “orientation,” “purpose,” and “affiliation;” however, they were unable to achieve consensus regarding the best means to improve 15(a).
- Definitional problems affect responses to 15(a), but can also affect responses to 15(b) and 15(c). Respondents who endorse “yes” to 15(a) are directed via an accompanying arrow to respond to 15(b) and 15(c), while respondents who select “no” are directed via another arrow to “GO to item 16, page 10.” Thus, errors in responding to

15(a) can result in response errors for Items 15 (b) and 15(c).

Final Modification of Item 15(a): Pretesting results verify that including all three terms “orientation,” “purpose,” and “affiliation,” accounts for the subtle complexities associated with the many types of relationships religiously-oriented private schools have with religious institutions and/or groups. As presently worded, 15(a) appears to most effectively capture the greatest number of correct endorsements. Therefore, no modifications were made to 15(a), and its original form was retained for the PSS field test.

15(b): *Is this school/program formally affiliated with a national religious denomination?*

Response Issues: Pretesting identified the following potential sources of response error:

- The term “formally affiliated” was conceptually difficult for many respondents. Because some private schools are operated independently by a single church or temple that sponsors the school, many respondents (including Jewish and non-denominational Christian respondents) do not perceive themselves to have a “formal” affiliation with a national religious denomination, and fail to endorse “yes” to 15(b).
- The terms “national” and “denomination” in the phrase “national religious denomination” provided sources of cognitive confusion for some respondents. Roman Catholic, Jewish, and Islamic respondents were unclear whether they should endorse “yes” to 15(b), because they perceived their religions to be international rather than “national” in scope. Similarly, the term “denomination” had little meaning for these respondents, who favored the use of a more inclusive term less associated with Protestant mainstream religious groups, such as “organization” or “institution.” Wave 2 experts also reported concerns about these issues.

Final Modification of Item 15(b): Item 15(b) was revised to address sources of response error identified through pretesting. The following modifications were made to 15(b) to facilitate respondents’ ability to endorse the appropriate response:

- Item 15(b) was revised to drop the word “national,” which posed difficulties for many religiously-oriented respondents. This modification was approved by all nine respondents during Wave 3 testing (including Jewish, Roman Catholic, and Islamic).

- The term “formally” was dropped and replaced with “affiliated in some way” to account for all possible types of affiliations private schools may have with a religious group and/or a single religious institution (e.g., church, temple, etc.).
- The phrase “religious denomination” was amended to read “religious denomination or organization” to include all respondents from religions that do not recognize the term “denomination,” to enhance the respondent’s ability to endorse “yes” appropriately. The term “organization” was added because it subsumes both religious groups and individual and independent religious institutions.
- 15(b) was amended for the field test as follows:

15(b): *Is this school/program affiliated in some way with a religious denomination or organization?*

15(c): *What is this school’s religious orientation or affiliation?*

Response Issues: Item 15(b) contains a list of 20 response options representing major religious groups that exist in the U.S. (e.g., Roman Catholic, Amish, Calvinist, Islamic, Jewish, etc.). “Roman Catholic” is the first option provided, because the majority of U.S. private schools are Roman Catholic. Four Lutheran options, representing the four major U.S. Lutheran synods, are also provided within the list. The final option provided is “other;” a blank line is also provided for respondents who choose to write in a religious group not included within the list of options. Pretesting identified the following potential sources of response error:

- Some respondents were concerned that “Roman Catholic” was not placed alphabetically in the list, hypothesizing that its placement in the first position might offend some respondents. A few experts also favored alphabetizing the list of religions for this reason.
- Some respondents were concerned that the inclusion of four Lutheran groups within the list of religious groups may appeared to weight the list too heavily in favor of one group. Therefore, for pretesting Waves 2 and 3, the four Lutheran groups were collapsed into a single option “Lutheran.” However, four Wave 2 experts indicated that all four sub-groupings of “Lutheran” should be retained in the final version of 15(c), because the four Lutheran Schools groups varied substantively in management and philosophy, and these distinctions should be duly noted. All four

experts agreed it would be acceptable to place the four Lutheran groups under the greater category heading of “Lutheran.”

Final Modification of Item 15(c): Item 15(c) was revised as specified below to address sources of response error identified through pretesting:

- Because more than one-half of U.S. private schools are Roman Catholic, it is reasonable, logical, and convenient to place the most frequently selected option first in a list of options. Three experts representing religious private school associations (only one of which was Catholic) agreed it was acceptable to retain the current placement of “Roman Catholic,” because of large number of Roman Catholic private school respondents. Therefore, the current placement of the option “Roman Catholic” was retained for the field test.
- All four types of Lutheran synods have been retained within the final version of 15(c) to ensure appropriate representation. However, these four options have been subsumed beneath the greater term “Lutheran” and an arrow has been provided to direct respondents who select “Lutheran” to the list of four Lutheran synods.
- Based on respondents’ recommendations, the option “Gospel/Full Gospel” was added to the list of religious groups provided as options. The option “Greek Orthodox” was also replaced with the more inclusive term “Eastern Orthodox.”

15(d): *Which of the following categories best describes this school?*

- Parochial (or inter-parochial)
- Diocesan
- Private

Answer this question only if you marked “Roman Catholic” for question c above. Mark (X) only one box.

Response Issues: This item is designed exclusively for Roman Catholic respondents. Response options represent Roman Catholic organizational structures that frequently maintain, support, or sponsor the Roman Catholic private school. The respondent is directed to respond to 15(d) by an arrow stemming from the option “Roman Catholic” in 15(c) and extending along the left-hand margin to 15(d). Pretesting identified the following potential sources of response error:

- Responses to 15(c) can affect responses to 15(d), because the arrow stemming from the option “Roman Catholic” in 15(c), which directs the respondent to 15(d), is frequently missed by

respondents. Some respondents do not read directions supplied beneath the stem in 15(d) which indicate that 15(d) is designed exclusively for Roman Catholic respondents; thus, some non-Catholic religiously-oriented and non-sectarian respondents selected “parochial” and/or “private” under 15(d), because they scanned the page, saw the word “private,” interpreted the item as including all private school respondents, and endorsed either “parochial” or “private.”

Final Modifications of Item 15(d): Item 15(d) was revised as specified below to address sources of response error identified through pretesting:

- Item 15(d) will be eliminated altogether, and the response options beneath 15(d) will be moved to a new location beneath the option “Roman Catholic” within 15(c). By collapsing these options, Roman Catholic respondents will be able to proceed directly (by means of an arrow) to the additional set of options “parochial,” “diocesan,” and “private,” after identifying themselves as Roman Catholic in 15(c). All nine private schools participating in Wave 3 testing agreed that this revision was an appropriate and more advantageous solution.

16: <i>To which of the following associations or organizations does this school belong? Mark (X) all that apply.</i>
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Response Issues: Respondents completing PSS [16] must identify associations they belong to from a list of 38 private school associations; respondents also have the option to select “None of the Above.” This list contains some informal grouping of types of related associations listed in semi-alphabetical order. There are also eleven “Other ...” options, such as “Other Montessori association(s)” and “Other religious school association(s).” All 38 association names are presented in the same type, consecutively, and without breaks. Pretesting identified the following potential sources of response error:

- The list of associations was haphazardly organized and difficult to read. Some respondents had difficulty finding their associations.
- “None of the Above” was on the bottom of the list. To endorse this option, respondents were required to scan the entire list prior to finding this option.
- Many respondents only knew the acronym for an association rather than the association’s full name (e.g., AMS - American Montessori Society). This made completing [16] more

difficult for some respondents, who struggled to remember the full name of their association.

- One respondent recommended a line be added for each of the “other” options provided within the list of associations so that schools could write in the name of their association. This recommendation was predicated on the assumption that respondents would feel they are a part of a recognized school association. Three educational experts favored this modification.
- Some private school respondents identified additional associations to be included within the list; associations with a sufficiently large number of school members were added to the final list of associations provided in PSS [16].

Card Sort Task Results: A card sort task was used to evaluate whether the list could be divided into major section headings. The primary objective of this task was to develop a categorization schema for the associations that would simplify the task of completing [16]. Introducing association category headings was hypothesized to simplify the task of completing [16] by allowing respondents to quickly scan the list of associations, and more readily discern where associations they belong to are located. Category headings also minimize reading required of respondents, and decrease respondents’ boredom, inattention, and the likelihood that association(s) the school belongs to is/are missed by the respondent.

A set of sorting cards was created, each made of durable cardboard and labeled with the name of an association from the PSS list. Sorting cards, numbered from 1 to 38, were provided to respondents in the order of presentation currently used in the PSS form (e.g., 1, 2, 3,..., 38) to closely approximate the actual task of completing [16].

Respondents were asked to sort the cards into clusters of associations representing logical and reasonable groupings. Respondents identified a mean number of 9.1 cluster names (range 4-14). Respondents exhibited several patterns when clustering associations. A common pattern was the identification of very small clusters of only two or three associations (e.g., bilingual, international, and alternative associations). Four respondents identified ten or more such cluster names.

Another clustering pattern that occurred frequently was the grouping of religiously-oriented private school associations by religion (e.g., Christian, Jewish, and Friends); this pattern emerged frequently from respondents from religiously-oriented private schools. Conversely, non-sectarian schools were more likely to group all religious

associations together under a neutral and inclusive category name such as “Religious Orientation.”

Some respondents classified a small number of specialized associations into clusters such as “Early Childhood,” “Special Needs” or “Exceptional Education,” or clusters with an educational or programmatic focus such as “Special Interest” and “Special Emphasis.” Finally, several respondents distinguished religiously-oriented associations from non-sectarian associations, which were labeled “Independent School Orientation” and “Other/Independent non-Religious.”

The task of developing category headings requires that headings be sufficiently inclusive to allow several associations to be grouped within the association heading name. However, it is essential that the new categorization system be parsimonious, because the inclusion of too many headings can be cumbersome and detract from the primary purpose of simplifying the list of associations. Therefore, a maximum of three category headings were identified to simplify the task of completing [16].

Final Modification of Item 16: Item 16 was revised as specified below to address sources of response error identified through pretesting:

- Three category headings were identified to simplify the task of completing [16]: 1) Religious; 2) Special Emphasis; and 3) Other School Associations or Organizations. Category headings provide respondents with a structure to facilitate visual acuity so respondents are less likely to miss their school association. Ten educational experts unanimously favored this revision, because respondents would save time by simply going to the association heading that contained association(s) of which they were members. The majority of experts did not anticipate that the use of the term “Other Private School Associations or Organizations” would present difficulties for respondents.
- Four additional associations were added to the list as recommended by respondents and experts.
- Acronyms for each association were placed in parentheses in capital boldface letters next to each association name, so respondents only familiar with the association acronym are able to quickly identify the association from the list. This feature allows respondents to scan the list of acronyms quickly, and should improve respondents’ ability to find their association.
- A screening item was added at the top of the list to screen out private schools that were not members of any school association. This

category would include private schools that 1) have not yet applied to any associations for membership; 2) cannot afford association membership dues; and 3) may not join any private school associations for religious or other reasons. The screening item was worded “This school/program does NOT belong to any association or organization [Mark X].”

- An “other” category was provided beneath each of the major categories, such as “Other Special Emphasis Associations.” This feature allows private schools with memberships in associations not included in the greater list to provide a response so they do not feel unimportant. “Other” options were printed in italics to distinguish them from association names; this feature makes these options more readily visible.
- Include an “other” option at the bottom of the list with a line available for respondents to write-in their school association(s) to alleviate any possible feelings of inferiority that would result from failing to check any options provided in the list; this feature would also allow NCES to consult the association and evaluate whether it should be included in latter versions of the PSS.

CONCLUSION

The Private School Survey (PSS) is used to identify and categorize private schools in the United States. The first year of testing of the PSS items resulted in the implementation of several modifications to the original PSS items. These modifications were identified through suggestions made by participating private school respondents and educational experts during early Waves of testing. Revisions were refined based upon results of latter Waves of testing.

Currently, a field test of the revised PSS items is underway with a proportional representative sample of approximately 1800 private schools throughout the United States. The results of the field test will be compared to responses generated by respondents who completed the PSS form during the 1996 administration. The comparison group will be drawn in a manner to ensure its statistical comparability with the field test sample. The results of field testing are expected to yield a final set of items that will be incorporated into the Private School Survey and used to categorize private schools throughout the United States.

The opinions expressed in this paper are those of the authors and do not necessarily represent those of the Bureau of Labor Statistics or the National Center for Education Statistics.