



DIAMOND

DATA INFORMED ACCESSIBILITY: MAKING
OPTIMAL NEEDS-BASED DECISIONS

Educators' Perspectives on Classroom Implementation of Accessibility Features and Accommodations

Deb Albus, Martha L. Thurlow, Kristi K. Liu, Sheryl S. Lazarus, and Erik D. Larson

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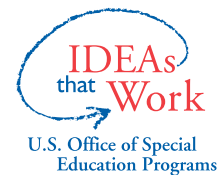
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DIAMOND States Participating in Study

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Minnesota
Ohio
West Virginia
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Overview

In 2015, the Data-Informed Accessibility–Making Optimal Needs-based Decisions (DIAMOND) project received funding from an Enhanced Assessment Initiative grant to collect information that would support the development of professional development modules for educators making decisions within new accessibility frameworks.

More accessibility features and accommodations are available to a wider range of students than ever before, which puts a greater burden on educators. Not only are educators expected to determine which accessibility features and accommodations help their students on state assessments, they are supposed to incorporate these same accessibility features and accommodations into their instruction and formative assessments. Previous research shows that they often struggle to do this (Altman, Lazarus, Quenemoen, Kearns, Quenemoen, & Thurlow, 2010; Langley & Olsen, 2003). To address this issue, the DIAMOND project conducted phone interviews with educators to highlight effective practices being used to implement accessibility features and accommodations in their classrooms during instruction and during assessments.

For this study, educators were asked about two kinds of accessibility features (universal features and designated features) and about accommodations. These were defined for this study as:

Universal Features: These are accessibility supports that are available to all students as they access instructional or assessment content. They may be either embedded and provided digitally through instructional or assessment technology (e.g., answer choice eliminator), or non-embedded and provided non-digitally at the local level (e.g., scratch paper).

Designated Features: These are accessibility supports that are available to any student for whom the need has been indicated by an educator (or team of educators including the parents/guardian and the student if appropriate) who are familiar with the student’s characteristics and needs. Embedded designated features (e.g., color contrast) are provided digitally through instructional or assessment technology, while non-embedded designated features (e.g., magnification device) are provided locally.

Accommodations: These are changes in procedures or materials that ensure equitable access to instructional and assessment content and generate valid assessment results for students who need them. Embedded accommodations (e.g., text to speech) are provided digitally through instructional or assessment technology, while non-embedded accommodations are provided locally. Accommodations are generally available to students for whom there is documentation on an Individualized Educational Plan (IEP) or 504 accommodations plan; states also have offered accommodations to English learners (ELs).

The study sought to answer the following questions:

1. How did educators define accessibility features and accommodations?
2. Which accessibility features and accommodations did educators use in their classrooms?
3. Did accessibility features and accommodations used differ by educator group (general educator, special educator, EL educator) or by student population served (special education, ELs, general education)?
4. To what extent were the accessibility features and accommodations identified by educators consistent with the state's assessment policies?
5. What challenges did educators report about the use of accessibility features and accommodations?

Methods

Study Recruitment

Educators participating in phone interviews were recruited in three stages. First, many educators had indicated their interest in being part of interviews on a DIAMOND survey that was administered online in June 2016 (see Thurlow, Larson, Lazarus, Shyyan, & Christensen, 2017). In the first round of recruitment, DIAMOND staff contacted those volunteers from the survey who met the following criteria: (a) currently served as a K-12 classroom educator in general education, special education, or English learner education; (b) taught in public schools, including charter schools, that had face-to-face instruction; and (c) had experience with accessibility features and accommodations.

We attempted to include educators from a variety of states, grade levels, licensure areas, and geographic locations (i.e., rural, small-town, suburban, and urban districts, according to definitions from the National Center for Education Statistics). The selected educators received an initial e-mail invitation with details of the telephone interview study and at least one reminder if they did not respond. Those who did respond were asked to fill out a research consent form (see Appendix A). Once the consent form was received, educators were invited to choose a convenient time for a roughly 45-minute phone interview. Using this strategy, 101 educators were contacted; 29 of them completed telephone interviews.

To enhance the number of participants in the study, a second wave of recruitment was recommended by the project's expert panel and staff from the collaborating state departments of education. State education agencies were given a recruitment e-mail template (see Appendix B) to

contact additional educators who met the study criteria. In three states, either the staff member from the state education agency or the recruited educators contacted the research team. We then followed a similar process to obtain educator consent and set up an interview time. Twelve additional educators were contacted using this method; eight of them completed an interview.

As a third recruitment method, project staff contacted educators who had volunteered for a telephone interview on the 2016 survey but who had not initially been selected to participate. In an effort to have a diverse sample, DIAMOND staff had generally selected only one educator from those with similar roles and locations (e.g. special education educators from rural Alabama districts). When greater numbers of participants were needed, the research team contacted all remaining volunteers regardless of their state of residence, geographic location, grade level, or type of teaching position. Thirty-seven educators in three states were contacted through this third round of recruitment; three of them completed interviews.

In total, DIAMOND project staff contacted 150 participants in eight states and conducted phone interviews with 40 (see Table 1).

Table 1. Number of Educators Contacted and Participating in Interviews

	Round 1 of Recruitment	Round 2 of Recruitment	Round 3 Of Recruitment
Alabama	16 contacted 8 participated	4 contacted 2 participated	25 contacted 2 participated
Connecticut	14 contacted 1 participated	--	--
Maryland	2 contacted 0 participated	--	--
Michigan	15 contacted 1 participated	7 contacted 5 participated	--
Minnesota	16 contacted 6 participated	1 contacted 1 participated	4 contacted 1 participated
Ohio	15 contacted 5 participated	--	--
West Virginia	16 contacted 5 participated	--	8 contacted 0 participated
Wisconsin	7 contacted 2 participated	--	--

Table 2 shows the number of educators who participated in phone interviews by their professional role. In sections of the report where data are presented by educator role, those with dually identified teaching backgrounds here are listed by their primary role.

Table 2. Number of Educators by Role

Educator Role	Number
General Educator	9
General Education/Special Educator	2
General Education/English Learner Educator	1
Special Educator	14
English Learner Educator	11
Unclear	3

Data Collection Procedures

DIAMOND project staff followed an interview protocol when conducting the phone interviews (see Appendix C). Interviewers first asked educators to briefly describe their current positions and the demographic characteristics of their current students. Educators then examined electronic versions of their own state’s assessment accessibility and accommodations manuals for content (math and English language arts–ELA) and English language proficiency (ELP) assessments; these had been e-mailed to them prior to the interview.

After looking at a list of the specific assessment accessibility features and accommodations allowed by their state, educators were asked to describe supports they typically used during instruction and on classroom tests. Interviewers asked them to reflect on supports used particularly for general education students, students in special education, and English learners. Several additional questions were used to determine whether the educators might have students who could be observed using a particular accessibility feature or accommodation as part of a future research activity, and whether the educators would be willing to allow researchers to visit their classroom.

Educators who completed a telephone interview were sent a \$50 gift card for their participation.

Data Preparation

When possible, and with educators’ agreement, phone interviews were recorded so that researchers could refer back to the educators’ words while composing their notes. When recording was not possible, researchers took summary notes during the phone calls that they then completed and edited afterward. These notes formed the raw data for analysis.

Data Analysis

Staff received cleaned versions of the full educator phone interviews for analysis. See Appendix C for the educator interview content. A subset of the entered data was used for this report.

Results

Educators' Definitions of Accessibility Features and Accommodations

Educators first were asked to define what the terms “accessibility features” and “accommodations” meant to them. Educators varied in their approach to answering this question. Overall, 14 of the 40 educators (35%) attempted to differentiate between the two terms. These 14 educators included four special educators, seven English learner educators, and three general educators.

The 14 educators differentiated the terms based on the context of use (e.g., instruction vs. assessment), by giving examples for each category, by the population able to use them (e.g., accommodations for students with IEP), and whether the support was built into a technology platform (see Table 3). A few educators attempted definitions based on different types of access, but were unclear as to meaning. (See Appendix D for all educator definitions offered).

Table 3 shows the frequency of these approaches to differentiating between accessibility features and accommodations by the educators' professional roles. As evident in the table, the highest number of educators differentiated by whether a support was built into the assessment technology (n=5) and by examples for categories (n=5), followed by context of use (n=3). Some educators used more than one approach in their response.

An example of each of the definition approaches educators used is included in Table 4. The full list of definitions is provided in Appendix D.

Table 3. Educator Approaches to Differentiating Accessibility Features and Accommodations

Differentiation Approach	Number of Educators			Total
	General Educator	Special Educator	English Learner Educator	
Built Into Assessment Technology	0	4	1	5
By Student Population that Uses	1	1	0	2
Context of Use (e.g., instruction vs. assessment)	1	1	1	3
English Language Development vs. Content Access	0	0	2	2
Examples for Categories	1	1	3	5
General Difference in Access Unclear	1	0	1	2

Table 4. Example Definition Approaches Used by Educators

<p>Built Into Assessment Technology</p> <p><i>“Accessibility features mean what’s built into the assessments that allows any student to have more successful experience with the assessments. Accommodations are something very specific to a student and without it could not access the assessment.”</i></p> <p>By Student Population that Uses</p> <p><i>“Accessibility features: I think of technology features. Accommodations; What we provide per students’ IEPs.”</i></p> <p>Context of Use</p> <p><i>“Accessibility features are tools that the students could use to help them with the test. Accommodations- what the teachers do in the class so everyone can meet their goals and be successful.”</i></p> <p>Examples for Categories</p> <p><i>“When I think of accessibility features, I think primarily of features associated with computerized testing. So these are text to speech, large print, notebook feature, highlighting, these are universal tools that every student has the ability to use to make the test more accessible to him or her. Accommodations, to me, then are features that are intended to, I guess, maybe even scaffold the test, for students who are special needs. These are things that are specialized to the student according to whatever handicap or disability is identified according to his or her IEP.”</i></p> <p>General Difference in Access Unclear</p> <p><i>“Well, accessibility means that they can access, well, I’ll try not to use the word access, access the information. And the accommodations is so that they can access it as equally as possible as students without any exceptionalities.”</i></p>
--

Accessibility Features and Accommodations Used in Classrooms for Instruction and Tests

Educators were asked about the supports they used with students for classroom instruction and assessments in the categories of universal features, designated features, and accommodations. Table 5 shows that educators identified some of the same supports within different categories, a finding that possibly could reflect policies for state assessments. Overall, two supports were mentioned by educators as fitting across all three support categories. These were Calculator and Text to Speech/Read Aloud.

Table 5. Supports Educators Described in Multiple Categories

Support	Universal Feature	Designated Feature	Accommodation
Calculator	X	X	X
Dictionary	X	--	X
Directions	X	--	X
Extended Time	X	--	X
Headphones/Noise Buffer	X	X	--
Highlighter	X	X	--
Line Guide/ Reader	X	X	--
Masking	X	--	X
Small Group/Individual Administration	X	--	X
Text to Speech/Read Aloud	X	X	X

Table 6 shows the totals for the most frequently mentioned supports across all categories (i.e., universal features, designated features, and accommodations) for each student group for classroom instruction and tests. Across student groups, the five most frequently mentioned supports for classroom instruction were Text to Speech (n=70), Extended/Extra Time (n=37), Highlighter (n=24), Calculator (n=17), and Scribe (n=13). Still, there were differences by student group. For general education students, extended time was most frequent; for students with disabilities, text to speech was most frequent; for English learners, dictionary was most frequent; and for ELs with disabilities, text to speech was also most frequent. Across student groups for classroom tests, the five most frequently mentioned supports were fairly similar to those for instruction, specifically, Text to Speech (n=81), Extended/Extra Time (n=59), Calculator (n=17), Highlighter (n=16), and Small Group (n=15). Again, there are differences by student group in the supports most often used for classroom tests. For general education students, extended time was most frequent; for students with disabilities, text to speech was most frequent; for English learners, dictionary was most frequent; and for ELs with disabilities, text to speech was also most frequent. These mirrored the most frequent supports for classroom instruction.

Across student groups and purposes, including classroom instruction and classroom tests, the five most frequently mentioned supports were Text to Speech (n=151), Extended/Extra Time (n=96), Highlighter (n=40), Calculator (n=34), and Scribe (n=25).

Table 6. Supports Mentioned Most Frequently Overall and by Student Group for Classroom Instruction

Support	General Education		Students with Disabilities		English Learners (ELs)		ELs with Disabilities		Total Educator Mentions
	Instr.	Test	Instr.	Test	Instr.	Test	Instr.	Test	
Background Font Colors	4	3	0	0	0	0	0	0	7
Bilingual Words	0	0	0	0	5	0	0	0	5
Calculator	8	8	9	4	0	5	0	0	34
Colored Overlay	0	0	0	0	5	0	0	0	5
Dictionary	0	0	0	0	12	11	0	0	23
Directions	4	3	0	0	0	6	4	3	7
Extended Time	14	16	13	34	10	9	0	0	96
Highlighter	5	5	8	0	8	8	3	3	40
Modify	0	0	0	0	5	0	0	0	5
Noise Buffer	3	3	7	5	0	0	0	0	18
Scratch Paper	0	0	6	0	0	0	0	0	6
Scribe	0	0	13	12	0	0	0	0	25
Small Group	0	0	0	15	0	0	0	0	15
Text to Speech	2	2	28	46	4	5	36	28	151
Translation/Stacked Spanish	0	0	0	0	9	10	0	0	19

Educator Professional Group and Student Group Differences in Accessibility Features and Accommodations for Instruction and Classroom Tests

Responses also were examined for each category of supports by educator professional groups and the student groups they served. To summarize this information, we focused on the target group most often associated with the educator’s professional group (e.g., general education students for general educators) and then for all students mentioned by that group of educators.

Universal features for instruction. Table 7 shows the universal features that educators in the three professional groups (i.e., general educator, special educator, and EL educator) identified for students for classroom instruction. As shown in Table 7, the top three supports general educators reported using for all students served were Highlighter (n=5), Calculator (n=4), and Translator (n=4). The top three for special educators for all students served were: Highlighter (n=9), Calculator (n=8), and Scratch Paper (n=6). For English learner educators, the top three for all students served were: Highlighter (n=7), Small Group/Individual Administration (n=6), and Calculator (n=5).

Table 7. Universal Features for Instruction

Universal Features	General Educator Mentions for:		Special Educator Mentions for:		English Learner Educator Mentions for:	
	General Education Students	All Served	Students with Disabilities	All Served	English Learners	All Served
Amplification	0	0	2	2	0	0
Breaks	0	0	2	2	0	2
Calculator	2	4	5	8	3	5
Chunking	1	1	0	0	0	1
Color Contrast	0	0	2	2	0	0
Dictionary	0	2	1	1	0	0
Different Paper/Materials	0	2	0	0	0	1
Directions/Repeat Directions	2	2	2	3	0	2
Extended Time	2	3	0	1	0	3
Headphones/Noise Buffer	0	1	4	4	0	0
Highlighter	2	5	3	9	3	7
Line Guide	2	2	2	2	4	4
Lighting	0	0	2	2	0	0
Masking	1	2	3	4	0	2
Page Enlarger	0	0	3	3	0	0
Redirect Student/Prompt to Continue	0	0	2	2	0	0
Scratch Paper	0	1	2	6	0	3
Small Group/Individual Administration	1	2	1	2	3	6
Spellcheck/Google Spell	0	1	2	2	2	3
T Stools	1	1	0	0	0	1
Text to Speech/Human Reader/Read Aloud	0	1	2	3	3	4
Thesaurus	0	0	0	0	2	2
Translator	0	4	0	0	0	0
Whiteboard	0	0	0	0	0	2
Writing Tools	1	1	2	3	0	1

The top three supports identified differed somewhat when examining them for the primary populations the educators served. There was no obvious “top three” identified by general educators for use with general education students. Special educators’ top three for students with

disabilities were Calculator (n=5), Headphones/Noise Buffer (n=4), followed by Highlighter, Masking, and Page Enlarger, each with three. For English learner educators, the top supports used for English learners for instruction were Line Guide (n=4), and Calculator, Highlighter, Small Group/Individual Administration, and Text to Speech/Read Aloud, all with three mentions.

Both special educators and English learner educators identified universal features for ELs with disabilities (not shown in the table). For special educators, the most frequent universal features were Directions and Highlighter with one each. For English learner educators, the most frequent universal features were Text to Speech/Read Aloud (n=4), Directions (n=3), and Highlighter Adjust Reading Level, and Modify, with two mentions for each.

Designated features for instruction. Table 8 shows the designated features that educators in the three professional groups identified for students for classroom instruction. The top features general educators reported using for all students served were Noise Buffer (n=4), Background Font Colors/Color Contrast/Color Overlay (n=3), and Reading Tracker/Reading Strip/Line Guide (n=3). For special educators, the top features for all students served were Text to Speech/Read Aloud (n=9), and Noise Buffer, Reading Tracker/Reading Strip/Line Guide, and Simplify Directions with two mentions of each. For English learner educators, the top features for all students served were Text to Speech (n=12), Background Font Colors/Color Contrast/Color Overlay (n=4), Bilingual Words (n=4), and Noise Buffer (n=4).

Table 8. Designated Features for Instruction

Designated Features	General Educator Mentions for:		Special Educator Mentions for:		English Learner Educator Mentions for:	
	General Education Students	All Served	Students with Disabilities	All Served	English Learners	All Served
Amplification	0	0	0	0	2	2
Background Font Colors/Color Contrast/ Color Overlay	0	3	0	0	4	4
Bilingual Words	0	1	0	0	4	4
Calculator	0	1	1	1	0	0
Enlarge Materials on Screen	0	1	1	1	0	0
Graph/Lined Paper	0	0	0	0	3	3
Highlighter	0	1	1	1	0	0
Masking	0	1	1	1	0	0
Music/White Noise	0	1	1	1	0	0
Noise Buffer	0	4	2	2	2	4
Reading Tracker/Reading Strip/ Line Reader	0	3	2	2	0	0

Table 8. Designated Features for Instruction (continued)

Scribing	0	0	0	0	3	3
Simplify Directions	0	2	1	2	0	0
Student Reads to Self	0	1	1	1	2	2
Text to Speech/Read Aloud	0	2	3	9	9	12
Visuals	0	0	0	0	3	3

The top designated features mentioned by each educator group for their primary population served were fairly consistent with the designated features they reported for all students served. The one exception was that general educators reported no designated features being used with general education students. Also, no designated features were specifically mentioned for ELs with disabilities for instruction (not shown in the table).

Accommodations for instruction. Table 9 shows the accommodations that educators in the three professional groups identified for students for classroom instruction. The top three mentioned accommodations by general educators for all students served were Extended Time (n=9), Text to Speech/Read Aloud (n=7), and Scribe (n=4). For special educators, the top three accommodations for all students served were Text to Speech/Read Aloud (n=11), Extended Time (n=10), and Scribe (n=8). For English learner educators, the top three accommodations for all students served were Text to Speech (n=20), Extended Time (n=11), and Scribe (n=7).

Table 9. Accommodations for Instruction

Accommodations	General Educator Mentions for:		Special Educator Mentions for:		English Learner Educator Mentions for:	
	General Education Students	All Served	Students with Disabilities	All Served	English Learners	All Served
Alternate Setting	0	2	0	0	0	0
Assistive Technology	0	0	2	2	0	0
Breaks	0	2	0	0	0	0
Calculator	1	3	1	1	0	1
Dictionary	0	2	0	1	6	6
Extended Time	3	9	6	10	6	11
Font Size/Large Print	0	0	4	4	0	0
Google Read/Write	1	2	0	0	0	2
iPad	0	1	1	1	0	0
Multiplication Tables	1	1	0	1	0	0
Native Language Support	0	0	0	0	3	3
Scribe	0	4	7	8	4	7

Table 9. Accommodations for Instruction (continued)

Small Group/Individual Administration	0	0	2	2	0	0
Text to Speech/Read Aloud	2	7	10	11	15	20
Translation/Stacked Spanish	0	1	0	0	5	5
Word Processor	0	2	0	0	2	2

In terms of the primary population served, the most frequent accommodations mentioned by general educators for general education students were Extended Time (n=3) and Text to Speech/Read Aloud (n=2). For special educators, the top accommodations mentioned for students with disabilities were Text to Speech/Read Aloud (n=10), Scribe (n=7), and Extended Time (n=6). For English learner educators, the top three accommodations for English learners were Text to Speech/Read Aloud (n=15), Dictionary (n=6), and Extended Time (n=6). No accommodations for instruction were specifically mentioned by any educator group for ELs with disabilities.

Universal features for classroom tests. Table 10 shows the universal features that educators in the three professional groups (i.e., general educator, special educator, and EL educator) identified for students for classroom tests.

Table 10. Universal Features for Classroom Tests

Universal Features	General Educator Mentions for:		Special Educator Mentions for:		English Learner Educator mentions for:	
	General Education Students	All Served	Students with Disabilities	All Served	English Learners	All Served
Breaks	0	0	5	2	3	2
Calculator	5	3	7	5	3	2
Color Contrast/Formatting	0	0	4	0	0	0
Cross Off	0	0	2	0	2	1
Dictionary	0	1	0	0	3	0
Different Colored Paper	0	4	0	0	0	0
Directions	3	2	4	0	6	3
Extended Time	3	4	8	0	2	3
Headphone/Noise Buffer	0	3	5	0	0	0
Highlighter	2	4	4	4	5	6
Large Print	0	2	2	0	0	0
Line Guide/Reader	1	2	2	1	0	0
Masking	1	2	3	1	0	0
Math Manipulatives	0	0	2	0	0	0

Table 10. Universal Features for Classroom Tests (continued)

Modify Questions/Limit Questions or Answers	3	3	0	0	2	1
Music/ White noise	0	2	2	0	0	0
Notepad	1	0	0	1	0	1
Pencil Grip/Larger Pencil	0	0	0	0	2	0
Redirect Students/Prompt to Continue	1	0	3	1	0	0
Same Writing Prompts	0	0	0	0	2	0
Scratch Paper	0	1	3	2	4	4
Scribe	0	0	2	0	1	0
Separate Testing Room	0	0	0	0	2	0
Small Group/Individual Administration	0	2	10	2	3	3
Specified Seating	0	0	2	0	0	0
Spell Check	0	2	2	1	0	0
Sticky Notes	0	0	0	0	2	0
Student Reads Aloud to Self	0	0	2	0	0	0
T Stools	1	0	0	0	0	1
Text to Speech/Read Aloud	0	7	11	0	3	2
Thesaurus	0	0	0	0	2	0
Time of Day	0	0	3	0	0	1
Translate	0	0	0	0	2	0
Word Bank	0	0	0	0	0	2
Writing Tools	0	1	0	0	2	0

The top three universal features general educators reported using for all students served were Text to Speech (n=7), Calculator (n=4), and Extended Time n=(4). The top universal features mentioned by special educators for all students served were: Calculator (n=5) and Highlighter (n=4). For English learner educators, the top universal features for all students served were: Highlighter (n=6) and Scratch Paper (n=4).

The universal features for classroom tests most often mentioned by general educators for use with general education students were Calculator (n=5) and Modify Questions/Limit Questions and Answers (n=3), Directions (n=3), and Extended Time (n=3). For special educators, the most frequently mentioned universal features for students with disabilities were Text to Speech/Read Aloud (n=11), Small Group/Individual Administration (n=10), and Extended Time (n=8). For English learner educators for English learners, the top three universal features were Directions (n=6), Highlighter (n=5), and Scratch Paper (n=4). No universal features were mentioned specifically for ELs with disabilities for classroom tests.

Designated features for classroom tests. Table 11 presents the designated features identified by the educator groups. The top features identified by general educators for all students served were Noise Buffer/Headset (n=3) and Text to Speech/Read Aloud (n=3). For special educators, the most frequently identified designated features for all students served were Color Choices (n=2) and Text to Speech/Read Aloud (n=2). For English learner educators the top mentions for all students served were Text to Speech/Read Aloud (n=4), Calculator (n=2), and Multiple Days (n=2).

Table 11. Designated Features for Classroom Tests

Designated Features	General Educator Mentions for:		Special Educator Mentions for:		English Learner Educator Mentions for:	
	General Education	All Served	Students with Disabilities	All Served	English Learners	All Served
Amplification Device	0	0	0	0	2	0
Calculator	0	1	1	0	0	2
Color Choices	1	1	1	2	2	0
Dictionary	0	0	0	0	4	0
Enlarge Screen/Expand Page/ Large Print	0	0	0	0	2	0
Headphone/Noise Buffer	2	3	2	1	0	0
Highlight	0	1	1	0	0	0
Masking	1	1	1	1	0	0
Multiple Days	0	0	0	0	5	2
Music/White noise	0	1	1	0	0	0
Scribe	0	0	0	0	4	0
Student Reads Aloud to Self	0	1	1	0	2	0
Text to Speech/Read Aloud	0	3	6	2	9	4
Visuals	0	0	0	0	3	0

The top designated features mentioned by each educator group for their primary population served were fairly consistent with those identified for all students served for general educators and special educators. For English learner educators, the designated features most often mentioned for English learners were Text to Speech/Read Aloud (n=9), Multiple Days (n=5), Dictionary (n=4) and Scribing (n=4). No designated features were identified by educators for ELs with disabilities for classroom tests.

Accommodations for classroom tests. Table 12 shows the accommodations that educators in the three professional groups (i.e., general educator, special educator, and EL educator) identified for students for classroom tests. General educators' top three mentioned accommodations for all students served were Extended Time (n=8), Text to Speech/Read Aloud (n=2), and Scribe (n=2). For special educators, the most frequently mentioned accommodation for all students served was Extended Time (n=4). For English learner educators, the top three for all students served were Text to Speech/Read Aloud (n=6), Extended Time (n=5), and Scribe (n=4).

Table 12. Accommodations for Classroom Tests

Accommodations	General Educator Mentions for:		Special Educator Mentions for:		English Learner Educator Mentions for:	
	General Education	All Served	Students with Disabilities	All Served	English Learners	All Served
Alternate Education Setting	0	0	2	0	0	0
Assistive Technology	0	0	2	0	0	0
Calculator	1	0	2	0	0	1
Dictionary	0	2	0	0	5	0
Extended Time	4	8	10	4	6	5
Font Size/ Enlarge Print	0	0	2	0	0	0
Modify Assessment	0	1	1	0	0	1
Multiple Sessions	0	0	2	0	0	0
Native Language Support	0	0	0	0	3	0
Paper Tests for Math	0	0	2	0	0	0
Paraphrasing	0	0	2	0	0	0
Scribe	0	2	6	0	3	4
Script for Science or Math	0	0	3	0	0	0
Simplify Test Directions	0	2	0	1	0	0
Small Group/Individual Administration	0	0	3	0	0	0
Software	0	2	0	0	0	0
Text to Speech/Read Aloud	1	2	9	0	13	6
Translator/Translation/Stacked Spanish	0	3	0	1	6	0
Word Processor	0	0	0	0	2	0

The most frequently identified accommodations by general educators for general education students did not differ from those used for all students. For special educators, the top accommodations mentioned for students with disabilities were Extended Time (n=10), Text to Speech/Read Aloud (n=9), and Scribe (n=6). For English learner educators, the top three accommoda-

tions mentioned were Text to Speech/Read Aloud (n=13), Extended Time (n=6), and Translator/ Translation/Stacked Spanish (n=6). No accommodations were specifically mentioned for English learners with disabilities for classroom tests (not shown in table).

Consistency of Accessibility Features and Accommodations Identified by Educators with State Policies

Table 13 provides an overall summary of the extent to which educators reported using universal features, designated features, or accommodations in instruction or classroom tests consistent with their states’ assessment policies and whether their use of the categories were consistent with those policies. Most educators (n=31) mentioned using supports not included in their states’ assessment policies. Furthermore, they used the category labels in a different way from their states’ assessment policies. Seven educators used supports consistent with their states’ policies, but used category labels inconsistent with those policies. Only two educators were completely consistent with their states’ assessment policies when identifying supports for instruction and classroom tests.

Table 13. Consistency in Supports and Categories Used with State Policies

Consistency Categories	Number of Educators
All Supports Inside Policy with Correct Category Usage Per State Policy	2
All Supports Inside Policy with Inconsistent Category Usage Per State Policy	7
Some Supports Outside Policy with Inconsistent Category Usage Per State Policy	31

Table 14 shows the total number of educators who reported using universal features, designated features, and accommodations that were consistent with state policies. Most frequently, educators used universal features and accommodations for instruction and classroom tests that were inconsistent with state policy. Few educators used universal features and accommodations for instruction only. When educators used supports inconsistent with state policy, they tended to do so for both instruction and classroom assessments (n=21). Only four educators reported using supports with students on classroom tests that were not allowed in state policy for state level assessments.

Table 14. Educators Reporting Supports Inconsistent with State Assessment Policy

Support Category	Inconsistent with State Policy for Instruction Only	Inconsistent with State Policy for Assessment Only	Inconsistent with State Policy for Instruction and Assessment
Universal Features	2	3	10
Designated Features	0	0	2
Accommodations	0	1	9

Challenges Reported by Educators for Use of Accessibility Features and Accommodations in Instruction and Classroom Tests

Educators reported challenges in using accessibility features and accommodations generally, and specifically for instruction and classroom tests. Figure 1 shows the top challenges identified overall, regardless of educator professional group or the student group served.

The most frequent theme (n=56) among the challenges mentioned focused on class size in relation to providing supports. These included class size being too big (n=18), a lot of students to accommodate (n=16), the variety of needs in the classroom (n=14), and differentiating in so many ways (n=8). The next most common theme centered on availability (n=50). These included logistics (n=16), available technology (n=10), ensuring students get what they need (n=8), other teachers having same access (n=4), and an open-ended availability category that was not defined by educators (n=12). The third most frequent theme was lack of knowledge (n=42). This included lack of knowledge about accommodations (n=24), teacher need for professional development (n=12), and the concern that most special education teachers do not know what is allowed (n=6).

Figure 2 shows the challenges that educators identified specifically for classroom instruction. These included just seven items mentioned once each. They included caseload, time, schedule time with other staff, not enough trained staff, student ability discrepancy, inclusion setting, and consideration in lesson planning.

Figure 3 shows the challenges that educators identified specifically for classroom tests. These included time (n=3), availability (n=2), and not enough staff (n=2). All other classroom test challenges were noted once each and included availability, test design, varied student abilities, translation needs, motivation on computer tests, and confidentiality.

Figure 1. Top 30 Challenges

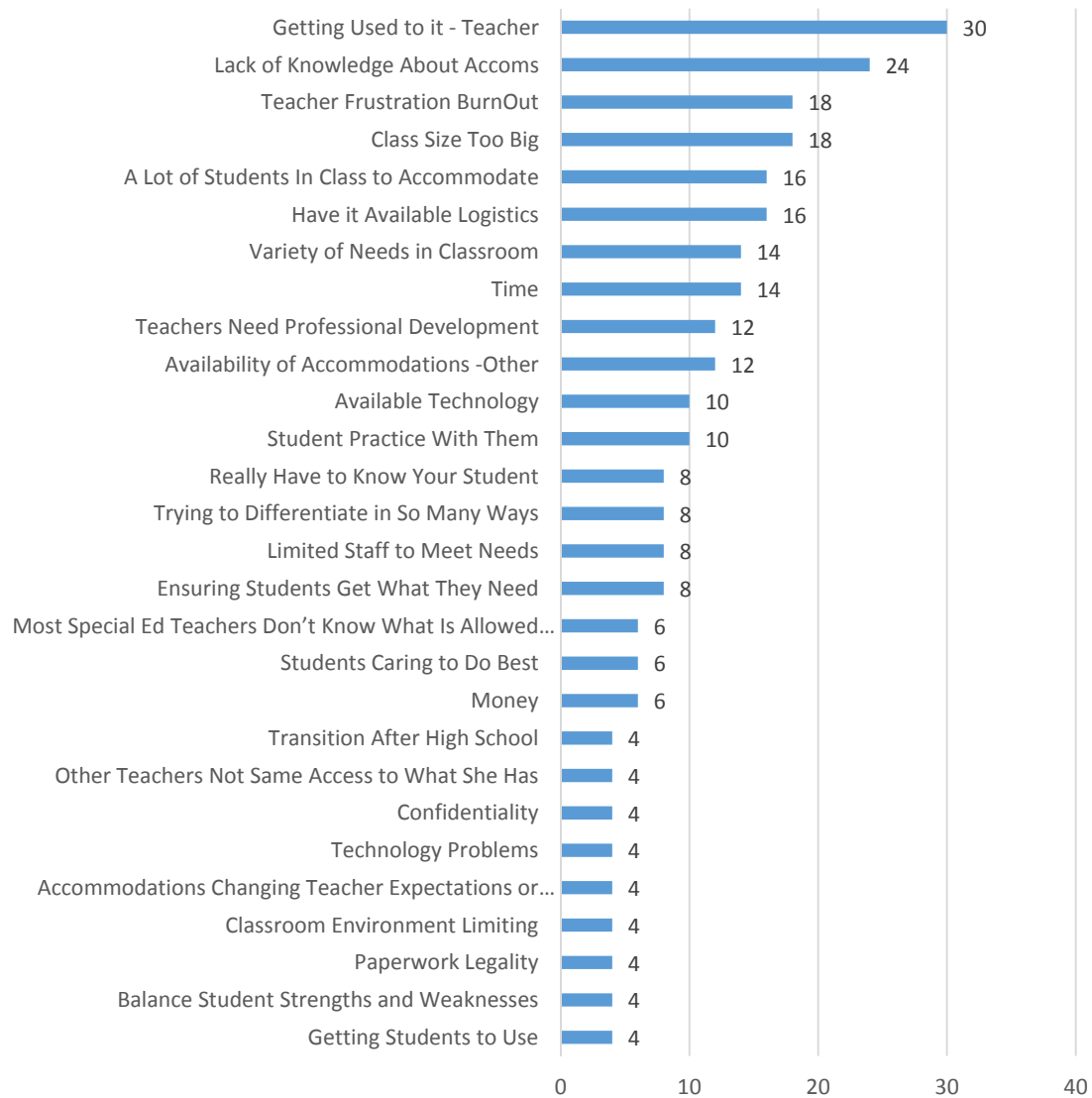
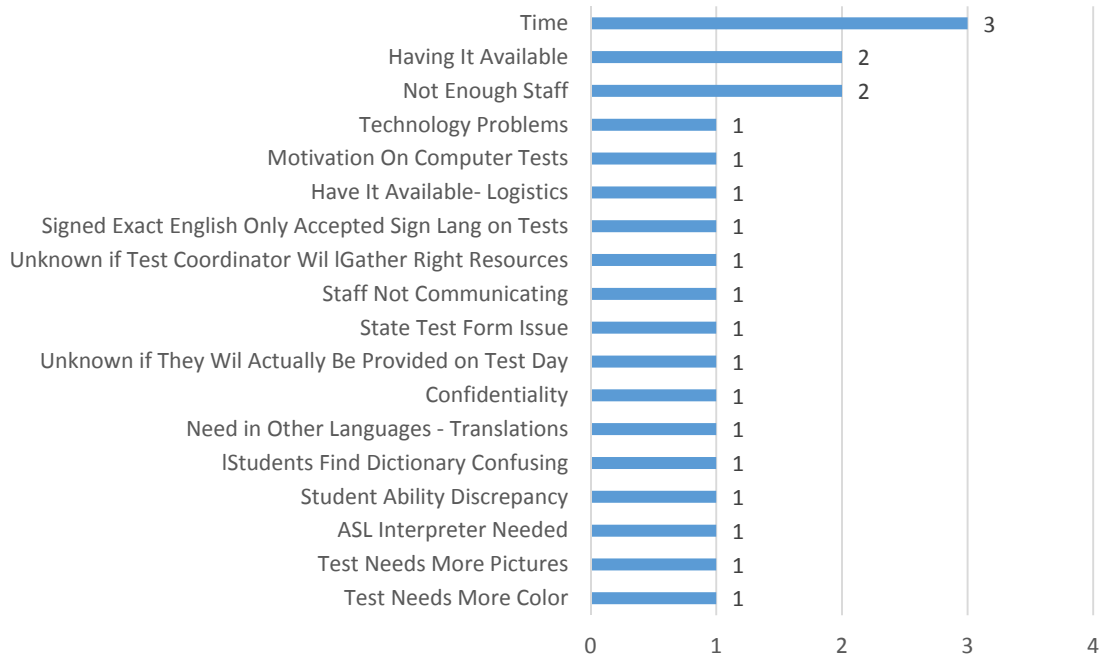


Figure 2. Challenges for Instruction



Figure 3. Challenges for Classroom Tests



Summary

Only 14 of the 40 responding educators attempted to differentiate between accessibility features and accommodations. These 14 varied in how they made the distinction, most often using one or more of the following approaches: defining based on context of use (e.g., instruction vs. assessment); defining by giving examples for each category; defining by the population able to use them (e.g., accommodations for students with IEP); and defining the indicating whether a support is built into assessment technology. Some educators attempted definitions based on different types of access, but were unclear about meaning when they did so. Educator uncertainty about accessibility features, designated features, and accommodations was also evident in their responses to other questions.

Overall, educators mentioned the following supports most frequently for instruction and classroom tests (totaled across student groups): Text to Speech/Read Aloud (n=151), Extended Time (n=96), Highlighter (n=40), Calculator (n=34), and Scribe (n=25).

Educators often reported using accessibility features and accommodations for classroom instruction and classroom tests that differed from their state policies. Fifteen educators across five states reported universal features inconsistent with their state policies for statewide assessments. Two educators from one state reported using designated features for classroom instruction and tests that were inconsistent with their state's policies. Nine educators in five states reported using accommodations for instruction and classroom tests that were inconsistent with their states' policies for statewide assessments. Three educators reported using universal features on classroom tests that were not allowed on statewide assessments, and a fourth educator reported using one or more accommodations for classroom tests that were not allowed to be used for statewide assessments.

The most frequently reported challenges from all educators combined centered on the following areas:

- 56 mentions: Class size too big (18), a lot of students to accommodate (n=16), variety of needs in class (n=14), differentiating in so many ways (n=8)
- 50 mentions: Availability and logistics (n=16), available technology (n=10), ensuring students get what they need (n=8), other teachers having same access (n=4), open-ended availability not defined (n=12)
- 42 mentions: Lack of knowledge about accommodations (n=24), teacher needs professional development (n=12), most special education teachers do not know what is allowed (n=6)

Educators noted six instruction-specific challenges (one educator each) including: caseload, time/scheduling time with other staff, not enough trained staff, student ability discrepancy, inclusion setting, and consideration in lesson planning. Educators noted the following testing-specific challenges: time (n=3), availability (n=2), and not enough staff (n=2). All others were mentioned one time: test design, varied student abilities, translation needs, motivation on computer tests, and confidentiality.

It is not necessarily expected that supports used in the classroom would be consistent with what is allowed for statewide testing. Nevertheless, the apparent confusion about universal features, designated features, and accommodations suggests that the lack of consistency may be due to confusion about what these are and what the state policies are. Further, educators themselves note several challenges in implementing accessibility features and accommodations within the classroom, a finding that suggests a student's access experiences are likely to be different in the classroom than when a student takes the statewide assessment.

The results of this study have the following potential implications for the field and professional development, especially the need for:

- Training and professional development on accessibility features and accommodations across educators of all background types, for all student populations, including English learners with disabilities.
- Educators to be able to distinguish the differences in their state's accessibility and accommodations available for statewide assessments and how this applies to their classroom instruction and classroom tests for all populations they serve.
- Training to help educators evaluate the appropriateness of using features and accommodations that are inconsistent with state assessment policies, and how best to balance the benefits versus the unintended consequences.
- Professional development to address educators' top reported challenges overall, and for instruction and classroom tests specifically.
- Training that provides guidance about accessibility features and accommodations to use with students while at the same time mitigating the challenges identified by educators, including those identified by the least number of educators (e.g., certain decisions being systematized at district level, challenges linked to unique local contexts such as financial constraints and considerable linguistic diversity, and the perception of stigma in using accommodations observed among students or assumed by staff).

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Appendix A

Consent Form

DIAMOND PROJECT: Teacher Phone Interviews

Teacher Consent Form

Overview of Study

Thank you for your interest in this study that explores the accessibility features and accommodations that students use in the classroom and during assessments. This research study is part of the larger Data Informed Accessibility - Making Optimal Needs-based Decisions (DIAMOND) project. The DIAMOND project is grant project awarded to a group of nine states (AL, CT, MD, MI, MN, OH, WI, WV, VI) along with the National Center on Educational Outcomes.

You were identified for possible participation in this study because you are a teacher in one of the participating states and you have indicated that you use accessibility features or accommodations with students during classroom instruction. Please read the information in this form and ask any questions you may have before agreeing to be in the study. If you have any questions that you would prefer to discuss with someone other than the researcher, please call the University of Minnesota Research Subjects Advocate Line at 612-625-1650.

Purpose of Study

This study is being conducted by researchers from the National Center on Educational Outcomes at the University of Minnesota. The results of this study will help policymakers better understand how teachers make accessibility and accommodations decisions for students, as well as providing information about what students use and what preferences they have. The data that are collected may help state departments of education train teachers on choosing appropriate accessibility features and accommodations for students, and may improve student test scores as a result.

Procedures

Participating in this study involves (a) confirming that you have at least one student for whom you use accessibility features or accommodations during classroom instruction, and (b) agreeing to set up a non-instructional time to participate in a phone interview for 30-45 minutes. The purpose of the interview is to provide information on current practices in choosing and assigning accessibility features and accommodations in the classroom, as well as any barriers to selecting and implementing these options. The interview may be recorded so that researchers can listen

to the conversation again while analyzing the information. We will ask you for your permission to turn on the tape recorder during the interview.

Risks and Benefits of Being in the Study

There is no foreseeable risk associated with your participation in this research.

There is no direct benefit to you or your students for participation in the study. Your interview responses from study will be used to improve accessibility and accommodations policies and procedures on state assessments.

Compensation

We will provide a \$50 gift card to you after completing the interview.

Confidentiality

The records of this study will be kept private. In any report that we might publish, we will not include any information that will make it possible to identify you or your student. Research records will be stored securely and only researchers will have access to them. This study will end in September 2018.

Voluntary Nature of the Study

Participation in this study is voluntary. Your decision about participation will not affect your current or future relations with the University of Minnesota, or your state, school district, or school. If you agree to participate, you may withdraw at any time without affecting those relationships.

Contacts and Questions

The researcher conducting this study is Martha Thurlow. You may ask her questions by calling (612-624-4826) or e-mailing (THURL001@umn.edu). If you have questions later, **you are encouraged** to contact her. Dr. Thurlow is located at the National Center on Educational Outcomes at the University of Minnesota in Minneapolis, Minnesota.

If you have any questions or concerns about this study and would like to talk to someone other than the researchers, **you are encouraged** to contact the Research Subjects' Advocate Line, D528 Mayo, 420 Delaware Street, SE, Minneapolis, MN 55455 (612-625-1650).

Statement of Consent:

Your signature below indicates that you have read this form, had an opportunity to ask any questions about your participation in this research, and voluntarily consent to participate.

Name (please print): _____

Signature: _____

Date: _____

Appendix B

Data Informed Accessibility—Making Optimal Needs-based Decisions (DIAMOND Project)

Dear Teacher ,

Researchers at the University of Minnesota’s National Center on Educational Outcomes [NCEO] are working with our state on a federally-funded grant project called the DIAMOND project. DIAMOND will identify best practices in the selection and use of accessibility features and accommodations on tests and in the classroom. In order to do this, NCEO staff would like to conduct a short phone interview with [*state name*] K-12 general education, special education or English language development teachers. NCEO would like to interview teachers who work in classroom settings right now, and who have considerable experience selecting and implementing accessibility features and accommodations.

We would like to invite you to participate in a 45-minute phone interview in [month], 2017. The interview questions will ask about accessibility features and accommodations that you currently use with your students. Interviews will be scheduled at your convenience, typically outside of your school day. Participants receive a \$50 gift card. Please contact Kristi Liu at kline010@umn.edu or 612-626-9061 if you are interested in participating.

Thank you,

[State Education Agency staff person’s name here]

Appendix C

Interview Protocol

Teacher Interviews by Phone

Estimated Time: Approximately 45 min.

Step 1: Introduction

“Hi there! This is _____ from the National Center on Educational Outcomes (NCEO). As I explained in my email, NCEO is working on a project called Data Informed Accessibility – Making Optimal Needs-based Decisions (DIAMOND), which is a partnership with nine states, including _____. The purpose of the DIAMOND project is to create guidelines for teachers to use accessibility features and accommodations more effectively and confidently. This part of the research will help us identify which accessibility features and accommodations teachers are using with their students and why.

“Thank you for your participation.

“Do you have any questions before we start?”

Step 2: Interview Questions

1. Could you briefly describe your current school position? What grades and subject areas do you teach?

2. Tell me about the students you teach this year.

3. What do the terms accessibility features and accommodations mean to you?

4. Now we're going to look at the different groups of accessibility features and accommodations in your state's **content assessment manual**. I'm going to ask you how you use these accommodations and accessibility features in your classroom.
 - a. Look at [*document & page number*]. I'm going to ask you about **universal features** that you have and have not commonly used with students in your classroom over the past few years.
 - i. Which of these universal features have you used most often with **ELs** during instruction? On classroom tests?
 - ii. Which of these universal features have you used most often for **students with disabilities** during instruction? On classroom tests?
 - iii. Which of these universal features have you used most often with **general education students** during instruction? On classroom tests?
 - iv. What factors influence your decision about the universal features to use with students in your classroom?
 - v. Are there any universal features that you do not use with students? Why?
 - b. Turn to page [*document & page number*]. I'm going to ask you some questions about **designated features** that you have and have not commonly used in your classroom over the past few years. [*Ask this only in states that have designated features.*]
 - i. Which designated features have you used most often with **ELs** during instruction? On classroom tests?

- ii. Which designated features have you used most often for **students with disabilities** during instruction? On classroom tests?

- iii. Which designated features have you used most often for **general education** students during instruction? On classroom tests?

- iv. What factors influence your decision about the designated features to use with students in your classroom?

- v. Are there any designated features that you do not use with students? Why?

- c. Turn to page [*document & page number*]. I'm going to ask you about the **accommodations** that you have and have not commonly used in your classroom over the past few years.
 - i. Which accommodations have you used most often with **ELs** during instruction? On classroom tests?

 - ii. Which accommodations have you used most often with **students with disabilities** during instruction? On classroom tests?

 - iii. Which accommodations have you used most often with **general education** students during instruction? On classroom tests?

- iv. What factors influence your decision about the accommodations to use with students in your classroom?

- v. Are there any accommodations that you do not use with students? Why?

- d. Are there any other universal, accessibility, or accommodations that you use in your classroom that are not in your state's accessibility and accommodations manual for the content assessment?

- 5. Next, we're going to look at the different groups of accessibility features and accommodations in your state's **English proficiency assessment manual**. I'm going to ask you how you use these accommodations and accessibility features for any English learners in your classroom. [Ask this only if relevant to state]
 - a. Which of these **universal features** have you used most often with ELs during instruction? On classroom tests?

 - b. Which of these **designated features** have you used most often with ELs during instruction? On classroom tests?

 - c. Which of these **accommodations** have you used most often with ELs during instruction? On classroom tests?

 - d. Are there any universal features, designated features or accommodations that you don't use? Why?

6. Now think about the students you are teaching this year. If I sat in on your class(es), which accessibility features (universal features, designated features) and accommodations would I see your students using?
 - a. Which students are using them?
 - b. What types of classroom activities are they participating in when they use accessibility features and accommodations?
 - c. How did you decide which accessibility features and accommodations to use for these students?
7. What do you think are the biggest challenges for teachers who are using accessibility features and accommodations during instruction or on classroom tests?
8. Later this spring we would like to visit the classrooms of a few teachers who have participated in this interview so that we can talk to students who are using accessibility features and accommodations. When we meet with students we would also like to briefly talk to their teachers to find out how those accessibility features and accommodations are working for that particular student. Would you be interested in taking part in these classroom visits along with one of your students?
9. Is there anything else you'd like to say about the topic of accessibility features and accommodations?

Step 3: Closing

“Thanks so much for participating in this research. You’ve given us a lot of great information. We hope that you will complete the short online survey that we will send to you after this call. It is about what you would like to see in professional development on accessibility and accommodations. We’ll mail you a [fifty-dollar gift card] as a thank-you for your time.”

Appendix D

Educator Definitions

Special Education Teachers' Definitions

<p>For the participant, accessibility features and accommodations level the playing field for students. They make material more accessible for students with disabilities</p>
<p>Well, for me, I couldn't do my job without them. I think everything that I do in my classroom is accommodated, in some way, or we use any type of accessibility feature. But to me it's just a way to better serve my students. I found it's kind of hard to get. Especially if I want to use it, as far as testing, there's a lot of data that I have to provide if I want my students to have an accessibility feature. So, it's been tricky. It's kind of made my job a little harder . . . I have to prove everything if I want them to receive these accommodations on testing.</p>
<p>Accessibility features and accommodations allow students to access same curriculum. They do not modify the content but the way that they're looking at the content.</p>
<p>Accessibility features and accommodations mean making sure that students have extended time to read instructions and guidelines on tests or homework. Interpreters signing questions are good example of an accommodation. Extra days of testing so that students can have a break are another example.</p>
<p>Accessibility Features- everybody gets the same thing- if they have a class on the 2nd floor- they have elevators to get there. Accommodations- something that helps somebody be able to do the work</p>
<p>Accessibility Features: I think of technology features. Accommodations : what we provide per students' IEPs</p>
<p>Accommodations are different from modifications. Accommodations are different way of having curriculum delivered to students. For behavioral issues, accommodations can be different expectations. Accommodations answer the question: "How do we get to the same place but with tools or strategies that are very different?" Accessibility features are the tools that can present information in a way that allows people to take part more easily and independently.</p>
<p>An accommodation is something that allows students to give information they know without their disabilities being a barrier. It allows teachers to actually find out what a student knows. The way that the test is given doesn't impede that when the right accommodations are given. Accommodations can also help students get to the information that they need. They can be related to how students best receive information. Accessibility features are related to how assessments are presented. It has a physical connotation for the participant – thinks of students with physical disabilities.</p>

In classroom, accessibility and accommodations mean anything from modifying assignments to setting up the space so that students can move around easily. Students with ASD sometimes cannot deal with the noise and bustle of the lunchroom and restrooms. Students might not be able to take notes fast enough during class. They should be able to get a copy of the notes from the teacher or watch or listen to the materials more than once. Being able to take pictures or complete assignments with an iPad. Dictating answers to paraprofessional or teacher. Extended time for tests and homework. In employment, accessibility is very different. Sometimes employers are unwilling to hire students with physical disabilities. Sometimes students with severe emotional disturbance have a hard time keeping a job. You need to develop relationships with the employers to keep the student on the job. In postsecondary educators, educators are not very willing to accommodate their students. They sometimes offer extended time on tests but not on assignments.

Means different things. Accessibility features mean what's built into the assessments that allows any student to have more successful experience with the assessments. Accommodations are something very specific to a student and without it could not access the assessment.

I think there's a lot of commonality. Okay, accessibility features, I think of, as tools -- I think I could say that, that would be tools -- that are helpful . . . I don't know of another word for accessible! . . . That makes it so that they can open up whatever it is that they need to give information or get information. And accommodation, I think of as more, well it could include tools, but I think it's also a process or a delivery model, or how things are presented. I think of it more abstract sometimes, for an accommodation. I can give you a million examples. But I think of accommodations as giving access to curriculum. And accessibility -- especially when we're talking about testing -- accessibility is allowing the student to show what they know. But that's a touchy, you know, I think that I use it [the two terms] interchangeably on my day-to-day basis, where I'm at. But keeping the testing in mind, I can just express that it's been a learning curve, because of going from paper tests to online tests. And so in these online tests, you're talking, the accessibility tools, I feel like I'm still learning. The learning curve for me of what my kids need to do to be able to get in there and show what they know. And how that relates to what I'm doing, because to me, the accommodations are what I'm living and breathing and doing here. But we're not doing everything online, so, I think that's where the quandary is, you know. They're testing all online, but the instruction and their practice and their learning, you know, I know it varies from teacher to teacher how much is online and how much is through technology. But that's probably a breakdown, you know, and trying to figure out, 'this is what the student needs in the classroom'. To give a specific example, if I'm using a masking -- I don't necessarily use masking a lot within the classroom, because if it's a paper thing, I can accommodate that student by making it so it visually isn't overstimulating, where they don't need to mask it. But on a computer, where it's a, you know, I don't have the ability to manipulate that, they might need the masking. . . . And we're, this is our third year, doing the online test for [state] -- end of course exams. Note: testing is all online, but instruction is both online and in other ways in classroom. For example, Masking is not used in classroom, for instance; can use other things to minimize stimulation. AIR -- second year of doing this online test.

The way that we support and help our students in various assignments and assessments, in addition to the good things that teachers do.

There are structures in place to level the playing field for students who do have some type of disability so that they can be just as successful as the general population.

To me, it means making it to where they can be successful at what other children are already successful at. It just makes that, whatever it may be -- a test or whatever -- it just makes it, not easier, but just to where they can be successful at. Because otherwise, they would not have a chance." They kind of go hand-in-hand to me, so I wouldn't make much of a distinction between them. I know there are some, but ... you know."

English Learner Teachers' Definitions

Well, accessibility means that they can access, well, I'll try not to use the word access, access the information. And the accommodations is so that they can access it as equally as possible as students without any exceptionalities.

Accessibility features and accommodations mean getting information to students in a way that they can use and getting information out of them in testing situations.

Accessibility Features- do I have the tools for these students to be ok in the classroom? For example- students with Cochlear Implants- do teachers have amplifying device? In the past- used magnifying screens- Autism- has a lot of little tools- special pencil, fidgety toys. For accommodations- what we provide for classwork and homework to help them with their learning styles

Accessibility features help students engage with any content in a level that is appropriate for their language development; Accommodations are the same where we help by accommodating material where they are expected to know the same material but how they show it to you and how they get there is different from what a general education student would do.

Accommodations mean differentiation of instruction or assessments for students to be successful; giving them the tools or strategies they need in order to complete an assessment.

Accommodations means having access to the general curriculum without modifying the curriculum.

Scaffolding instruction- students come in and can't get access to the content so we provide accommodations- Translation dictionaries- online translators- allows students to understand the concepts The-saurus.com- gives alternative meanings for words. Giving students plenty of time to respond, not use idioms, help make language and content available. Pictures/gestures/take a field trip around school- i.e. to learn what a secretary does. Hands on kinds of things. In the middle of the access testing- if there's a reading passage and content. Read the questions first and then find the answers and highlight – Line highlighter- (by the way- the font on test too small- why do they do that?)- you can pull down and read so you don't lose your place. Font size- difficult on computer- have magnifying tools- but the issue is when you magnifying the text- takes it out of the test- and there might be 2 paragraphs, but only one shows, so the student then tries to answer the questions based on the one paragraph- and you aren't allowed to say- "You're missing one section- so you just have to hope they notice. On some accessibility features- magnifying with a side bar- so students can keep track of where they are. That should be done on all tests.

More familiar with accommodations because we write accommodation plans for students based on what level of English they have. These help the classroom teachers decide how they're going to help the students in the classroom as far as what they might use, e.g., dictionary, peer support, study guides. Mostly at the beginning of the year they go through to create an accommodation plan for the student for the teacher to have. The accessibility features are designed more to testing, but not positive, to level the playing field to take the test.

When I think of accessibility feature, I think primarily of features associated with computerized testing. So these are text to speech, large print, notebook feature, highlighting, these are universal tools that every student has the ability to use to make the test more accessible to him or her. Accommodations, to me, then are features that are intended to, I guess, maybe even scaffold the test, for students who are special needs. These are things that are specialized to the student according to whatever handicap or disability is identified according to his or her IEP.

I guess accommodations I see as being things that accommodate a LD or language barrier, changes that need to be made so you can access the test if there's an obstacle. Accessibility Features -- that would make the test more accessible.

The accessibility features/accommodations manual provides the protocols on what is available to support students.

General Education Teachers' Definitions

Accessibility Features are tools that the students could use to help them with the test. Accommodations - what the teachers do in the class so everyone can meet their goals and be successful.

Accessibility Features - not a term I'm particular familiar with. Accommodations- use every single day, the changes we make in order to better accommodate students who have special needs of some sort, could be a regular education student with a 504, because of a sight issue/hearing issue, etc.

Accessibility Features: Does not mean anything to me. Accommodation: To help students be successful, doesn't mean we test anything differently, just use different formats to test same material.

Being able to get all information to every student. They have certain exceptionalities that aren't tailored to a text book. Being able to modify instruction and assessment so they are able to be successful.

Students receive accommodations that will help them perform better in the classroom, e.g., extended time, fewer items, work with the resource teacher.

Students who are having trouble in the classroom could be given these features to assist them on the test. There is a difference between assisting and helping, which might mean giving answers. Accommodations are different from accessibility features. Accessibility features should be on an IEP, while accommodations alter the format of a test, e.g., testing the student in a quiet room. The distinction has never been made clear.

The school has a very strong special education department. They provide students access to the same types of tools that they need to be successful. More time, read aloud, special education teachers as co-teachers. Keep general education teachers up to date on accommodations, have to document on the log. Keep everyone on track.

Things that I do for students to help them complete an assignment, or do a test. Extended time, text to speech, started learning about a feature that Google has - install on iPad and select a text and it will read to students. Peer or teacher read to child.

Was not familiar with Accessibility Feature as a term until became involved in this study - at school use accommodations and modifications interchangeably. Accessibility feature feels it is a more positive term. One of the biggest concerns is that the school tends to have 4-5 standard accommodations and they appear on everyone's IEP – they are not personalized at all - very frustrating. Has tried to fight very strongly for skill building - wants to see all students with deficits work harder to eliminate the deficits. But because students get so many modifications, i.e. everything read orally- only do half the problems, etc. they are not being stretched as much as they should be. There are students who have IEPs that say they are only required to write a maximum of 3 sentences. Her students might be working on a thorough report, but the ones with such severe limitations on their IEPs are kept from growing as much as she believes they are capable of doing.

General and English Language Teachers' Definitions

Accessibility features are the things that make, that affect the way students can access the text or the materials or the curriculum. [Accommodations are] the next layer of things that the students need to [access instruction] that might be different from what everyone is getting.

They have a couple meanings. For IEPs, accommodations or accessibility features refer to tools that students get in classroom to learn content at a level similar to their peers. For testing, accommodations and accessibility features are extra assistance or environmental changes to help them test at a level similar to their peers.

Providing opportunities for students in order to level the playing field. Alleviating issues or problems that students may have with reading, typing, sound, or positioning. Helping students fully focus on the task at hand.

Unclear Teacher Role

Accessibility features are what we are giving the students to access the material to meet their full potential, either in an assignment or an assessment, so they have the most benefit.

Multiple intelligences; everyone learns differently. Meeting the needs of every student, including physical impairments. Push the kids to do as much as they can until they can't.

When I think of accessibility I think making the same skills/knowledge accessible for all students regardless of their disabilities or other things that might keep them from getting that knowledge.

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