Technical Report # 31

Instrument Development: Examining the Appropriateness of Student and Teacher Surveys for Determining the Need for Testing Accommodations

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Published by

Behavioral Research and Teaching
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Abstract

This technical report documents the procedures followed in developing student and teacher surveys to gather information about the accommodations students are accustomed to receiving and those that might be beneficial on a mathematics test delivered on the computer. It provides documentation of the technical adequacy of the survey instruments, as part of the larger effort to develop and validate our computerized accommodations recommendation and delivery system. Information is provided about the process we used to gather content-related validity evidence and revise the measures. Data from the content review and piloting procedures are presented. Logistical guidance for other researchers piloting survey instruments is provided.

Introduction

The Individuals with Disabilities Education Act (IDEA) mandates that all children in the United States be provided a free and appropriate public education as part of their basic rights. Central to the act is the stipulation that students be educated in the least restrictive environment that will meet their individual needs and that they be included in general education activities to the fullest extent possible. Of course, identification of what is the most appropriate setting and instructional program for each individual student with special needs is a complex task. Rather than attempt to legislate every possible variation of needs, IDEA establishes that each student shall have an Individualized Educational Program (IEP), written by a team of people with direct knowledge of the individual student's needs, to guide his/her education. Along with prescribing the special and general education services that shall be provided to the student, the IEP team also determines the types of accommodations and/or modifications the student shall receive in testing situations. In theory, this plan seems quite sound. In actuality, however, it often breaks down.

Teachers, both general education and special education, may be unfamiliar with the accommodations allowed by their states (Tindal, Hollenbeck, & Almond, 1998), or they may apply accommodations listed on the IEPs only sporadically (Jayanthi, Epstein, Polloway, and Bursuck, 1996). Additionally, the reliability of teachers' accommodations recommendations has been reported as weak. In one study, there was only a .64 correlation between the accommodations teachers indicated would be useful for their students one week and those they indicated would be helpful *for the same students just two weeks later* (Ketterlin-Geller, Alonzo, Braun-Monegan, & Tindal, n.d.). These issues led us to realize the need for a more systematic method of making accommodations decisions, one which would reduce the error variance, and thereby increase the reliability and validity of the interpretation of test results for students who either receive testing accommodations or modifications or who ought to receive them.

Our new system integrates information from three main sources into a computer-based accommodation station, allowing for cross-referencing and systematic weighting of many different variables all done through a series of algorithms programmed into the computer. Variables programmed into our accommodation station include: (a) the results of several short basic skills tests to determine the degree to which students' access skills (e.g., reading) may be preventing an accurate assessment of the skills being targeted by the particular test, (b) an assessment of student ability to use a computer mouse to enter information into the computer, and (c) information gathered from both teachers and students—via the survey instruments discussed in this technical report—about the particular accommodations/ modifications the student is accustomed to receiving and the accommodations/ modifications that may be helpful in the current testing situation. Once the accommodation station has analyzed all the variables, it delivers a math test customized to meet each student's individual needs. The end results are testing accommodations/ modifications individualized for each student minutes before the testing occurs, not as much as a year earlier, as is currently the case with IEPs.

This technical report documents the process we used in developing two of the measurement tools used to provide information to our accommodation station: the student and teacher accommodations recommendations surveys. This report serves two purposes. The first is to provide documentation of the technical adequacy of the survey instruments, as part of the larger effort to develop and validate our computerized accommodations recommendation and delivery system. To address this purpose, we have provided information about the process we used to gather content-related validity evidence and revise the measures appropriately. As part of this process, we present the data gathered in our content review and piloting procedures. The second purpose is to provide guidance to other researchers piloting their own survey instruments. To this end, we have included as appendices all documents used in our study that we thought might prove useful from a logistical standpoint for anyone else developing and piloting surveys.

Methods

Measurement/Instrument Development

A team of three people collaborated on survey development: the primary researcher on the larger project of which this survey development effort was one small part and two doctoral students. We developed the surveys in five steps. Step 1 consisted of reading literature on survey development as well as testing accommodations allowable in different states. DeVillis (1991) was particularly informative in the area of survey development, while the National Center on Educational Outcomes website proved invaluable in the area of accommodations. In step 2, we wrote potential items to include on the surveys. We began with a rough list of questions the primary researcher had used in an earlier study on accommodations recommendations and then worked as a group to revise this list to make it more appropriate for this particular study. Step 3 consisted of working individually to review and refine the questions. For step 4, we worked as a group once more to compare suggested revisions and come to agreement about the final wording and organization of the surveys. Step 5 included formatting the surveys so they would be appropriate for teachers and students. Because student subjects in our study were enrolled in the third grade, and a key target population was students with skill deficits in reading, this step of survey development was particularly important. Once we had the surveys in formats we believed to be appropriate for our purpose and target audiences, we moved to the next step: refinement of the survey instruments through content review and piloting with actual third-grade students.

Content Review

We first recruited five teachers representing four different elementary schools and two school districts to review both the student and the teacher surveys for appropriateness of the wording, format, and information sought on the survey instruments. We established contact initially with principals in the four elementary schools and asked them to recommend teachers familiar with third

grade students and with the type of accommodation information contained on IEPs. We then sent an informational e-mail to the recommended teachers giving a brief overview of what would be involved and soliciting their assistance (See Appendix A). All teachers we contacted indicated their willingness to participate in content review, and we followed up with a letter outlining the specific steps we wanted them to follow in conducting their content review (See Appendix B). We sent the letter, paper copies of the Teacher Survey (See Appendix C), Teacher Survey Feedback Form (See Appendix D), Student Survey (See Appendix E), Student Survey Feedback Form (See Appendix F), and a self-addressed stamped envelope to each of the teachers.

One of the five teachers did not complete the feedback forms, explaining that she had become too busy at work to participate. The remaining four teachers filled out the teacher survey along with a feedback form developed for the purpose of the review. These four teachers also read through the student survey and filled out an additional feedback form specific to the student survey instrument. All teachers who completed the content review process were paid $25.00 for their participation.

Piloting

Additionally, we piloted the student surveys in two third-grade classrooms at two different elementary schools, gathering feedback from both teachers involved as well as from all their third-grade students in school on the day we conducted our pilot testing. Teachers were recruited in the same way as we recruited the teachers who only completed the content review. The teachers filled out their feedback forms prior to the piloting of the survey instrument in their classrooms, and their responses were added to the responses of the four other teachers for later analysis.

The first class was a combination second- and third-grade class, but during the piloting, the regular classroom teacher worked with the second-grade students while the lead author worked with the third-grade students. This class was part of a small rural district in the Pacific Northwest. Ethnic and gender composition of the classes was typical of districts in this region. The first author administered the survey and proctored the completion of the feedback forms in both classes

following a written protocol (See Appendix K). Because the second class was comprised of a single grade level and had more students, the regular classroom teacher assisted the first author with the administration of the survey and filling out of the feedback forms in the class.

After teachers in both the content review and piloting groups had completed and returned their feedback forms, they were sent thank you letters and asked to provide information so their payments could be processed (See Appendix J). We then began analysis of the data.

Analysis

The first author compiled the results of both the content reviews and the piloting of the survey instruments. Because of the nature of the Student Survey and Student Survey Feedback Forms, frequency counts were the most appropriate way to compile the data. In contrast, information from the Teacher Feedback Form consisted of a mix of qualitative and quantitative formats, requiring a different format of analysis. Data from the Teacher Feedback Forms were entered into an Excel spreadsheet and the quantitative data was presented in the form of frequency counts while the open-ended responses were compiled and are included in full in this technical report.

Results

Teacher Feedback on Teacher Survey

Results of the content review by teachers are presented in Table 1. In general, the teachers indicated that the Teacher Survey was appropriate and clearly written.

Table 1
Teacher Feedback on the Teacher Survey (n = 6)

Question	Not at all appropriate	Somewhat appropriate	Appropriate	Extremely appropriate
How appropriate is the language in the survey for third grade teachers?	0	0	4 (66%)	2 (33%)
How appropriate is the length of the survey for third grade teachers?	0	2 (33%)	2 (33%)	2 (33%)
How appropriate is the format of the survey for third grade teachers?	0	1 (17%)	3 (50%)	2 (33%)
How appropriate are the topics for third grade teachers?	0	0	4 (66%)	2 (33%)
	Not at all clear	Somewhat clear	Clear	Extremely clear

In addition to the Likert-type scale items, the Teacher Feedback Form included open-ended questions. The responses for each of the open-ended questions for which written responses were given are presented below.

Section 1
Question #6: If you were on an IEP team, what other information would be helpful for making mathematics accommodation decisions?

- Sections 3 and 4. Don't need both.
- Not sure.
- Attention span, focus, behavior, student comfort level during testing.
- Does the student have an adult that they typically work with or enjoy working with? This can greatly increase performance if they want to please.
- Present level of educational performance; format of instruction and problems.

Question #7: Which questions, if any, are redundant and could be omitted from the Teacher Survey?

- Why would you do Section 3 and 4? What you need to know is what should be included.
- Omit Section 4.

Question #8: Which questions in this section, if any, would be confusing to you as a teacher?

- None. But I don't like having 5 choices; 3 is cleaner.
- Many students can use the mouse -- but to find the appropriate info…

Question #9: What changes would you recommend to increase the clarity of the question(s)?

- See #8.
- Specific skills-- finding a web page, using a mouse, student proficiency independently.

Question #10, For Question 9, are there additional supplemental services that we should add to this list?

- Speech language
- Include speech language
- Language behavioral
- Pre-teaching for content area

Section 2
Question #11: Which questions in this section, if any, would be confusing to you as a teacher?

- Clarify what students are expected to be doing for 40 - 60 minutes.
- Work independently … after directions are given in small group?

Question #12: What changes would you recommend to increase the clarity of the questions?

- Tests--small, short vs. long, involved. Computer vs. paper.
- During content area instruction, during large group instruction w/out SPED support.

Section 3
Question #13: Which questions in this section, if any, would be confusing to you as a teacher?

- #8 -- free response format. Would this be a modification?

Question #14: What changes would you recommend to increase the clarity of the questions?

- I would state why they were being asked these same questions again --that is to seek info about the state-allowable testing accommodations.
- Great! Clear other than what free response… is this talking out answer in written form?

Question #15: Are there other accommodations that we should add to this list? If yes, please specify.

- Use a variety of manipulatives, use a calculator.
- Change the test to fewer questions on each page-- reformat material not content.

Section 4
Question #16: Which questions in this section, if any, would be confusing to you as a teacher?

- I assumed these were about all IN CLASS vs. just state testing.
- #6

Question #17: What changes would you recommend to increase the clarity of the question(s)?

- Is this with peer/ teacher/ para-professional?

Question #18: Do you have any additional suggestions about the Teacher Survey that we might find helpful?

- Mostly students that are SPED or low readers are sent to me, it would be fantastic to have regular ed. teachers implement accommodations in their classrooms with higher fidelity. Use a peer to read directions… group students with higher skills/peer models, etc.

Teacher Feedback on Student Survey

Results of teachers' content review of the student survey are presented in Table 2. In general, the teachers indicated that the Student Survey was appropriate and clearly written, although half of the teachers surveyed reported that the survey was too long. Two of the six teachers also reported that they felt the directions would be only *somewhat clear* to third-grade students.

In addition to the Likert-type scale items, the Teacher Feedback on Student Survey Form included open-ended questions. The responses for each of the open-ended questions for which written responses were given are presented below.

Introductory Section
Question #6: What suggestions do you have to improve the directions?

- Better format: section 1: how much do you like? Section 8 How do you feel about?
- It seemed too easy for students to just go down the line circling the end #s.
- Maybe some obvious practice questions would help get them into a more thoughtful mind set.
- The directions are well-worded.
- None if accompanied with verbal instructions, and an overhead sample of what to do.

Question #7: If you were on an IEP team, what additional Student Survey information would be helpful when making mathematics accommodation decisions?

- I would base accommodations on student behavior rather than a survey.
- This covers it quite well.
- Does the student feel confident in the subject? … small groups? … large groups?
- Present levels of educational performance.

Question #8: Which questions, if any, are redundant and could be omitted from the Student Survey?

- The survey is too cumbersome for SPED students.
- Section 3 is redundant.
- None
- #6 and #7 are similar ideas. Students I have would probably think of what they already get rather than what would be helpful.

Section 1
Question #9: Which questions in this section, if any, would be confusing to a third grade student?

- 3, 'computations'
- "Math computation problems
- I would change the word 'computation' to something easier.
- #3 I'd say 'number problems' instead of 'computation'.

Question #11: What changes would you recommend to increase the clarity of the questions?

- Add/subtraction
- 3. Say "math problems like adding and subtracting."
- #3, I'd say “+, —, x, / ” problems. Sentence/ ? (Statement) Tell the truth or tell how you feel (respond honestly).

Section 2
Question #12: Which questions in this section, if any, would be confusing to a third grade student?

- 3, computations; 6, other things.
- Once again, they won't know the word 'computation'.
- #3, #6, "How do you feel about…"

Question 14: What changes would you recommend to increase the clarity of the question(s)?

- Clarify both.
- To find a web page, find info (out about something) on the Internet.

Section 3
Question 15: Which questions in this section, if any, would be confusing to a third grade student?

- 1
- The addition of the 'not as school work' needed clarification.
- I don't see the need for this section. I think the kids will feel as if they have seen it before.
- (Not as school work) Wording.

Question #17: What changes would you recommend to increase the clarity of the question(s)?

- Maybe change wording to "at home I read… not homework over 'school work'."
- Not sure for magazines… maybe use 'comic books'.
- Maybe add the questions with a qualifier as part of school work to help them make the distinction.
- Delete the section

Section 4
Question #18: Which questions in this section, if any, would be confusing to a third grade student?

- #2, although most 3rd graders can tell time, I don't think they still really comprehend how long or short time is.
- #3, Maybe insert classroom teacher's name for clarity / student visual not in resource/ small group.

Question #20: What changes would you recommend to increase the clarity of the question(s)?

- It is clear
- Work without help from the teacher or friends?

- I often refer to on your own as independent work or all by yourself. Language will vary upon teacher and student understanding.

Section 5
Question #21: Which questions in this section, if any, would be confusing to a third grade student?

- #2, the negative format threw some. #3 and #4, They wanted to know if it meant math papers or THIS paper.
- What information are you seeking from questions 3 and 4? I find them confusing.
- #3 -- spaces on the paper or size of the paper?
- #5
- #5 how to start a problem.

Question #23: What changes would you recommend to increase the clarity of the question(s)?

- Vocab too hard for many SPED students.
- Maybe ask the questions in both negative and affirmative.
- #5 I know what to do to get started on a question.
- #1 Follow directions for each part. Know what to do on an independent activity.

Section 6
Question #24: Which questions in this section, if any, would be confusing to a third grade student?

- 2,3,4
- #2
- #6, In resource room -- be more specific of somewhere else Alone? Or with peer or teacher?

Question #26: What changes would you recommend to increase the clarity of the question(s)?

- Language -- words, testing sessions -- work times.
- Language to words.

- Many (several), words (language), 10. a, b, c, d,; a group of choices.

Question #27: Are there other accommodations that we should add to this list? If yes, please specify.

- Lots of 3rd graders won't know answers to these questions.
- This seems to cover it--unless you added, "on the computer".
- Let me pick what adult I will work with.
- Work one on one with peer or teacher.

Section 7
Question #28: Which questions in this section, if any, would be confusing to a third grade student?

- Same as section 6.
- #2

Question #30: What changes would you recommend to increase the clarity of the question(s)?

- Language—words.
- #2. Many language issues seem to be a modification on state assessments -- defining words, providing synonyms, etc.

Section 8
Question #31: Which questions in this section, if any, would be confusing to a third grade student?

- Pretty good.
- I like this section.
- great!

Question 33: What changes would you recommend to increase the clarity of the question(s)?

- I would only have three choices: "no help", "some help", "a lot of help" Why split hairs?
- Specify classroom tests to regular ed. Room (teacher name) special ed teacher (name) or specific subjects.

Question #34: Do you have any additional suggestions that we might find helpful?

- SPED 3rd graders would need significant support to complete this survey. I think this is better suited to older students.
- No, it's very user friendly.
- Will the survey be read/ explained to students? When students are given multiple choice ?'s in my room, they do not usually apply the skills they know -- show your work could not apply as well. I think the smiley face format would be even better than never, sometimes,... format for my students.

Student Feedback on Student Survey

Students from two third grade classrooms participated in a pilot test of the student survey instrument. In addition to filling out the survey, they provided feedback on ways to improve the survey instrument. In all, 32 third grade students (20 boys and 12 girls) provided feedback on the surveys.

The lead author followed a written protocol when piloting the survey instruments with the students (See Appendix L). She thanked the students for their help, provided a brief introduction to the purpose of the survey, then asked the students to read through the survey, one section at a time. Students were instructed to circle each word in the survey that they "had to think really hard about or take a long time to figure out what it meant" as they were reading. To reduce the likelihood that students would provide socially desirable rather than honest responses about the parts of the survey they found confusing, the lead author asked students to keep a younger sibling or a friend who struggled in school in mind as they were completing the survey and feedback form. Table 3 lists the words that students indicated were confusing to them as they were attempting to complete the survey. *Confusing words* were defined as words the students either did not know how to decode or words they could decode but not comprehend.

Table 3
Words Students Indicated Were Confusing

Word	# of Students Who Indicated It Was Confusing	Word	# of Students Who Indicated It Was Confusing	Word	# of Students Who Indicated It Was Confusing
Computation	22	Directions	4	Statements	2
Magazines	7	Written	1	Describe	1
Problems	2	Question	2	Easier	1
Etc.	20	Someone	1	Alone	2
Language	4	Pictures	2	Typing	2
Solving	3	Choose	1	Pointing	1
Computer	3	Understand	2	Respond	1
Minutes	3	Sessions	2	Reading	1
Tests	3	Instead	2	Writing	1
Things	1	Letters	1	Own	1
Group	1	Somewhere	1	Answer	1
Classroom	1				

As they came to the end of each section, students were asked to answer the corresponding questions on the Student Feedback Form. Their responses showed almost no variance (students seemed to circle the most positive option available in each question). However, students made the following suggestions when given the opportunity to supply their own ideas to make the survey easier to complete:

1. Use bigger font (4 students).
2. Space the words out more (1 student).
3. Include pictures (1 student).
4. Make the survey shorter (3 students).
5. Make the difference in the directions between Section 6 and Section 7 more obvious so students understand more easily why they are responding to the same question stems (1 student).

Discussion

Analysis of both teacher and student feedback provided clear suggestions for improvements to the surveys. We begin with a discussion of the changes suggested by content reviewers on the teacher survey instrument and then move to the changes suggested on the student survey instrument by content review teachers and third-grade students involved in the pilot testing.

Suggestions for Improving the Teacher Survey Instrument

Although all teachers who provided feedback reported that the survey was appropriate and clearly written, five changes are suggested to improve the instrument. First, the option of *speech language* should be added to the list of services provided to the student in Section 1, Question 9. Second, the exact meaning of *work 40-60 minutes* needs to be clarified (Section 2, Question 2). Changing the item to *work 40-60 minutes without additional teacher direction* would address this concern. Third, the meaning of *free response format* needs to be clarified (Section 3, Question 8). Teachers who participated in our content review were unsure how to interpret the meaning of the phrase, and this ambiguity could produce construct irrelevant variance in the survey responses. Fourth, additional accommodations identified by the teachers as commonly used should be added to the list of accommodations in both Sections 3 and 4. The

additional accommodations include: *use a variety of manipulatives*, *use a calculator*, and *change the test to fewer questions on each page — reformat the material not the content.* Fifth, clarify whether the *tests* referred to in Section 4, Question 16 are state tests or classroom tests. Addressing these five concerns would improve the content-validity of the teacher survey for use in our accommodation station.

Suggestions for Improving the Student Survey Instrument

Suggestions for improving the student survey generally fall into two areas: changes in the formatting of the survey instrument and changes in the wording used in the various questions.

Changes that should be made in the formatting of the student survey

Moving from a paper survey to one delivered via computer should address all the concerns identified by both teachers and students. First, the computer format will reduce the chance that students will get confused by the differences in appearance and layout of the different sections. The survey can be designed in such a way that the key words in the section prompt (such as *How much do you like…*, in Section 1) stand out more obviously from the individual item stems and answer choices. Consistent use of color, font size, and placement on the screen should help students decipher the various components of each section of the survey and thus reduce confusion. Concern raised by both teachers and students about the seeming redundancy of Sections 6 and 7 can also be addressed as a layout design issue. Using color, italicized type, or selective fonts to emphasize the difference in the question stem in these two sections might reduce the potential for confusion. Second, computer delivery should address some of the concern with the length of the survey. Because the computer screen can advance one

section at a time, students will have less to focus on at any one time; this format should de-emphasize the impression that they are wading through a lengthy survey.

Changes that should be made in the wording of the student survey

Clearly, third-grade students who participated in our pilot study were unfamiliar with some of the words used on the survey instrument. These words need to be changed. Table 4 presents suggested changes in wording for all the words that 4 or more students identified as *challenging.*

Table 4
Suggested Changes in Wording on Student Survey (n=32)

Original Word	Suggested Change	# of Students Who Indicated It Was Confusing
Computation	Math number problems	22
Etc.	Drop the word; do not replace it	20
Magazines	Drop the word; do not replace it	7
Language	Words	4
Directions	Drop the word; do not replace it	4

In addition, 29 other words were also identified as *confusing* by three or fewer students out of the group of 32. During the pilot test, the first author was able to provide assistance to students who were struggling with these words. When the words in question were read aloud, 100% of the students in the pilot sample reported that they then understood the meaning and were able to respond to the survey question. Again, the computer format of the Accommodation

Recommendation and Testing Station provides a convenient method to address these challenges. The system already provides an option for test items to be read aloud for students with reading deficits. Including a read aloud option for the survey as well should increase its accessibility vastly.

Discussion

Input was gathered from students and teachers about the format and content of the teacher and student surveys for the accommodation station. The suggested recommendations provided by this review will be considered in the revision of the surveys. This information is important for the continued development of the accommodation station as it provides insights into the accommodations that may be beneficial to students from two different perspectives. We hope that the process outlined in this report may be useful for other researchers attempting to evaluate the appropriateness of an instrument.

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Appendix A

Template of the Letter Used for Initial Contact with Content Review Teachers

Dear ,

I am working on a project with _____ and _____ at the University of Oregon. This project is designed to help us develop a tool that will assist teachers in making decisions about what accommodations are appropriate for individual students in their classes.

One part of this tool involves two surveys: one that would be filled out by teachers and another that would be filled out by students. Eventually, these surveys will be designed to be completed on a computer so the results can be returned immediately. Before we move to the computers, however, we would like to get some feedback on the appropriateness of the wording and usefulness of the information on the surveys.

We are wondering if you might be able to look over the two surveys and provide us with some feedback. This should take approximately 20 minutes. We are hoping to complete this part of the process by the end of April.

We would like to offer you $25 to compensate you for your time.

Thank you for considering our request. Please contact me if you are interested or have any questions (phone_____ or email_____).

I hope this school year is progressing smoothly for you!

Sincerely,

_____

Research Assistant
Behavioral Research and Teaching

Appendix B

Template of the Letter Used for 2nd Contact with Content Review Teachers

Dear _____,

Again, thank you for your willingness to participate in this research effort. We really couldn't do it without you!

Enclosed, please find the following 4 documents:

1) copies of the teacher and student surveys for you to review
2) feedback forms for you to fill out on both surveys

Please review both the teacher and student surveys first yourself, then fill out the feedback forms. We can either arrange to have someone pick up the surveys and feedback forms at your school site, or you can send them to us in the mail once you have completed your reviews.

Also, in order to process your check when the surveys and feedback forms have been returned, I will need your social security number. If you are uncomfortable supplying your social security number, please let me know, and we can make other arrangements.

Please feel free to contact me if you have any questions (phone____ or email_____).

Again, thank you very much for your assistance.

Sincerely,
_____

Research Assistant
Behavioral Research and Teaching

Appendix C

Teacher Recommendation for Accommodations Survey

Student Name: _____ Teacher: _____ School: _____

Please read each statement and circle the answer that best describes this student.

Section 1: Student Proficiency

	very unproficient	not very proficient	fairly proficient	highly proficient	very highly proficient
1. How proficient is the student in reading grade level material?	1	2	3	4	5
2. How proficient is the student in writing?	1	2	3	4	5
3. How proficient is the student in math computation?	1	2	3	4	5
4. How proficient is the student in math problem solving?	1	2	3	4	5
5. How proficient is the student in using a computer mouse?	1	2	3	4	5
	rarely	infrequently	sometimes	frequently	daily
6. How often does this student use a computer in your classroom for instructional activities or tests?	1	2	3	4	5
7. What percentage of the student's instruction is in a language other than English?	0%	25%	50%	75%	100%
Please specify language					
8. How much academic time during an average week does the student spend outside the general education classroom?	0%	25%	50%	75%	100%

9. Please specify additional services this student receives. (check all that apply)

____ supplemental reading instruction

____ supplemental writing instruction

____ supplemental math instruction

____ individualized instruction

____ other

Section 2. Ease of doing school-related tasks

Rate how easy it is for this student to do the following:	*Not Easy*	*Somewhat Easy*	*Very Easy*
1. Work independently.	1	2	3
2. Work for 45–60 minutes.	1	2	3
3. Work in whole class.	1	2	3
4. Read and understand directions.	1	2	3
5. Take tests.	1	2	3

Section 3. Accommodation recommendations.

Please evaluate the appropriateness of each of the following testing accommodations for this student.

How much would the student benefit from taking a math test under the following accommodations?	No benefit	Minimal benefit	Some benefit	Strong benefit	Do Not Know
1. Read problems and directions aloud	1	2	3	4	0
2. Simplify language in problems and directions	1	2	3	4	0
3. Present problems written in a language other than English	1	2	3	4	0
4. Extend length of testing session	1	2	3	4	0
5. Administer test in multiple short testing sessions	1	2	3	4	0
6. Allow student to work alone in a separate testing location	1	2	3	4	0
7. Allow student to respond to questions in alternate formats such as typing, pointing, or with the use of a scribe	1	2	3	4	0
8. Magnify text of problems and directions	1	2	3	4	0
8. Allow student to respond to questions in a free response format where he/she provides the answer in writing	1	2	3	4	0
10. Allow student to respond to questions in a multiple choice response format where he/she selects the best answer from a list of choices	1	2	3	4	0

Section 4. Frequency of student use of accommodations and technology/calculators

Please describe how often each of the following testing accommodations are provided for this student in your classroom.

How often are the following accommodations provided to this student in your classroom?	Never	Sometimes	Often	Always	Do Not Know
1. Read problems and directions aloud	1	2	3	4	0
2. Simplify language in problems and directions	1	2	3	4	0
3. Present in a language other than English	1	2	3	4	0
4. Extend length of testing session	1	2	3	4	0
5. Administer test in multiple short testing sessions	1	2	3	4	0
6. Allow student to work alone in a separate testing location	1	2	3	4	0
7. Allow student to respond to questions in alternate formats such as typing, pointing, or with the use of a scribe	1	2	3	4	0
8. Magnify text of problems and directions	1	2	3	4	0
9. Allow student to respond to questions in a free response format where he/she provides the answer in writing	1	2	3	4	0
10. Allow student to respond to questions in a multiple choice response format where he/she selects the best answer from a list of choices	1	2	3	4	0

Appendix D

Teacher Feedback Form

Teacher Survey

<u>Note:</u> The attached survey is designed to be completed for *every student individually*, such that you would fill out a separate survey for every student in your class. Please keep this in mind as you are responding to the following questions.

Please review the entire survey. We would like your overall impression as well as feedback on individual items.

OVERALL FEEDBACK

This survey is designed to help provide information to teachers and members of IEP teams about the types of accommodations students should receive on classroom as well as state tests.

1. How appropriate is the language in the survey for third grade teachers? (circle one)

   not at all appropriate *somewhat appropriate* *appropriate* *extremely appropriate*

2. How appropriate is the length of the survey for third grade teachers? (circle one)

   not at all appropriate *somewhat appropriate* *appropriate* *extremely appropriate*

3. How appropriate is the format of the survey for third grade teachers? (circle one)

   not at all appropriate *somewhat appropriate* *appropriate* *extremely appropriate*

4. How appropriate are the topics for third grade teachers? (circle one)

   not at all appropriate *somewhat appropriate* *appropriate* *extremely appropriate*

5. How clear are the directions? (circle one)
   not at all clear *somewhat clear* *clear* *extremely clear*

6. If you were on an IEP team, what other information would be helpful for making mathematics accommodation decisions?

7. Which questions, if any, are redundant and could be omitted from the Teacher Survey?

SPECIFIC FEEDBACK

Section 1: In this section, we are seeking information about students' proficiency in a variety of academic areas.

8. Which questions, if any, would be confusing to you as a teacher?

9. What changes would you recommend to increase the clarity of the question(s)?

10. For question 9, are there additional supplemental services that we should add to this list? If *yes*, please specify.

Section 2: In this section we are seeking information about the ease with which students are able to complete a variety of academic behaviors.

11. Which questions, if any, would be confusing to you as a teacher?

12. What changes would you recommend to increase the clarity of the question(s)?

Section 3: In this section, we are seeking information about the state-allowable testing accommodations that you feel would be appropriate for your students.

13. Which questions, if any, would be confusing to you as a teacher?

14. What changes would you recommend to increase the clarity of the question(s)?

15. Are there other accommodations that we should add to this list? If *yes*, please specify.

Section 4: In this section, we are seeking information about how accustomed students are to using state-allowable testing accommodations in their classes.

16. Which questions, if any, would be confusing to you as a teacher?

17. What changes would you recommend to increase the clarity of the question(s)?

18. Do you have any additional suggestions about the Teacher Survey that we might find helpful?

Thank you so much for your thoughtful feedback on this survey!

Appendix E

Student Name: _____ School: _____

Teacher Name: _____ ID number: _____

Student Survey

Please read each statement carefully and respond honestly.

Section 1

How much do you like…	not at all	sort of	a lot
1. To read books and magazines?	1	2	3
2. To write letters, notes, etc.?	1	2	3
3. To solve math computation problems?	1	2	3
4. To solve math word problems?	1	2	3
5. To work on the computer?	1	2	3
6. To solve math problems on the computer?	1	2	3

Section 2

How much do the following statements describe you?

	not at all like me	sort of like me	a lot like me
1. I am good at reading.	1	2	3
2. I am good at writing.	1	2	3
3. I am good at math computation.	1	2	3
4. I am good at math problem solving.	1	2	3
5. I am good at using a computer to solve math problems.	1	2	3
6. I am good at using a computer for other things.	1	2	3

Section 3

Circle the best answer.

	never	1 time a month	2-3 times a month	1 time a week	everyd ay
1. I read books or magazines on my own (not as school work).	1	2	3	4	5
2. I write on my own (not as school work).	1	2	3	4	5
3. I solve math problems on my own (not as school work).	1	2	3	4	5
4. I use the computer on my own (not as school work).	1	2	3	4	5

Section 4

How easy is it for you to…

	not easy	sort of easy	very easy
1. Work on your own?	1	2	3
2. Work for 45–60 minutes?	1	2	3
3. Work as part of the whole class group?	1	2	3
4. Read and understand directions?	1	2	3
5. Take tests?	1	2	3

Section 5

Circle YES if the statement is true for you or NO if the statement is not true for you.

1. It is hard for me to follow written directions. YES NO
2. I don't have enough time to finish my schoolwork. YES NO
3. There is not enough space on the paper for me to do my work. YES NO
4. The letters and words are written too small for me to read. YES NO
5. It is hard for me to know what to do first to answer a question. YES NO

Section 6

How much would the following things help you on math tests?

	no help	a little help	more help	a lot of help	I don't know
1. Have someone read the problems and directions to me.	1	2	3	4	?
2. Make the language in problems and directions easier to understand.	1	2	3	4	?
3. Write the questions in a language other than English.	1	2	3	4	?
4. Give me more time.	1	2	3	4	?
5. Give me the test in several short testing sessions instead of all at once.	1	2	3	4	?
6. Give me the test alone somewhere away from the rest of the class.	1	2	3	4	?
7. Let me answer by typing, pointing, or having someone write what I tell them.	1	2	3	4	?
8. Make the letters and pictures in the directions bigger.	1	2	3	4	?
9. Let me write answers to the questions in my own way.	1	2	3	4	?
10. Let me choose an answer to the questions from a list.	1	2	3	4	?

Section 7

How often do you get to do the following things on math tests?

	never	sometimes	often	always	I don't know
1. Have someone read the problems and directions to you.	1	2	3	4	?
2. Have the language in problems and directions easier to understand.	1	2	3	4	?
3. Have the questions written in a language other than English.	1	2	3	4	?
4. Get more time.	1	2	3	4	?
5. Take the test as several short tests instead of all at once.	1	2	3	4	?
6. Take the test alone somewhere away from the rest of the class.	1	2	3	4	?
7. Answer by typing, pointing, or having someone write what you tell them.	1	2	3	4	?
8. Have the letters and pictures in the test bigger.	1	2	3	4	?
9. Write answers to the questions in your own way.	1	2	3	4	?
10. Choose an answer to the questions from a list.	1	2	3	4	?

Section 8

How do you feel about…

	not happy	somewhat happy	happy
1. Taking state tests	☹	😐	☺
2. Taking classroom tests	☹	😐	☺
3. Working with computers	☹	😐	☺
4. Taking tests on computers	☹	😐	☺

Appendix F

Teacher Feedback Form
on the Student Survey

<u>Note:</u> This survey is designed to be completed by third grade students. Please keep this in mind as you are responding to the following questions.

Please review the entire survey. We would like your overall impression as well as specific feedback on individual items.

OVERALL FEEDBACK

This survey will provide information about students' perceptions of their proficiency in reading, writing, math computation, math problem solving, and computer use. It will also provide information about student ability to work independently, take tests, etc. In addition, it will provide information about the accommodations the student is accustomed to receiving in his/her classes and the types of accommodations the student believes might be useful for him/her to receive.

1. How appropriate is the *language* in the Student Survey for third grade students? (circle one)

   too easy *just right* *too hard*

2. How appropriate is the *length* of the Student Survey for third grade students? (circle one)

   too short *just right* *too long*

3. How appropriate is the *format* of the Student Survey for third grade students? (circle one)

   not at all appropriate *somewhat appropriate* *appropriate* *extremely appropriate*

4. How appropriate are the *topics* of the Student Survey for third grade students? (circle one)

   not at all appropriate *somewhat appropriate* *appropriate* *extremely appropriate*

5. How clear are the *directions* for third grade students?

   not at all clear *somewhat clear* *clear* *extremely clear*

6. What suggestions do you have to improve the directions?

7. If you were on an IEP team, what additional Student Survey information would be helpful when making mathematics accommodation decisions?

8. Which questions, if any, are redundant and could be omitted from the Student Survey?

SPECIFIC FEEDBACK

Section 1: In this section, we are seeking information about students' *attitudes* towards a variety of academic areas.

9. Which questions, if any, would be confusing to a third grade student?

10. Please circle (on the survey itself) any words that may be confusing for a third grade student.

11. What changes would you recommend to increase the clarity of the question(s)?

Section 2: In this section, we are seeking information about students' *proficiency* in a variety of academic areas.

12. Which questions, if any, would be confusing to a third grade student?

13. Please circle (on the survey itself) any words that may be confusing for a third grade student.

14. What changes would you recommend to increase the clarity of the question(s)?

Section 3: In this section, we are seeking information about students' *frequency of engaging independently* in a variety of academic behaviors.

15. Which questions, if any, would be confusing to a third grade student?

16. Please circle (on the survey itself) any words that may be confusing for a third grade student.

17. What changes would you recommend to increase the clarity of the question(s)?

Section 4: In this section we are seeking information about *the ease* with which students are able to complete a variety of academic behaviors.

18. Which questions, if any, would be confusing to a third grade student?

19. Please circle (on the survey itself) any words that may be confusing for a third grade student.

20. What changes would you recommend to increase the clarity of the question(s)?

Section 5: In this section, we are again seeking information about *the ease* with which students report they engage in a variety of academic behaviors.

21. Which questions, if any, would be confusing to a third grade student?

22. Please circle (on the survey itself) any words that may be confusing for a third grade student.

23. What changes would you recommend to increase the clarity of the question(s)?

Section 6: In this section, we are seeking information about the state-allowable testing *accommodations* that your students feel would be helpful to them.

24. Which questions, if any, would be confusing to a third grade student?

25. Please circle (on the survey itself) any words that may be confusing for a third grade student.

26. What changes would you recommend to increase the clarity of the question(s)?

27. Are there other accommodations that we should add to this list? If *yes*, please specify.

Section 7: In this section, we are seeking information about *how accustomed* students are to using state-allowable testing accommodations in their classes.

28. Which questions, if any, would be confusing to a third grade student?

29. Please circle (on the survey itself) any words that may be confusing for a third grade student.
30. What changes would you recommend to increase the clarity of the question(s)?

Section 8: In this section, we are seeking information about students' *feelings* about tests in various contexts.

31. Which questions, if any, would be confusing to a third grade student?

32. Please circle (on the survey itself) any words that may be confusing for a third grade student.

33. What changes would you recommend to increase the clarity of the question(s)?

34. Do you have any additional suggestions that we might find helpful?

Thank you so much for your thoughtful feedback on this survey!

Appendix G

Student Feedback Form

Student Survey

<u>Note:</u> Please follow along with us as you complete this survey. You will work on the survey one section at a time. First, you will answer some questions on a survey. Then, you will answer some questions on this feedback form. Thank you for your help!

Section 1:
How easy was it to understand what you had to do?

not at all easy sort of easy very easy

Write the number of any questions that were confusing: _____

What was confusing? _____

_____

_____

Section 2:
How easy was it to understand what you had to do?

not at all easy sort of easy very easy

Write the number of any questions that were confusing: _____

What was confusing? _____

_____

_____

Section 3:
How easy was it to understand what you had to do?

not at all easy sort of easy very easy

Write the number of any questions that were confusing: _____

What was confusing? _____

_____

_____

Section 4:
How easy was it to understand what you had to do?

not at all easy sort of easy very easy

Write the number of any questions that were confusing: _____

What was confusing? _____

_____

_____

Section 5:
How easy was it to understand what you had to do?

not at all easy sort of easy very easy

Write the number of any questions that were confusing: _____

What was confusing? _____

_____

_____

Section 6:
How easy was it to understand what you had to do?

not at all easy sort of easy very easy

Write the number of any questions that were confusing: _____

What was confusing? _____

_____

_____

Section 7:
How easy was it to understand what you had to do?

not at all easy sort of easy very easy

Write the number of any questions that were confusing: _____

What was confusing? _____

_____

_____

Section 8:
How easy was it to understand what you had to do?

not at all easy sort of easy very easy

Write the number of any questions that were confusing: _____

What was confusing? _____

_____

_____

Overall Feedback:

What would make this survey easier to fill out?

_____

_____

_____

_____

_____

_____

Do you have any other suggestions for this survey?

_____

_____

_____

_____

_____

Appendix H

Template of the Letter Used for 1st Contact with Teachers Involved in Piloting Surveys

Dear ,

I am working on a project with ____ and ____ at the University of Oregon. This project is designed to help us develop a tool that will assist teachers in making decisions about what accommodations are appropriate for individual students in their classes.

One part of this tool involves two surveys: one that would be filled out by teachers and another that would be filled out by students. Eventually, these surveys will be designed to be completed on a computer so the results can be returned immediately. Before we move to the computers, however, we would like to get some feedback on the appropriateness of the wording and usefulness of the information on the surveys.

We are wondering if you might be able to look over the two surveys and provide us with some feedback. This should take approximately 20 minutes. In addition, we are hoping to pilot the survey with several classes of third grade students and get feedback from them. We expect the pilot testing with students to take about 30 minutes. We are hoping to complete this part of the process by the end of April.

We would like to offer you $50 to compensate you for your time.

Thank you for considering our request. Please contact me if you are interested or have any questions (phone_____ or email _____).

I hope this school year is progressing smoothly for you!

Sincerely,

_____

Research Assistant
Behavioral Research and Teaching

Appendix I

Template of the Letter Used for 2nd Contact with Teachers Involved in Piloting Surveys

Dear ,

Thank you for your interest in assisting us with a review of the surveys we are developing.

Here's a brief overview of the parts of this project:

1) You will review both the teacher and student surveys and fill out feedback forms for each of them.
2) You will send home a copy of the passive consent form with each of your students prior to our administering the student surveys and feedback forms to your class.
3) We will set up a time to administer the surveys to your students and get their reactions.

It would be very helpful if you could send me a roster of your students. This will allow me to fill out the surveys before we administer them to your students.

I can either send the surveys and feedback forms for your use electronically as attachments or as paper copies through the mail. Please let me know which you would prefer.

Please feel free to contact me if you have any questions (phone _____ or email_____).

Again, thank you very much for your assistance.

Sincerely,

_____

Research Assistant
Behavioral Research and Teaching

Appendix J

Thank You!

Thank you very much for participating in this project. We appreciate your involvement.

We would like to compensate you for your time and effort. Please complete the following information for processing purposes.

First Name: _____

Last Name: _____

Social Security Number: _____

School: _____

Home Address: _____

_____

Home Phone: _____

e-mail: _____

Please send this form to:

_____
Behavioral Research and Teaching
241 College of Education
5262 University of Oregon
Eugene, OR 97403-5262

Thank you again for helping to make this project a success.

Sincerely,

_____

Appendix K

Instructions for Having Students Review the Surveys

1. Distribute passive consent forms several days in advance so students and parents have time to think about their participation.
2. On the day you have selected to have students review the surveys, have enough copies of the survey and feedback form for every student to have his/her own.
3. Distribute one survey and one feedback form to each student.
4. Working *as a class*, read through Section 1 of the survey. Have students fill it out.
5. Working *as a class,* read through Section 1 of the feedback form. Have students fill it out.
6. Continue together, section by section, until students have completed all 8 sections of the survey and have responded to each of the sections on the feedback forms.
7. Collect all surveys and feedback forms from students.
8. Thank students and teacher for helping out.