

Wisconsin Alternate Assessment for Students with Disabilities

Profile Sorting Standard Setting Technical Report

for

**Grades 3–8 & 10 Mathematics
Grades 3–8 & 10 Reading
Grades 4, 8, & 10 Science**

**Submitted to
Wisconsin Department of Public Instruction
June 2008**



Developed and published under contract with the Wisconsin Department of Public Instruction by CTB/McGraw-Hill LLC, a subsidiary of The McGraw-Hill Companies, Inc., 20 Ryan Ranch Road, Monterey, California 93940-5703. Copyright © 2008 by the Wisconsin Department of Public Instruction. Portions of this publication are from the *CTB Profile Sorting Handbook*, copyright © 2008 by CTB/McGraw-Hill LLC. All rights reserved. Only State of Wisconsin educators and citizens may copy, download and/or print the document, located online at <http://www.dpi.state.wi.us>. Any other use or reproduction of this document, in whole or in part, requires the prior written permission of the Wisconsin Department of Public Instruction and CTB/McGraw-Hill LLC.

Table of Contents

Section A

Executive Summary	1-5
-------------------------	-----

Section B

Overview of the Standard Setting	6-31
--	------

Section C

Participant Agendas for the Profile Sorting Workshop	32-35
--	-------

Section D

Overheads and Training Materials for Profile Sorting	36-67
--	-------

Section E

Achievement Descriptors	68-60
-------------------------------	-------

Section F

Detailed Summary of Ratings	81-161
-----------------------------------	--------

- Profile Sorting Results for Rounds 1 and 2
 - Round 1 Profile Sorting Results
 - Based on Uniform Distribution82-91
 - Based on Total Population.....92-101
 - Round 2 Profile Sorting Results
 - Based on Uniform Distribution102-111
 - Based on Total Population.....112-121
- Synthesis Discussion Results
 - Based on Uniform Distribution122-131
 - Based on Total Population132-141
- Approved Cut Scores and Associated Impact Data
 - Based on Uniform Distribution142-151
 - Based on Total Population152-161

Section G

Results of the Participant Evaluation for the Profile Sorting Workshop.....	162-181
---	---------

Section H

Contrasting Groups Survey.....	182-232
--------------------------------	---------

SECTION A

Executive Summary

Executive Summary

Staff members from the Wisconsin Department of Public Instruction (DPI) and CTB/McGraw-Hill (CTB) collaborated to establish achievement standards for the Wisconsin Alternate Assessment for Students with Disabilities (WAA-SwD) in Grades 3–8 and 10 Mathematics; Grades 3–8 and 10 Reading; and Grades 4, 8, and 10 Science. The purpose of the standard setting was to identify cut scores that separate students into four achievement levels: *Minimal Performance*, *Basic*, *Proficient*, and *Advanced*, with *Advanced* representing the highest level of achievement.

The standard setting was divided into two phases. In the first phase of the standard setting, a committee of educators from across the state of Wisconsin was convened to engage in a profile sorting (Jaeger, 1995) study. During the WAA-SwD Profile Sorting Workshop, which was held April 1-4, 2008, participants examined scored response vectors (student profiles) and classified them into the four achievement levels. The cut scores and associated impact data from the profile sorting study are shown in Table 1. It should be noted that the profile sorting was performed on a uniform distribution of student scores so educators could assess the full range of possible scores¹. However, the impact data are presented for both the uniform distribution as well as the total population of student scores received prior to the standard setting.

In the second phase of the standard setting, a subset of participants from the WAA-SwD profile sorting study was convened for the synthesis discussions. A synthesis discussion was held for each content area, and the participants identified trends in the data and recommended changes in the cut scores to promote cross-grade articulation within a content area. The cut scores and associated impact data from the synthesis discussions are shown in Table 2.

Following the standard setting, the Superintendent of Public Instruction, staff from the DPI, and the Wisconsin Technical Advisory Committee (TAC) reviewed the cut scores and associated impact data and made adjustments to the cut scores. These adjustments resulted in the final approved cut scores for the WAA-SwD. The final cut scores and associated impact data, approved for use on the WAA-SwD, are shown in Table 3.

This report summarizes the results of the WAA-SwD standard setting. Section B presents a synopsis of the day-by-day activities of the standard setting. Section C contains the workshop agendas given to the participants. Section D includes the handouts of the slides and training materials given to participants during the workshop. Section E shows the achievement descriptors provided to participants for the profile sorting study. Section F contains detailed results for each phase of the standard setting. Section G shows the participant evaluation and the results of the evaluation for the WAA-SwD Profile Sorting Workshop. The Contrasting Groups survey is described in Section H.

¹ Throughout the standard setting a uniform distribution selected via a stratified random sample of students was used to populate the student profiles and, later, to show impact data. The uniform distribution was utilized due to a concern about the representativeness of the population of students within this year's test administration, as compared to expectations for future administrations. More information regarding the uniform distribution is provided in Section B of this report.

Table 1. Participant-recommended cut scores and associated impact data from the WAA-SwD profile sorting study*.

Content Area	Grade	Maximum Possible Score	Cut Scores			Associated Impact Data Total Population			Associated Impact Data Uniform Distribution				
			Basic	Proficient	Advanced	Minimal Performance	Basic	Proficient	Advanced	Minimal Performance	Basic	Proficient	Advanced
Mathematics	3	34	8	19	28	15%	14%	30%	41%	23%	31%	26%	20%
	4	34	7	19	28	12%	16%	27%	45%	19%	34%	26%	21%
	5	34	11	21	30	16%	17%	31%	35%	31%	29%	26%	14%
	6	34	11	20	30	15%	18%	32%	36%	31%	26%	29%	14%
	7	34	8	17	25	13%	14%	16%	57%	22%	26%	23%	29%
	8	34	8	16	25	16%	13%	21%	51%	23%	23%	26%	29%
	10	34	7	19	26	15%	27%	25%	33%	19%	35%	20%	26%
	3	30	10	18	25	15%	12%	26%	48%	32%	26%	23%	19%
	4	30	9	18	24	11%	11%	13%	65%	27%	30%	20%	23%
	5	30	6	20	27	11%	17%	27%	45%	19%	45%	23%	13%
Reading	6	30	6	19	26	10%	18%	24%	48%	19%	42%	23%	16%
	7	31	9	21	26	13%	23%	17%	47%	26%	39%	16%	19%
	8	30	8	19	26	14%	24%	26%	37%	25%	36%	23%	16%
	10	30	11	17	26	18%	10%	35%	37%	33%	20%	30%	17%
	4	37	16	25	32	20%	10%	17%	53%	38%	25%	20%	17%
Science	8	39	14	24	34	16%	10%	26%	48%	27%	28%	28%	17%
	10	39	11	26	33	14%	14%	16%	56%	21%	39%	20%	20%

*The number of participants for profile sorting can be found in Table 2 of Section B.

Table 2. Participant-recommended cut scores and associated impact data from the WAA-SwD synthesis discussions*.

Content Area	Grade	Maximum Possible Score	Cut Scores				Associated Impact Data Total Population				Associated Impact Data Uniform Distribution						
			Basic	Proficient	Advanced	Maximum	Minimal Performance	Basic	Proficient	Advanced	Maximum	Minimal Performance	Basic	Proficient	Advanced	Maximum	
Mathematics	3	34	7	18	28	28	14%	31%	41%	20%	14%	31%	41%	20%	31%	29%	20%
	4	34	9	19	28	28	13%	27%	45%	24%	15%	27%	45%	24%	29%	26%	21%
	5	34	9	19	28	28	15%	26%	45%	26%	15%	26%	45%	26%	29%	26%	20%
	6	34	10	19	29	29	14%	29%	41%	28%	16%	29%	41%	28%	26%	29%	17%
	7	34	8	17	28	28	13%	28%	46%	22%	14%	28%	46%	22%	26%	32%	20%
	8	34	8	18	28	28	16%	24%	42%	23%	18%	24%	42%	23%	29%	29%	20%
	10	34	8	18	26	26	16%	28%	33%	22%	23%	28%	33%	22%	29%	23%	26%
	3	30	10	18	26	26	15%	31%	42%	32%	12%	31%	42%	32%	26%	26%	16%
	4	30	9	18	26	26	11%	21%	57%	27%	11%	21%	57%	27%	30%	26%	16%
	5	30	6	20	27	27	11%	27%	45%	19%	17%	27%	45%	19%	45%	23%	13%
Reading	6	30	6	19	26	26	10%	24%	48%	19%	18%	24%	48%	19%	42%	23%	16%
	7	31	9	21	26	26	13%	17%	47%	26%	23%	17%	47%	26%	39%	16%	19%
	8	30	8	19	26	26	14%	26%	37%	25%	24%	26%	37%	25%	36%	23%	16%
	10	30	10	18	26	26	16%	32%	37%	29%	15%	32%	37%	29%	27%	27%	17%
	4	37	15	25	32	32	19%	17%	53%	35%	11%	17%	53%	35%	28%	20%	17%
Science	8	39	14	24	34	34	16%	26%	48%	27%	10%	26%	48%	27%	28%	28%	17%
	10	39	12	26	33	33	15%	16%	56%	23%	14%	16%	56%	23%	37%	20%	20%

*The number of participants for profile sorting can be found in Table 2 of Section B.

Table 3. Final cut scores and associated impact data approved for use on the WAA-SwD.

Content Area	Grade	Maximum Possible Score	Cut Scores			Associated Impact Data Total Population			Associated Impact Data Uniform Distribution				
			Basic	Proficient	Advanced	Minimal Performance	Basic	Proficient	Advanced	Minimal Performance	Basic	Proficient	Advanced
Mathematics	3	34	7	18	28	14%	31%	41%	14%	31%	20%	29%	20%
	4	34	9	19	28	13%	27%	45%	15%	27%	24%	26%	21%
	5	34	9	19	28	15%	26%	45%	15%	26%	26%	26%	20%
	6	34	10	19	29	14%	29%	41%	16%	29%	28%	29%	17%
	7	34	8	17	28	13%	28%	46%	14%	28%	22%	32%	20%
	8	34	8	18	28	16%	24%	42%	18%	24%	23%	29%	20%
	10	34	8	18	26	16%	28%	33%	23%	28%	22%	23%	26%
	3	30	10	19	26	15%	29%	42%	14%	29%	32%	23%	16%
	4	30	10	22	28	12%	28%	42%	18%	28%	31%	20%	10%
	5	30	8	20	27	13%	27%	45%	15%	27%	26%	23%	13%
Reading	6	30	8	21	27	12%	26%	41%	21%	26%	26%	19%	13%
	7	31	9	21	26	13%	17%	47%	23%	17%	26%	16%	19%
	8	30	9	20	26	15%	24%	37%	24%	24%	28%	20%	16%
	10	30	10	20	26	16%	24%	37%	22%	24%	29%	20%	17%
	4	37	15	25	32	19%	17%	53%	11%	17%	35%	20%	17%
Science	8	39	14	24	34	16%	26%	48%	10%	26%	27%	28%	17%
	10	39	12	26	33	15%	16%	56%	14%	16%	23%	20%	20%

Section B

Overview of the Standard Setting

Overview of the Standard Setting

Staff members from the Wisconsin Department of Public Instruction (DPI) and CTB/McGraw-Hill (CTB) collaborated with Wisconsin educators to establish achievement standards for the Wisconsin Alternate Assessment for Students with Disabilities (WAA-SwD) in Grades 3–8 and 10 Mathematics; Grades 3–8 and 10 Reading; and Grades 4, 8, and 10 Science. The purpose of the standard setting was to identify cut scores that separate students into four achievement levels: *Minimal Performance*, *Basic*, *Proficient*, and *Advanced*, with *Advanced* representing the highest level.

The standard setting was divided into two phases. In the first phase of the standard setting, a committee of educators from across the state of Wisconsin was convened to engage in a profile sorting (Jaeger, 1995) study. The WAA-SwD Profile Sorting Workshop was held April 1–4, 2008, in Madison, Wisconsin. During the workshop, participants examined scored response vectors (student profiles) and classified them into the four achievement levels. Each of the three content areas worked in a separate breakout room. It should be noted that the profile sorting was performed on a uniform distribution of student scores so educators could assess the full range of possible scores. However, the impact data are presented for both the uniform distribution as well as the total population of student scores received prior to the standard setting.

In the second phase of the standard setting, a subset of participants from the WAA-SwD profile sorting study was convened for synthesis discussions. A synthesis discussion was held for each content area, and the participants identified trends in the data and recommended changes in the cut scores to promote cross-grade articulation within a content area.

Following the standard setting, the State Superintendent of Public Instruction, staff from the DPI, and the Wisconsin Technical Advisory Committee (TAC) reviewed the cut scores and associated impact data and made adjustments to the cut scores. These adjustments resulted in the final approved cut scores for the WAA-SwD, which are discussed in more detail later in this report.

This section describes the standard setting and provides information about the results from each phase. Prior to the standard setting, a modified Contrasting Groups study was conducted and is described in Section H.

Profile Sorting Workshop

The WAA-SwD Profile Sorting Workshop was held in Madison, Wisconsin, on April 1–4, 2008. Educators from throughout the state of Wisconsin were convened to participate in the workshop.

The profile sorting method used at the workshop was adapted from the Judgmental Policy Capturing Method (Jaeger, 1995). In the method, participants examine scored response vectors (student profiles) and holistically rate them into achievement levels.

Any given student's performance on the WAA-SwD cannot be considered completely independent of his or her interaction with the test examiner. Indeed, the WAA-SwD is given in a one-on-one format, with the examiner working directly with the tested student. To use an item

mapping procedure, such as the Bookmark Standard Setting Procedure (Lewis, Mitzel, & Green, 1996), may be seen as an implicit assumption that students' scores are independent of teacher interaction. In contrast, the profile sorting method described in this section allows standard setting participants to consider each of a student's test scores, and allows them to make holistic judgments about students' knowledge, skills, and abilities. In addition, the examinee-centered nature of the profile sorting procedure—as opposed to the test-centered nature of the Bookmark Standard Setting Procedure or the modified Angoff (1971) procedure—allows standard setting participants to consider the strengths and weaknesses of individual students during the standard setting workshop. Because the population of students tested by the WAA-SwD is extraordinarily diverse in their abilities, the examinee-centered nature of the profile sorting method was useful in establishing cut scores for the test, as individual examinees' test response patterns could be and are as varied as the students themselves. For these reasons, the profile sorting method was used.

CTB Staff. The CTB Standard Setting Team worked with staff from the DPI to design, organize, and conduct the standard setting for the WAA-SwD. Dr. Jill van den Heuvel is the CTB Research Scientist for the WAA-SwD testing program, and Ricardo Mercado is the CTB Research Project Manager for the WAA-SwD standard setting. Dr. van den Heuvel and Mr. Mercado facilitated the profile sorting workshop for CTB. Mr. Mercado was also responsible for training participants on the process used for the profile sorting.

Adele Brandstrom and Dorothy Tele'a, CTB Standard Setting Specialists, assisted in the creation of the materials presented at the workshop. Ms. Brandstrom attended the standard setting and assisted in data analysis during and after the workshop.

Sandra Snell is the CTB Program Manager for the WAA-SwD contract. Ricky Harris, CTB Program Office Coordinator, handled the logistics for the workshop. Ms. Snell and Mr. Harris both attended the workshop.

Content experts from CTB Content Development served as Group Leaders during the workshop. Two Group Leaders were assigned to the breakout rooms for both Mathematics and Reading, and one Group Leader was assigned to the breakout room for Science. The Group Leaders for the WAA-SwD workshop are listed in Table 1.

In each content area, the Group Leaders served as facilitators and were in charge of time management, focusing the participants on the task at hand, and interacting with the participants. The Group Leaders also facilitated discussions and were in charge of security and data management and collected the rating forms from participants. In addition, the Group Leaders communicated with the CTB Standard Setting Team and the DPI staff. All CTB staff members were non-voting members, and were present to help facilitate the workshop.

Table 1. Group Leaders for the WAA-SwD standard setting workshop.

Content Area	Group Leader(s)
Mathematics	Andrew Jones & Timothy Pozdol
Reading	Kris Paulsen & Peter Zutz
Science	Bevin Flaherty

Participants. Sixty-nine Wisconsin educators from across the state of Wisconsin, and representing all Cooperative Educational Service Agencies (CESAs) in Wisconsin, participated in the profile sorting workshop¹. Each content area worked in a separate breakout room. The participants were divided into 11 tables, by grade and content area. Six of the 11 tables were assigned to a band of two grades within their content area: Grades 3–4, Grades 5–6, and Grades 7–8 for both Mathematics and Reading. Participants in the remaining five tables were each assigned to a single grade. Table 2 shows the number of participants who participated in profile sorting for each grade level and content area.

Table 2. Number of participants for profile sorting for each grade level and content area.

Content Area	Grade Level(s)	Number of Participants
Mathematics	3–4	6
	5–6	8
	7–8	8
	10	5
Reading	3–4	8
	5–6	7
	7–8	6
	10	5
Science	4	6
	8	5
	10	5
Total		69

At the end of the workshop, participants completed an evaluation that included information regarding their gender, ethnicity, educational background, profession, years of service, and experience with special education. This information is presented in Tables 3 through 8, respectively. The complete results of the evaluation are included in Section G.

¹ Participants were recruited and invited by the DPI; of those invited, 69 ultimately participated in the standard setting.

Table 3. Gender of standard setting participants.

Content Area	Grade	N	Male	Female
Overall		69	4%	96%
Mathematics	3-4	6	0%	100%
	5-6	8	0%	100%
	7-8	8	13%	88%
	10	5	20%	80%
Reading	3-4	8	0%	100%
	5-6	7	0%	100%
	7-8	6	17%	83%
	10	5	0%	100%
Science	4	6	0%	100%
	8	5	0%	100%
	10	5	0%	100%

Table 4. Ethnicity of standard setting participants.

Content Area	Grade	N	Asian/ Pacific Islander	Hispanic	Black/ African- American	American Indian	White	Other
Overall		69	0%	4%	4%	0%	91%	0%
Mathematics	3-4	6	0%	0%	0%	0%	100%	0%
	5-6	8	0%	13%	0%	0%	88%	0%
	7-8	8	0%	0%	13%	0%	88%	0%
	10	5	0%	0%	0%	0%	100%	0%
Reading	3-4	8	0%	13%	0%	0%	88%	0%
	5-6	7	0%	14%	0%	0%	86%	0%
	7-8	6	0%	0%	0%	0%	100%	0%
	10	5	0%	0%	20%	0%	80%	0%
Science	4	6	0%	0%	0%	0%	100%	0%
	8	5	0%	0%	0%	0%	100%	0%
	10	5	0%	0%	20%	0%	80%	0%

Table 5. Educational background of standard setting participants.

Content Area	Grade	N	HSD/GED	Bachelor's	Master's	Doctorate
Overall		69	0%	29%	71%	0%
Mathematics	3-4	6	0%	50%	50%	0%
	5-6	8	0%	25%	75%	0%
	7-8	8	0%	25%	75%	0%
	10	5	0%	40%	60%	0%
Reading	3-4	8	0%	13%	88%	0%
	5-6	7	0%	43%	57%	0%
	7-8	6	0%	0%	100%	0%
	10	5	0%	40%	60%	0%
Science	4	6	0%	0%	100%	0%
	8	5	0%	60%	40%	0%
	10	5	0%	40%	60%	0%

Table 6. Profession of standard setting participants.

Content Area	Grade	N	Teacher	Administrator	Other
Overall		69	91%	3%	6%
Mathematics	3-4	6	100%	0%	0%
	5-6	8	100%	0%	0%
	7-8	8	88%	0%	13%
	10	5	100%	0%	0%
Reading	3-4	8	88%	0%	13%
	5-6	7	86%	14%	0%
	7-8	6	83%	0%	17%
	10	5	80%	20%	0%
Science	4	6	83%	0%	17%
	8	5	100%	0%	0%
	10	5	100%	0%	0%

Table 7. Years of service of standard setting participants.

Content Area	Grade	N	1-5	6-10	11-15	16-20	21+
Overall		68	16%	27%	19%	16%	22%
Mathematics	3-4	6	50%	17%	17%	17%	0%
	5-6	8	0%	50%	13%	13%	25%
	7-8	8	0%	25%	25%	25%	25%
	10	5	20%	40%	0%	20%	20%
Reading	3-4	8	13%	0%	25%	25%	38%
	5-6	7	29%	57%	14%	0%	0%
	7-8	6	17%	0%	0%	33%	50%
	10	5	20%	40%	40%	0%	0%
Science	4	5	0%	0%	20%	40%	40%
	8	5	20%	20%	40%	0%	20%
	10	5	20%	40%	20%	0%	20%

Table 8. Standard setting participants' experience with special education.

Content Area	Grade	N	Yes	No
Overall		68	68%	32%
Mathematics	3-4	6	67%	33%
	5-6	8	88%	13%
	7-8	8	63%	38%
	10	5	60%	40%
Reading	3-4	8	50%	50%
	5-6	7	86%	14%
	7-8	6	83%	17%
	10	5	60%	40%
Science	4	5	60%	40%
	8	5	40%	60%
	10	5	80%	20%

Table Leaders. Participants at each table were led by a Table Leader, whose primary role was to monitor the group discourse, which included keeping the group focused on the tasks, facilitating discussions, and helping maintain the schedule. Table Leaders were selected by the DPI and were full, voting members of their committees.

Standard Setting Security

Security was of paramount importance throughout the standard setting process. Participants received secure test materials based upon operational items. Secure test materials used during the workshop were numbered and assembled into packets. Each participant signed out a specific packet and signed his or her name on each piece of secure material in the packet. CTB staff monitored the standard setting rooms to prevent the removal of secure materials. At the end of each day, each participant's materials were collected and audited. The secure materials were stored overnight in a secure room. At the conclusion of the workshop, the secure materials were collected, audited, and confirmed against the sign-out lists.

Profile Sorting Workshop: Day 1

Opening Session. Philip Olsen, DPI Assistant Director of the Office of Educational Accountability, opened the session for the DPI. He began the session by describing the WAA-SwD and how it differs from the previous statewide alternate assessment. The DPI then discussed how the test would be used to measure the knowledge, skills, and abilities held by students with severe cognitive disabilities. The DPI concluded the opening remarks with a discussion of how the recommendations made by the committee would be analyzed, reviewed, and possibly adjusted before they reached their final form.

Ricardo Mercado, CTB Research Project Manager, then oriented participants to the standard setting. Standard setting was first described in general terms, followed by a more detailed description of how participants would recommend cut scores for the WAA-SwD using the profile sorting method. The overheads presented to participants are included in Section D.

Special Study. Following the opening session, Dr. Jill van den Heuvel oriented participants to a special study. This special study was designed to examine test item complexity as determined by educators. Complexity was defined for this study by the judgment of each test item's characteristics, including the extended depth of knowledge (EDOK), item type, reading load, and mathematical processes, where appropriate. Following the complexity judgments, each item was examined in relation to the other items on the form and rank ordered on the basis of overall complexity. The study was designed to examine the relationship between item difficulty (as measured by student performance on the test items) and the item complexity (as ranked by the educators participating in the special study). Participants were informed that the results of the special study would not influence the results of the standard setting, and would not be used in the calculation of the cut scores for the WAA-SwD.

Following the introduction to the special study, the participants adjourned to their assigned breakout rooms. As part of the special study, participants studied the Wisconsin Extended Grade Band Standards, achievement descriptors, and test items. The achievement descriptors are included in Section E. A more complete description of the special study, as well as results and discussion, can be found in an addendum to the *2007–08 Wisconsin Alternate Assessment for Students with Disabilities Technical Report*.

Profile Sorting Workshop: Day 2

At the beginning of Day 2 of the workshop, Elizabeth Burmaster, the State Superintendent of Public Instruction, addressed the standard setting participants and thanked them for their participation in the workshop.

Following the Superintendent's address, the participants adjourned to their assigned breakout rooms and finished their work with the special study. Following completion of the special study, the participants were oriented to the profile sorting process. The participants assigned to tables for one grade group were oriented to the profile sorting process in the morning, and participants assigned to tables for two grade groups were oriented in the afternoon.

Orientation to Profile Sorting. Participants were convened for a second training session, in which they received a more in-depth orientation to the process of profile sorting. Participants were provided with sample materials, mirroring those actually used during the workshop. The overheads and training materials presented to participants are included in Section D. A description follows of the materials used for training.

- Scoring rubrics. The rubrics detail what must be demonstrated to achieve each score point.
- Wisconsin Extended Grade Band Standards. The standards list the content students should be taught.
- Achievement descriptors. The descriptors describe the knowledge, skills, and abilities that students should have in each of the four achievement levels for each grade band in a content area. The achievement descriptors are included in Section E.
- Student profiles. The profiles are student scores for each test item. The sample student profiles used for training are shown in Figure 1. The top row reports the maximum number of points possible for each item, followed by the identifying number (order number) for each item. The third row shows each item's p -value, which is the proportion of students in the uniform distribution who answered each item correctly. Subsequent rows contain an identification number and the score points received by that student. For example, student "T-002" received no points on Item 1 and one point on Item 2. (More information about the student profiles follows this list of training materials.)
- Item map. The item map provides information about each test item. The sample item map used for training is shown in Figure 2. Information provided for each item included the item identifying information (order number), item type, maximum score points, p -value, item number, and extended grade band objective and subskill. Participants used the last column on the item map to record the knowledge, skills, and abilities measured by each item.
- Item booklet. The item booklet contains the test items presented in the item map and student profiles. The test items in the item booklet were ordered from easiest to hardest, as indicated by the p -value for the item. Item p -values were calculated from the uniform distribution of student scores. The item booklet is not included because secure test items were used for training.

Figure 1. Sample student profiles used for profile sorting training.

**Training for Profile Sorting Workshop
Grade 3 Mathematics SAMPLE PROFILES**

Max Points*						2					Max Points*
Order No. (ON)	1	2	3	4	5	6	7	8	9	10	Order No. (ON)
p-value	0.58	0.58	0.55	0.52	0.51	0.51	0.49	0.49	0.48	0.48	p-value
T-001	1	1	1	1	1	2	1	1	1	1	T-001
T-002	0	1	0	0	0	0	0	0	1	0	T-002
T-003	0	1	0	1	1	2	1	0	1	1	T-003
T-004	1	1	1	1	1	2	1	1	1	1	T-004
T-005	1	0	0	1	1	0	0	1	1	0	T-005
T-006	1	0	0	0	0	2	0	0	1	0	T-006
T-007	1	0	1	1	0	0	1	1	0	0	T-007
T-008	1	1	1	1	1	2	1	0	0	1	T-008
T-009	0	1	1	0	1	0	0	1	0	1	T-009
T-010	1	1	0	0	1	1	0	0	1	0	T-010

* Unless otherwise noted, the maximum score for an item is 1.

Figure 2. Sample item map used for profile sorting training.

**Wisconsin Alternate Assessment Program for Students with Disabilities (WAA-SwD) Standard Setting
Grade 3 Mathematics Training ITEM MAP**

Order No. (ON)	Item Type	Max Score	p-value	Item Number	Objective/Subskill	Extended Grade Band Objective	What does this item measure? That is, what do you know about a student who can respond successfully to this item?
1	SR	1	0.58		C.a.: Describing Figures C.b.: Spatial Relationships and Transformations	Identify and match 3 basic shapes	
2	SR	1	0.58		D.a.: Measurable Attributes D.b.: Direct Measurement D.c.: Indirect Measurement	Compare 2 objects by size or weight	
3	SR	1	0.55		F.a: Patterns, Relations and Functions	Recognize or extend two part/ A B pattern	
4	SR	1	0.52		D.a.: Measurable Attributes D.b.: Direct Measurement D.c.: Indirect Measurement	Identify basic tools of measurement and their purpose (e.g., calendar, clocks, ruler)	
5	SR	1	0.51		F.a: Patterns, Relations and Functions	Recognize or extend two part/ A B pattern	
6	CR	2	0.51		B.a.: Concepts	Order or rote count numbers 0-20 and represent numbers 0-10	
7	SR	1	0.49		F.a: Patterns, Relations and Functions	Recognize or extend two part/ A B pattern	
8	SR	1	0.49		C.c.: Coordinate Systems	Recognize basic positional concepts (such as behind, over, under, in-front of, next to)	
9	SR	1	0.48		F.a: Patterns, Relations and Functions	Recognize or extend two part/ A B pattern	
10	SR	1	0.48		B.a.: Concept	Sort coins to like groups	

Note: The item numbers have been removed for security purposes.

Student Profiles. The student profiles used in the standard setting were comprised of real data. Each student profile represents the scored responses of an actual student. Within a given grade, 100 student profiles were selected. The student profiles were randomly ordered for the standard setting materials.

The test items represented in the student profiles were ordered in terms of their difficulty, from easiest to hardest, using their *p*-values. Mapping the items this way provided participants with information about how difficult students found each item, and provided useful information for evaluating student performance on the test items.

Uniform distribution of student scores. Throughout the standard setting, a stratified, random sample of students was used to populate the student profiles and, later, to show impact data. The uniform distribution was developed due to a concern about the population of students represented within this year's test administration. It was felt that there would be more students at the top of the distribution in this administration than would be expected in future administrations. Based on CTB's experience with alternate assessments in other states, a uniform distribution tends to approximate the distribution obtained after the standards and assessment have been in place for a couple of years within a state. Therefore, it was determined that utilizing a uniform distribution would be more appropriate for the standard setting.

The uniform distribution was selected from the total population using a stratified, random sampling procedure. The sampling was designed to capture approximately four observations for each possible total raw score for a test, from zero to the maximum score. In cases where there were no observations (or fewer than four observations) for a particular total raw score, only those observed within the operational data were used (i.e., no simulated data points were used).

More than 100 students were represented in the uniform distribution for each grade and content area. From the 119 to 143 students in the uniformly distributed sample for each grade and content area, exactly 100 student profiles were selected such that the selected profiles retained the uniform nature of the distribution. Participants at the standard setting were informed about the uniform distribution, how it was obtained, how no data were simulated, and the rationale behind its use.

Study of the Test Items. Following the training on profile sorting, participants proceeded to their pre-assigned tables. Participants in each content area worked in a breakout room dedicated solely to their content area; thus the Mathematics participants worked in one large room, the Reading participants worked in another room, and the Science participants worked in a third room. At their tables, participants were given copies of the WAA-SwD test items in the item booklets and item maps. Participants worked individually to examine the test. As they studied the items, participants noted on their item maps the knowledge, skills, and abilities measured by each item. Table 9 shows the maximum number of points possible on each WAA-SwD test.

Table 9. Maximum number of points possible on each WAA-SwD test.

Content Area	Grade						
	3	4	5	6	7	8	10
Mathematics	34	34	34	34	34	34	34
Reading	30	30	30	30	31	30	30
Science	—	37	—	—	—	39	39

Study of the Achievement Descriptors. Participants reviewed the Wisconsin Extended Grade Band Standards for their grade band and content area, as well as the achievement descriptors. Participants were encouraged to discuss the descriptors and to consider the differences between the achievement levels. For example, participants were encouraged to consider the difference in test performance between students who were classified as *Basic* and *Proficient*.

Schedule. Table 10 shows the schedule used during the WAA-SwD profile sorting workshop. The participant agendas are included in Section C. Participants were assigned to groups to coincide with the grade bands contained in the Wisconsin Extended Grade Band Standards. Note that participants assigned to groups with two grades (e.g., Grades 3–4 Mathematics) engaged in profile sorting first for the lower grade, then repeated the process for the upper grade. Participants assigned to groups with one grade completed the profile sorting process and were excused from the standard setting workshop approximately one day early, except that the synthesis participants for Mathematics and Reading returned on Day 4 for the synthesis discussions. The synthesis discussion for Science was completed on Day 3.

Table 10. Schedule of events for the WAA-SwD Profile Sorting Workshop.

Day	Time	Activity (2-grade groups)	Activity (1-grade groups)
Day 1	PM	Special study	Special study
Day 2	AM	Special study	Complete special study & Orientation to profile sorting
	PM	Orientation to profile sorting & Profile sorting Round 1 for lower grade	Profile sorting Round 1
Day 3	AM	Profile sorting Rounds 1 & 2 for lower grade	Profile sorting Round 2
	PM	Profile sorting Rounds 1 & 2 for upper grade	Synthesis discussion for Science
Day 4	AM	Complete profile sorting Round 2 for upper grade & Synthesis discussion for Reading	Synthesis discussion for Reading
	PM	Synthesis discussion for Mathematics	Synthesis discussion for Mathematics

Profile Sorting. Participants in each grade and content area were provided a set of 100 student profiles to rate. Participants engaged in two rounds of ratings and discussion. Student profiles were selected from the uniform distribution of students, as described previously. For participants in tables assigned to two grades, participants began with the lower grade. Once participants finished the lower grade, the profile sorting process was repeated for the upper grade.

Participants were instructed to go through the 100 profiles individually, focusing on one profile at a time. Participants were encouraged to consider the knowledge, skills, and abilities that were held by the student, as evidenced by the student's scores on each test item. Participants were directed to rely on the achievement descriptors while making their ratings.

After each participant at the table sorted all 100 profiles into the achievement levels, the Table Leader led a discussion about the profiles for which there was disagreement at the table. The participants were asked to share their rationales behind their ratings, and to keep an open mind about their ratings. After this discussion, participants were free to retain their initial ratings or change one or more of them. Cut scores and associated impact data were not presented to participants between the first and second round of ratings.

After participants completed discussion of the profiles, the participants engaged in a second round of rating the student profiles. Throughout the process, participants were instructed to keep in mind the knowledge, skills, and abilities demonstrated by the students through their scores, and how these skills relate to the Wisconsin Extended Grade Band Standards and the achievement descriptors.

Profile Sorting Workshop: Day 3

Participants continued sorting the profiles.

Repeating the Process for the Second, Upper Grade Level. Participants at tables assigned to two grades then repeated the profile sorting process for the second, upper grade level. For example, the table assigned to Grades 3–4 Mathematics completed the process for Grade 3, then repeated the process for Grade 4. As participants began the process for the upper grade, they examined the achievement descriptors with the upper grade in mind, studied the test items in the new grade and took notes on their item maps, studied 100 new student profiles, and engaged in two rounds of ratings and discussion.

Presentation of Recommendations. After all tables in a content area completed the profile sorting process, CTB calculated the cut scores associated with their profile ratings using logistic regression. (A description of logistic regression used to calculate the cut scores for profile sorting is contained within the description of the Day 4 activities.) Participants were shown their group's recommended cut scores, as well as the impact data associated with their recommendations. Participants were asked to consider how reasonable they considered the recommendations for the grade(s) for which they rated profiles, as well as how reasonable they considered the trends across grades. Section F contains summaries of participant ratings.

Impact data were shown for both the total tested population, as well as the uniform distribution of student scores. The use of the uniform distribution was explained again to the participants, with attention paid to explaining that this uniform distribution was not reality for this testing year and that it was simply a guess at what may happen in the future. Participants were guided to consider the impact data from both the total population and the uniform distribution when examining the cut scores. Additionally the participants were informed that the impact data from a future administration may result in a distribution that lies somewhere between that of the total population and that of the uniform distribution calculated from this administration.

Participants were given an opportunity to ask questions of CTB and the DPI staff members, and to discuss the results at their tables.

Achievement Descriptor Revision. Participants were given an opportunity to recommend revisions to the achievement descriptors. Working in their tables, participants edited the achievement descriptors to promote clarity and concision. Suggested revisions were provided to the DPI for their consideration at the conclusion of the workshop.

Evaluation of the Workshop. Participants completed an evaluation of the WAA-SwD Profile Sorting Workshop to measure their satisfaction with the process and provide information about themselves. The evaluation and complete results are shown in Section G.

Participants in Science, Grade 10 Mathematics, and Grade 10 Reading completed sorting their profiles on Day 3. These participants were shown the cut scores calculated from their Round 2 ratings of the 100 profiles.

Following the presentation of cut scores and impact data, the participants in Science, Grade 10 Mathematics, and Grade 10 Reading were given an opportunity to recommend revisions to the achievement descriptors. These participants then completed an evaluation of the workshop. The participants in Science, Grade 10 Mathematics, and Grade 10 Reading who did not take part in the synthesis discussions were released from the workshop. The synthesis participants from Science remained for the Science synthesis discussion on Day 3. The synthesis participants for Grade 10 Mathematics, and Grade 10 Reading returned on Day 4 to participate in the synthesis discussions for their respective content areas. A description of the synthesis discussions is contained within the description of the Day 4 activities.

Profile Sorting Workshop: Day 4

Participants in Grades 3–8 Mathematics and Grades 3–8 Reading completed rating their second grade on Day 4. These participants were shown the cut scores calculated from their Round 2 ratings of the 100 profiles.

Following the presentation of cut scores and impact data, the participants in Grades 3–8 Mathematics and Grades 3–8 Reading were given an opportunity to recommend revisions to the achievement descriptors. These participants then completed an evaluation of the workshop. The participants in Grades 3–8 Mathematics and Grades 3–8 Reading who did not take part in the

synthesis discussions were released from the workshop. The synthesis participants from Grades 3–8 Mathematics and Grades 3–8 Reading remained for the synthesis discussions. The synthesis participants for Grade 10 Mathematics and Grade 10 Reading returned on Day 4 to participate in the synthesis discussions for their respective content areas. A description of the synthesis discussions is contained within the description of the Day 4 activities.

Logistic Regression Used to Calculate Cut Scores for Profile Sorting. After participants completed their profile ratings, cut scores were calculated using logistic regression.

For each grade and content area, participants' ratings of each student profile were matched with the score received by each student. This matching was performed for each participant/student combination: for example, a group of six participants each rating 100 student profiles would yield 600 participant/student combinations.

Logistic regression was then performed to identify each cut score. A separate analysis was performed for each cut score. The regression analysis estimates the probability that students at any given test score would be classified at or above a cut score (e.g., at or above *Proficient*). The following is the logistic regression equation used in this analysis:

$$\ln \frac{p}{1-p} = a + b * x,$$

where a and b are the slope and intercept of the logistic regression, and x is the raw score point of interest. Once the a and b parameters are estimated, the cut score is found by solving for the raw score point, x , where $p = 0.5$:

$$\ln \frac{0.5}{1-0.5} = a + bx,$$

$$0 = a + bx,$$

$$x = \frac{-a}{b}.$$

This calculation method, also used in the Body of Work procedure (Kingston, Kahl, Sweeney, & Bay, 2001), is used to compare the relationship between discrete variables, such as achievement level rating, and continuous variables, such as student test score.

Table 11 shows the participant-recommended cut scores calculated from the final round of ratings in the profile sorting process with the associated impact data based on the total population. Table 12 shows the same participant-recommended cut scores with the associated impact data based on the uniform distribution of student scores.

Table 11. Participant-recommended cut scores from the profile sorting process with associated impact data based on the total population*.

		Cut Scores				Associated Impact Data Total Population			
Content Area	Grade	Maximum Possible Score	<i>Basic</i>	<i>Proficient</i>	<i>Advanced</i>	<i>Minimal Performance</i>	<i>Basic</i>	<i>Proficient</i>	<i>Advanced</i>
Mathematics	3	34	8	19	28	15%	14%	30%	41%
	4	34	7	19	28	12%	16%	27%	45%
	5	34	11	21	30	16%	17%	31%	35%
	6	34	11	20	30	15%	18%	32%	36%
	7	34	8	17	25	13%	14%	16%	57%
	8	34	8	16	25	16%	13%	21%	51%
	10	34	7	19	26	15%	27%	25%	33%
Reading	3	30	10	18	25	15%	12%	26%	48%
	4	30	9	18	24	11%	11%	13%	65%
	5	30	6	20	27	11%	17%	27%	45%
	6	30	6	19	26	10%	18%	24%	48%
	7	31	9	21	26	13%	23%	17%	47%
	8	30	8	19	26	14%	24%	26%	37%
	10	30	11	17	26	18%	10%	35%	37%
Science	4	37	16	25	32	20%	10%	17%	53%
	8	39	14	24	34	16%	10%	26%	48%
	10	39	11	26	33	14%	14%	16%	56%

* The number of participants for profile sorting can be found in Table 2 of Section B.

Table 12. Participant-recommended cut scores from the profile sorting process with associated impact data based on the uniform distribution of student scores*.

Content Area	Grade	Maximum Possible Score	Cut Scores			Associated Impact Data Uniform Distribution			
			<i>Basic</i>	<i>Proficient</i>	<i>Advanced</i>	<i>Minimal Performance</i>	<i>Basic</i>	<i>Proficient</i>	<i>Advanced</i>
Mathematics	3	34	8	19	28	23%	31%	26%	20%
	4	34	7	19	28	19%	34%	26%	21%
	5	34	11	21	30	31%	29%	26%	14%
	6	34	11	20	30	31%	26%	29%	14%
	7	34	8	17	25	22%	26%	23%	29%
	8	34	8	16	25	23%	23%	26%	29%
	10	34	7	19	26	19%	35%	20%	26%
Reading	3	30	10	18	25	32%	26%	23%	19%
	4	30	9	18	24	27%	30%	20%	23%
	5	30	6	20	27	19%	45%	23%	13%
	6	30	6	19	26	19%	42%	23%	16%
	7	31	9	21	26	26%	39%	16%	19%
	8	30	8	19	26	25%	36%	23%	16%
	10	30	11	17	26	33%	20%	30%	17%
Science	4	37	16	25	32	38%	25%	20%	17%
	8	39	14	24	34	27%	28%	28%	17%
	10	39	11	26	33	21%	39%	20%	20%

* The number of participants for profile sorting can be found in Table 2 of Section B.

Table 13 shows the variance of the cut scores calculated from each participant's judgments during the Profile Sorting procedure. The values in the table are shown for Rounds 1 and 2 of profile sorting. (This presentation of the variability in participants' cut score recommendations is adapted from Kingston, et al., 2001). In general, the variance among participants' individual cut scores declines from Round 1 to Round 2.

Table 13. Variance of cut scores associated with each participant's judgments in the profile sorting process, by content area, grade, and round*.

Content Area	Grade	Round 1			Round 2		
		<i>Basic</i>	<i>Proficient</i>	<i>Advanced</i>	<i>Basic</i>	<i>Proficient</i>	<i>Advanced</i>
Mathematics	3	1.47	9.77	1.87	1.37	4.40	0.57
	4	2.57	15.87	2.57	0.57	3.37	0.97
	5	9.36	23.27	7.14	3.41	9.36	2.29
	6	6.98	15.43	3.43	1.13	5.70	3.43
	7	9.70	11.41	16.13	1.36	0.57	0.27
	8	1.43	2.79	2.55	0.13	0.29	0.98
	10	7.70	8.70	3.80	0.70	1.50	0.30
Reading	3	18.70	6.86	7.24	1.93	2.57	2.29
	4	3.95	1.29	1.81	1.13	0.55	0.55
	5	2.90	9.62	2.62	0.00	0.00	0.14
	6	0.62	3.62	0.67	0.14	0.00	0.14
	7	1.50	4.97	3.70	0.17	0.00	0.00
	8	1.07	5.07	0.40	0.00	0.00	0.00
	10	9.80	9.00	1.30	0.80	1.00	0.00
Science	4	23.87	12.17	4.57	1.10	0.57	0.00
	8	2.00	2.80	2.30	0.30	0.00	0.20
	10	6.20	12.00	9.70	0.20	0.00	0.00

* In Round 1, two participants—one in Grade 3 Reading and one in Grade 7 Reading—rated no student profiles as *Advanced*. Because no *Advanced* cut score can be calculated for these participants for Round 1, they were omitted from the variance calculation for that round and cut score. Otherwise, the number of participants for profile sorting can be found in Table 2 of Section B.

Participant Evaluation of the Standard Setting. Participants completed an evaluation of the standard setting at the conclusion of the workshop. The evaluation and complete results of the evaluation are presented in Section G. Overall, standard setting participants were satisfied with their group’s final recommendations (Table 14). Most participants viewed the procedure as fair (Table 15), and most felt valid standards were produced (Table 16).

Table 14. Participants' Agreement/Disagreement with the Statement, "Overall, I was satisfied with my group's final recommendations."

Content Area	Grade	N	Strongly Disagree			Neutral	Agree	Strongly Agree	Agree + Strongly Agree
			Disagree	Disagree	Disagree				
Overall		68	0.0%	0.0%	1.5%	30.9%	67.6%	98.5%	
Mathematics	3-4	6	0.0%	0.0%	0.0%	50.0%	50.0%	100.0%	
	5-6	8	0.0%	0.0%	0.0%	12.5%	87.5%	100.0%	
	7-8	8	0.0%	0.0%	0.0%	37.5%	62.5%	100.0%	
	10	5	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	
Reading	3-4	7	0.0%	0.0%	0.0%	42.9%	57.1%	100.0%	
	5-6	7	0.0%	0.0%	0.0%	85.7%	14.3%	100.0%	
	7-8	6	0.0%	0.0%	0.0%	16.7%	83.3%	100.0%	
	10	5	0.0%	0.0%	0.0%	20.0%	80.0%	100.0%	
Science	4	6	0.0%	0.0%	0.0%	16.7%	83.3%	100.0%	
	8	5	0.0%	0.0%	0.0%	20.0%	80.0%	100.0%	
	10	5	0.0%	0.0%	20.0%	20.0%	60.0%	80.0%	

Table 15. Participants' Agreement/Disagreement with the Statement, "I felt that this procedure was fair."

Content Area	Grade	N	Strongly Disagree			Neutral	Agree	Strongly Agree	Agree + Strongly Agree
			Disagree	Disagree	Disagree				
Overall		67	0.0%	0.0%	1.5%	61.2%	37.3%	98.5%	
Mathematics	3-4	6	0.0%	0.0%	0.0%	83.3%	16.7%	100.0%	
	5-6	8	0.0%	0.0%	0.0%	75.0%	25.0%	100.0%	
	7-8	8	0.0%	0.0%	12.5%	50.0%	37.5%	87.5%	
	10	5	0.0%	0.0%	0.0%	40.0%	60.0%	100.0%	
Reading	3-4	8	0.0%	0.0%	0.0%	50.0%	50.0%	100.0%	
	5-6	7	0.0%	0.0%	0.0%	85.7%	14.3%	100.0%	
	7-8	6	0.0%	0.0%	0.0%	50.0%	50.0%	100.0%	
	10	4	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%	
Science	4	5	0.0%	0.0%	0.0%	40.0%	60.0%	100.0%	
	8	5	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%	
	10	5	0.0%	0.0%	0.0%	80.0%	20.0%	100.0%	

Table 16. Participants’ Agreement/Disagreement with the Statement, “I am confident that the Profile Sorting standard setting produced valid standards.”

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		69	0.0%	1.4%	1.4%	60.9%	36.2%	97.1%
Mathematics	3-4	6	0.0%	0.0%	16.7%	66.7%	16.7%	83.4%
	5-6	8	0.0%	0.0%	0.0%	50.0%	50.0%	100.0%
	7-8	8	0.0%	0.0%	0.0%	50.0%	50.0%	100.0%
	10	5	0.0%	0.0%	0.0%	40.0%	60.0%	100.0%
Reading	3-4	8	0.0%	12.5%	0.0%	75.0%	12.5%	87.5%
	5-6	7	0.0%	0.0%	0.0%	71.4%	28.6%	100.0%
	7-8	6	0.0%	0.0%	0.0%	66.7%	33.3%	100.0%
	10	5	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Science	4	6	0.0%	0.0%	0.0%	66.7%	33.3%	100.0%
	8	5	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
	10	5	0.0%	0.0%	0.0%	80.0%	20.0%	100.0%

Synthesis Discussions. After all grades within a given content area completed the profile sorting process, a smaller group of these participants was convened to examine the results of the profile sorting study. The synthesis discussion for Science occurred on the afternoon of April 3, which was Day 3 of the workshop. The synthesis discussions for Reading and Mathematics occurred on the morning and afternoon, respectively, of April 4, which was Day 4 of the workshop.

The Table Leader from each grade group was invited to participate in the synthesis discussion for a content area. In addition, each table was given the option of sending a second participant to the discussion. By inviting participants to the synthesis discussions in this way, each table was represented in the discussions by at least one participant.

The participants in the synthesis discussions were charged with considering the articulation of the achievement levels: participants were asked to consider actively the consistency of the recommended achievement standards across grades.

Synthesis participants were also shown the results from the modified Contrasting Groups study. Some participants in the synthesis discussion indicated that they had participated in the modified Contrasting Groups study. CTB described the modified Contrasting Groups process to all synthesis participants, and then showed the resultant cut scores and impact data.

Due to the discrepancy between the results from the Contrasting Groups study and the profile sorting activity, the Contrasting Groups study was not weighed heavily within the context of the cut score determination. More items appeared on the January 2008 examinations than actually contributed to student scores: between 16% and 43% of items (average 32%) on each assessment were not scored for a variety of factors (CTB/McGraw-Hill, 2008). Given that the respondents

to the modified Contrasting Groups study were likely to have taken into account students' performance on items that did not ultimately contribute to their scores, and that participants at the profile sorting workshop were able to consider fully the test items that did contribute to student scores, participants weighed heavily the results of the profile sorting process.

The synthesis participants again were shown the cut scores and impact data associated with profile sorting, which are shown in Tables 11 and 12.

The synthesis participants were asked to report on the types of discussions that occurred at their tables after the presentation of recommendations to the entire content area, as well as their participants' views on the overall set of recommendations. When possible, synthesis participants were asked to consider the knowledge, skills, and abilities expected of students in each grade and achievement level. Participants were instructed to consider how the Wisconsin Extended Grade Band Standards differ across grades, and how these differences may affect the expectations of students in each achievement level.

Synthesis participants in all groups indicated that it was not surprising that the Contrasting Groups cut scores tended to be higher than those from the profile sorting process, especially when considering the recent move statewide from a portfolio assessment to the WAA-SwD. Details regarding the Contrasting Groups study are presented in Section H. The synthesis participants worked together to recommend cut scores for each grade and content area that yielded articulated impact data from a cross-grade perspective.

Several adjustments to the Mathematics cut scores were recommended by participants during the synthesis discussion to promote better consistency across the grade levels. The *Basic* cut scores were decreased by one point in Grade 3, by two points in Grade 4, by two points in Grade 5, by one point in Grade 6; and were increased by one point in Grade 10. The *Proficient* cut scores were decreased by one point in Grade 3, by two points in Grade 5, by one point in Grade 6, by one point in Grade 10; and were increased by one point in Grade 8. The *Advanced* cut scores were decreased by two points in Grade 5, by one point in Grade 6; and were increased by three points in Grade 7, and by three points in Grade 8.

Several adjustments to the Reading cut scores were recommended by participants during the synthesis discussion. To promote better consistency in the percentage of students classified as *Basic* in Grade 10, the Grade 10 *Basic* cut score was decreased by one point to 10, and the Grade 10 *Proficient* cut score was increased by one point to 18. To promote better cross-grade consistency among the percentages of students classified as *Advanced*, the *Advanced* cut score in Grade 3 was raised by one point to 26, and in Grade 4 by two points to 26.

Several adjustments to the Science cut scores were recommended by participants during the synthesis discussion. The *Basic* cut score for Grade 4 Science was lowered by one point, from 16 to 15. The *Basic* cut score for Grade 10 Science was raised by one point, from 11 to 12. Both cut scores were adjusted to promote better consistency across grades for the percentage of students classified as *Basic*. The synthesis participants from all three grade levels indicated that the participants were satisfied overall with their cut scores, but that the three groups would be comfortable with adjustments to the *Basic* cut score.

The cut scores recommended by the synthesis participants, as well as the associated impact data based on the total population, are shown in Table 17. The same cut scores, and the associated impact data based on the uniform distribution of student scores, are shown in Table 18. Section F contains results of the synthesis discussions.

Table 17. Cut scores from the synthesis discussions with associated impact data based on the total population*.

		Cut Scores				Associated Impact Data Total Population			
Content Area	Grade	Maximum Possible Score	<i>Basic</i>	<i>Proficient</i>	<i>Advanced</i>	<i>Minimal Performance</i>	<i>Basic</i>	<i>Proficient</i>	<i>Advanced</i>
Mathematics	3	34	7	18	28	14%	14%	31%	41%
	4	34	9	19	28	13%	15%	27%	45%
	5	34	9	19	28	15%	15%	26%	45%
	6	34	10	19	29	14%	16%	29%	41%
	7	34	8	17	28	13%	14%	28%	46%
	8	34	8	18	28	16%	18%	24%	42%
	10	34	8	18	26	16%	23%	28%	33%
Reading	3	30	10	18	26	15%	12%	31%	42%
	4	30	9	18	26	11%	11%	21%	57%
	5	30	6	20	27	11%	17%	27%	45%
	6	30	6	19	26	10%	18%	24%	48%
	7	31	9	21	26	13%	23%	17%	47%
	8	30	8	19	26	14%	24%	26%	37%
	10	30	10	18	26	16%	15%	32%	37%
Science	4	37	15	25	32	19%	11%	17%	53%
	8	39	14	24	34	16%	10%	26%	48%
	10	39	12	26	33	15%	14%	16%	56%

* The number of participants for profile sorting can be found in Table 2 of Section B.

Table 18. Cut scores from the synthesis discussions with associated impact data based on the uniform distribution of student scores*.

Content Area	Grade	Maximum Possible Score	Cut Scores			Associated Impact Data Uniform Distribution			
			<i>Basic</i>	<i>Proficient</i>	<i>Advanced</i>	<i>Minimal Performance</i>	<i>Basic</i>	<i>Proficient</i>	<i>Advanced</i>
Mathematics	3	34	7	18	28	20%	31%	29%	20%
	4	34	9	19	28	24%	29%	26%	21%
	5	34	9	19	28	26%	29%	26%	20%
	6	34	10	19	29	28%	26%	29%	17%
	7	34	8	17	28	22%	26%	32%	20%
	8	34	8	18	28	23%	29%	29%	20%
	10	34	8	18	26	22%	29%	23%	26%
Reading	3	30	10	18	26	32%	26%	26%	16%
	4	30	9	18	26	27%	30%	26%	16%
	5	30	6	20	27	19%	45%	23%	13%
	6	30	6	19	26	19%	42%	23%	16%
	7	31	9	21	26	26%	39%	16%	19%
	8	30	8	19	26	25%	36%	23%	16%
	10	30	10	18	26	29%	27%	27%	17%
Science	4	37	15	25	32	35%	28%	20%	17%
	8	39	14	24	34	27%	28%	28%	17%
	10	39	12	26	33	23%	37%	20%	20%

* The number of participants for profile sorting can be found in Table 2 of Section B.

**Final Review by the State Superintendent of Public Instruction, DPI, and Wisconsin
Technical Advisory Committee**

During the week following the standard setting, staff from the DPI and the Wisconsin Technical Advisory Committee (TAC) reviewed the cut scores and associated impact data and made adjustments to the cut scores. The State Superintendent reviewed these recommendations and the recommendations from the synthesis group and approved the staff and TAC recommendations.

The final cut scores for the WAA-SwD and the associated impact data based on the total population are shown in Table 19. The same cut scores and the associated impact data based on the uniform distribution of student scores are shown in Table 20. Section F contains summaries of the approved cut scores and impact data.

Table 19. Final cut scores, approved for use on the WAA-SwD, with associated impact based on the total population.

Content Area	Grade	Maximum Possible Score	Cut Scores			Associated Impact Data Total Population			
			<i>Basic</i>	<i>Proficient</i>	<i>Advanced</i>	<i>Minimal Performance</i>	<i>Basic</i>	<i>Proficient</i>	<i>Advanced</i>
Mathematics	3	34	7	18	28	14%	14%	31%	41%
	4	34	9	19	28	13%	15%	27%	45%
	5	34	9	19	28	15%	15%	26%	45%
	6	34	10	19	29	14%	16%	29%	41%
	7	34	8	17	28	13%	14%	28%	46%
	8	34	8	18	28	16%	18%	24%	42%
	10	34	8	18	26	16%	23%	28%	33%
Reading	3	30	10	19	26	15%	14%	29%	42%
	4	30	10	22	28	12%	18%	28%	42%
	5	30	8	20	27	13%	15%	27%	45%
	6	30	8	21	27	12%	21%	26%	41%
	7	31	9	21	26	13%	23%	17%	47%
	8	30	9	20	26	15%	24%	24%	37%
	10	30	10	20	26	16%	22%	24%	37%
Science	4	37	15	25	32	19%	11%	17%	53%
	8	39	14	24	34	16%	10%	26%	48%
	10	39	12	26	33	15%	14%	16%	56%

Table 20. Final cut scores, approved for use on the WAA-SwD, with associated impact data based on the uniform distribution of student scores.

Content Area	Grade	Maximum Possible Score	Cut Scores			Associated Impact Data Uniform Distribution			
			<i>Basic</i>	<i>Proficient</i>	<i>Advanced</i>	<i>Minimal Performance</i>	<i>Basic</i>	<i>Proficient</i>	<i>Advanced</i>
Mathematics	3	34	7	18	28	20%	31%	29%	20%
	4	34	9	19	28	24%	29%	26%	21%
	5	34	9	19	28	26%	29%	26%	20%
	6	34	10	19	29	28%	26%	29%	17%
	7	34	8	17	28	22%	26%	32%	20%
	8	34	8	18	28	23%	29%	29%	20%
	10	34	8	18	26	22%	29%	23%	26%
Reading	3	30	10	19	26	32%	29%	23%	16%
	4	30	10	22	28	31%	40%	20%	10%
	5	30	8	20	27	26%	39%	23%	13%
	6	30	8	21	27	26%	42%	19%	13%
	7	31	9	21	26	26%	39%	16%	19%
	8	30	9	20	26	28%	36%	20%	16%
	10	30	10	20	26	29%	34%	20%	17%
Science	4	37	15	25	32	35%	28%	20%	17%
	8	39	14	24	34	27%	28%	28%	17%
	10	39	12	26	33	23%	37%	20%	20%

Summary

Educators from across the state of Wisconsin recommended cut scores for the WAA-SwD in April 2008. These educators participated in a profile sorting standard setting workshop, adapted from Jaeger (1995). Participants examined actual student data; studied the operational test items; and considered the knowledge, skills, and abilities required of students in each performance level on the WAA-SwD. In a synthesis discussion, selected participants convened to review the recommended cut scores and associated impact data across grade levels: these participants adjusted the cut scores to promote consistency in the performance standards across grades.

After the standard setting, the DPI and its TAC reviewed the standard setting committee's recommendations and made additional adjustments to promote consistency in the performance standards across grades. The State Superintendent reviewed the recommendations from the standard setting committee, and from the DPI and its TAC, and approved the staff and TAC recommendations. The final approved cut scores and associated impact data are shown in Table 19 for the total population.

References

Angoff, W.H. (1971). Scales, norms and equivalent scores. In R.L. Thorndike (Ed.), *Educational measurement* (2nd ed., pp. 508-600). Washington, DC: American Council on Education.

CTB/McGraw-Hill. (2008). *2007–08 Wisconsin Alternate Assessment for Students with Disabilities Technical Report*. Monterey, CA: Author.

CTB/McGraw-Hill. (2008). *2007–08 Wisconsin Alternate Assessment for Students with Disabilities Technical Report: Addendum to Technical Report Complexity Study*. Monterey, CA: Author.

Jaeger, R. M. (1995). Setting performance standards through two-stage judgmental policy capturing. *Applied Measurement in Education*, 8, 15-40.

Kingston, N. M., Kahl, S. R., Sweeney, K., & Bay, L. (2001). Setting performance standards using the body of work method. In G. J. Cizek (Ed.), *Setting performance standards: Concepts, methods, and perspectives* (pp.219-248). Mahwah, NJ: Lawrence Erlbaum.

Lewis, D.M., Mitzel, H.C., Green, D.R. (1996). *Standard setting: A Bookmark approach*. Symposium presented at the Council of Chief State School Officers National Conference on Large-Scale Assessment: Phoenix, AZ.

SECTION C

Participant Agendas for the Profile Sorting Workshop

Standard Setting Participant Agenda

Welcome to the Profile Sorting Standard Setting for the Wisconsin Alternate Assessment for Students with Disabilities (WAA-SwD) for Reading, Mathematics, and Science! The Wisconsin Department of Public Instruction and CTB/McGraw-Hill thank you for your time and expertise during this important process. Please use this agenda to orient yourself during the workshop. If you have any questions or concerns, please contact a member of the CTB Standard Setting Team.

Tuesday, April 1	12:30 PM	Participant registration
	1:00 PM	Opening session, orientation to special study
	2:45 PM	Review the achievement descriptors
	3:15 PM	Begin study and ordering of test items for Grade 3, 5, or 7
	4:45 PM	Secure materials collection and audit
	5:00 PM	Participant dismissal

Wednesday, April 2	8:00 AM	Participant registration and continental breakfast
	8:30 AM	Complete study and ordering of test items for Grade 3, 5, or 7
	9:30 AM	Study and order of test items for Grade 4, 6, or 8
	12:00 PM	Lunch
	1:00 PM	Orientation to profile sorting
	2:00 PM	Review each test item for Grade 3, 5, or 7
	3:00 PM	Begin Round 1 of profile sorting for Grade 3, 5, or 7
	4:45 PM	Secure materials collection and audit
5:00 PM	Participant dismissal	

Thursday, April 3	8:00 AM	Participant registration and continental breakfast
	8:30 AM	Complete Round 1 of profile sorting for Grade 3, 5, or 7
	9:30 AM	Round 2 of profile sorting for Grade 3, 5, or 7
	12:00 PM	Lunch
	1:00 PM	Review each test item for Grade 4, 6, or 8
	2:00 PM	Round 1 of profile sorting for Grade 4, 6, or 8
	3:30 PM	Begin Round 2 of profile sorting for Grade 4, 6, or 8
	4:45 PM	Secure materials collection and audit
	5:00 PM	Participant dismissal

Friday, April 4	8:00 AM	Participant registration and continental breakfast
	8:30 AM	Complete Round 2 of profile sorting for Grade 4, 6, or 8
	10:30 AM	Presentation of recommended cut scores
	11:30 AM	Workshop evaluations
	12:00 PM	Lunch
	1:00 PM	Participants and table leaders divide into groups: For participants: review the achievement descriptors For table leaders: synthesis workshop
	3:45 PM	Secure materials collection and audit
	4:00 PM	Participant dismissal



Please note: two 15-minute breaks are scheduled each day, one in the morning and another in the afternoon.

DPI and CTB/McGraw-Hill thank you for your time and participation!

Standard Setting Participant Agenda

Welcome to the Profile Sorting Standard Setting for the Wisconsin Alternate Assessment for Students with Disabilities (WAA-SwD) for Reading, Mathematics, and Science! The Wisconsin Department of Public Instruction and CTB/McGraw-Hill thank you for your time and expertise during this important process. Please use this agenda to orient yourself during the workshop. If you have any questions or concerns, please contact a member of the CTB Standard Setting Team.

Tuesday, April 1	12:30 PM	Participant registration
	1:00 PM	Opening session, orientation to special study
	2:45 PM	Review the achievement descriptors
	3:15 PM	Begin study and ordering of test items
	4:45 PM	Secure materials collection and audit
	5:00 PM	Participant dismissal
Wednesday, April 2	8:00 AM	Participant registration and continental breakfast
	8:30 AM	Complete study and ordering of test items
	10:15 AM	Orientation to profile sorting
	11:00 AM	Review each test item
	12:00 PM	Lunch
	1:00 PM	Round 1 of profile sorting
	4:45 PM	Secure materials collection and audit
	5:00 PM	Participant dismissal
Thursday, April 3	8:00 AM	Participant registration and continental breakfast
	8:30 AM	Round 2 of profile sorting
	12:00 PM	Lunch
	1:00 PM	Presentation of recommended cut scores
	1:30 PM	Workshop evaluations
	1:45 PM	Review the achievement descriptors
	2:30 PM	Secure materials collection and audit
	3:00 PM	Participant dismissal: the standard setting workshop ends for participants, table leaders adjourn until noon on Friday, April 4
Friday, April 4	—Table Leaders Only—	
	8:00 AM	Participant registration and continental breakfast
	12:00 PM	Lunch
	1:00 PM	Synthesis workshop for all Reading and Mathematics table leaders
	3:45 PM	Secure materials collection and audit
	4:00 PM	Table Leader dismissal



Please note: two 15-minute breaks are scheduled each day, one in the morning and another in the afternoon.

DPI and CTB/McGraw-Hill thank you for your time and participation!

Standard Setting Participant Agenda

Welcome to the Profile Sorting Standard Setting for the Wisconsin Alternate Assessment for Students with Disabilities (WAA-SwD) for Reading, Mathematics, and Science! The Wisconsin Department of Public Instruction and CTB/McGraw-Hill thank you for your time and expertise during this important process. Please use this agenda to orient yourself during the workshop. If you have any questions or concerns, please contact a member of the CTB Standard Setting Team.

Tuesday, April 1	12:30 PM	Participant registration
	1:00 PM	Opening session, orientation to special study
	2:45 PM	Review the achievement descriptors
	3:15 PM	Begin study and ordering of test items
	4:45 PM	Secure materials collection and audit
	5:00 PM	Participant dismissal
Wednesday, April 2	8:00 AM	Participant registration and continental breakfast
	8:30 AM	Complete study and ordering of test items
	10:15 AM	Orientation to profile sorting
	11:00 AM	Review each test item
	12:00 PM	Lunch
	1:00 PM	Round 1 of profile sorting
	4:45 PM	Secure materials collection and audit
	5:00 PM	Participant dismissal
Thursday, April 3	8:00 AM	Participant registration and continental breakfast
	8:30 AM	Round 2 of profile sorting
	12:00 PM	Lunch
	1:00 PM	Presentation of recommended cut scores
	2:15 PM	Workshop evaluations
	2:45 PM	Participants and table leaders divide into groups: For participants: review the achievement descriptors For table leaders: synthesis workshop
	3:45 PM	Secure materials collection and audit
	4:00 PM	Participant dismissal: the standard setting workshop ends for all Science participants and table leaders



Please note: two 15-minute breaks are scheduled each day, one in the morning and another in the afternoon.

DPI and CTB/McGraw-Hill thank you for your time and participation!

SECTION D

Overheads and Training Materials for Profile Sorting

**Wisconsin Alternate Assessment
for Students with Disabilities (WAA-SwD)**

Profile Sorting Standard Setting

Opening Session

Wisconsin Department of Public Instruction CTB/McGraw-Hill




April 1, 2008

Overview

- Introduction to standard setting
- Committee roles
- Profile sorting process
- Workshop agenda

- Orientation to special study
- Questions and answers




Wisconsin DPI Staff

- Sandra Berndt
- Duane Dorn
- Angela Dugas
- Brian Johnson
- Kristen Kehoe
- Eva Kubinski
- Philip Olsen
- Stephanie Petska
- Lynette Russell
- Diane Sullivan
- Plus other DPI staff will be available




The Students

- Remember the students...



CTB Standard Setting Team

- Jill van den Heuvel
- Rick Mercado
- Adele Brandstrom
- Dorothy Tele'a
- Sandra Snell
- Michelle Paregian
- Ricky Harris
- Kris Paulsen
- Bevin Flaherty
- Peter Zutz
- Andrew Jones
- Timothy Pozdol



What is standard setting?

- A process that lets experts make judgments about the content that students in each achievement level should know.
- The WAA-SwD standard setting has three phases:
 - Contrasting Groups Study
 - Profile Sorting Workshop
 - Synthesis Discussion
- Recommendations made in each phase of the standard setting will be reviewed before final cut scores are adopted.



Why standard setting?

- The Wisconsin Extended Grade Band Standards define what students are tested on.
 - These are things students *should* know and be able to do.
 - Wisconsin has Extended Grade Band Standards for Reading, Mathematics, and Science.



Why standard setting?

- Achievement standards define what students *can do* in each achievement level.
- You will actively discuss your expectations of students in each achievement level.



Achievement Levels

- Specify the knowledge, skills and abilities a student needs to know in order to be classified in each achievement level:
 - *Minimal*
 - *Basic*
 - *Proficient*
 - *Advanced*



Contrasting Groups

- A Contrasting Groups Study has been completed for the WAA-SwD.
- As part of this study, Wisconsin special educators were asked to consider their students' knowledge, skills, and abilities, and indicated which of the achievement levels best described each student in Reading, Mathematics, and Science.
- The ratings were compiled and cut scores were calculated from them.
- These cut scores will be part of the synthesis discussion at the end of the workshop.



Grade and Content Area Committees

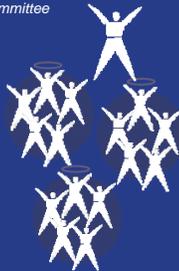
- There are 11 groups:
 - Grades 3/4 Mathematics
 - Grades 5/6 Mathematics
 - Grades 7/8 Mathematics
 - Grade 10 Mathematics
 - Grade 4 Science
 - Grade 8 Science
 - Grade 10 Science
 - Grades 3/4 Reading
 - Grades 5/6 Reading
 - Grades 7/8 Reading
 - Grade 10 Reading



Committee Roles

- Group Leader
- Table Leaders
- Participants
- DPI
- CTB

*Standard Setting
Committee*



Committee Roles

- Group Leader
 - Facilitates the standard setting process
- Table Leaders
 - Lead the standard setting process at the tables
 - Keep track of secure materials
 - Standard setters
- Participants
 - Standard setters

Standard Setting Committee





Standard Setting Materials

- Student profiles
- Rating form
- Extended Grade Band Standards
- Achievement descriptors
- Item maps
- Ordered item booklets

- For training, we will use a set of ten sample math items.




Special Study

- The workshop begins with a special study, which will be introduced later in the training session.
- As part of the special study, you will:
 - study the standards and achievement descriptors
 - consider the knowledge, skills, and abilities measured by each test item
 - gauge the complexity of each test item
- After the special study, the profile sorting portion of the standard setting process will begin.




Profile Sorting

- Student-centered process
- Content-based decisions



CTB
McGraw-Hill

Profiles

- Student profiles show students' scores for each item in the test.
- Each row represents a student. Each column represents a test item.
 - Test items are ordered from easiest to hardest. This ordering is reflected in the ordered item booklet.
 - Student profiles are shown in no particular order.



CTB
McGraw-Hill

Sample Profiles

Training for Profile Sorting Workshop Grade 3 Mathematics SAMPLE PROFILES											
Max Points*											Max Points*
Order No. (ON)	1	2	3	4	5	6	7	8	9	10	Order No. (ON)
p-value	0.58	0.58	0.55	0.52	0.51	0.51	0.49	0.49	0.48	0.48	p-value
T-001	1	1	1	1	1	2	1	1	1	1	T-001
T-002	0	1	0	0	0	0	0	0	1	0	T-002
T-003	0	1	0	1	1	2	1	0	1	1	T-003
T-004	1	1	1	1	1	2	1	1	1	1	T-004
T-005	1	0	0	1	1	0	0	1	1	0	T-005
T-006	1	0	0	0	0	2	0	0	1	0	T-006
T-007	1	0	1	1	0	0	1	1	0	0	T-007
T-008	1	1	1	1	1	2	1	0	0	1	T-008
T-009	0	1	1	0	1	0	0	1	0	1	T-009
T-010	1	1	0	0	1	1	0	0	1	0	T-010

* Unless otherwise noted, the maximum score for an item is 1.



CTB
McGraw-Hill

Rating Profiles

- The goal of the profile sorting process is to decide which of the four achievement levels best describes each student, as evidenced by the student's test scores.
- To do this, keep in mind the achievement descriptors.



CTB
McGraw-Hill

Achievement Descriptors

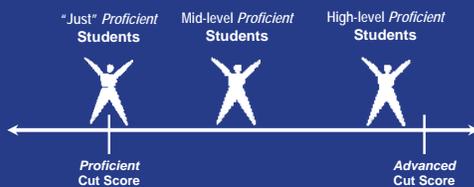
Mathematics Extended Grade Band 3-4 Alternate Assessment Achievement Descriptors	
Achievement Level	Achievement Descriptor
Advanced	<ul style="list-style-type: none"> Indicates performing at the Advanced Level. Order or rate count numbers 0-50, represent numbers 0-20. Add or subtract missing single-digit number problems, and combine or separate numbers or objects 0-20 into requested equal groups. Sort and name cubes, sort the four basic shapes into like groups, and compare three objects by size. Recognize basic positional concepts (such as behind, over, under, in front of, next to, and left, right) and extend three-part A/B/C patterns. Identify and use tools of measurement (e.g., calendar, analog, and digital clocks, ruler). Identify and display graph showing most, least, and same.
Proficient	<ul style="list-style-type: none"> Indicates performing at the Proficient Level. Order or rate count numbers 0-20 and represent numbers 0-30, add and subtract one-step single-digit number problems, and combine or separate numbers or objects 0-20 into requested equal groups. Sort cubes by likeness and two objects by size. Recognize basic positional concepts (such as behind, over, under, in front of, next to), match 3 basic shapes, indicate most, least, and same on a graph, and extend simple patterns. Identify purpose of basic tools of measurement (e.g., calendar, clock, ruler).
Basic	<ul style="list-style-type: none"> Indicates performing at the Basic Level. Order count numbers 0-10, add one-step single-digit number problems. Match two basic shapes, color and identify, and copy a three-part pattern from an existing pattern. Recognize two basic positional concepts (such as behind, over, under, in front of, next to, in, out, top, bottom). Identify tools of measurement (e.g., clock, calendar, ruler, scales). Identify what is the same on a graph.
Minimal	<ul style="list-style-type: none"> Indicates performing at the Minimal Level. Sort one by a group of objects. Match one basic shape. Recognize a number, clock, calendar, graph, and one basic positional concept (such as in, out, top, bottom).



CTB
McGraw-Hill

Target Students

- Within an achievement level, there is a spectrum of ability.
- Consider the skills of the "just" *Proficient* student.



CTB
McGraw-Hill

Workshop Agenda: Day 2

- Complete special study
 - Table and individual activity
- Orientation to profile sorting
- Begin profile sorting activities
 - Individual activity



Workshop Agenda: Day 3

- Continue profile sorting activities
 - Individual activity
- *Participants in Grades 4, 8, and 10 Science; Grade 10 Reading; and Grade 10 Mathematics will proceed directly to Day 4 activities.*



Workshop Agenda: Day 4

- Complete profile sorting activities
 - Individual activity
- Presentation of recommended cut scores
- Evaluate the workshop
- Synthesis discussion for Table Leaders
- Review the achievement descriptors
- Secure materials collection



Wisconsin Alternate Assessment
for Students with Disabilities (WAA-SwD)

Profile Sorting Standard Setting

Orientation to Profile Sorting

Wisconsin Department
of Public Instruction

CTB/McGraw-Hill



April 2, 2008

About this Presentation

- This presentation will orient you to the profile sorting portion of the standard setting.
- Some aspects of this presentation are intentionally repeated from yesterday's presentation.



Profile Sorting

- Student-centered process
- Content-based decisions



Profiles

- Student profiles show students' scores for each item in the test.
- Each row represents a student. Each column represents a test item.
 - Test items are ordered from easiest to hardest. This ordering is reflected in the ordered item booklet.
 - Student profiles are shown in no particular order.



CTB
McGraw-Hill

Sample Profiles

Training for Profile Sorting Workshop
Grade 3 Mathematics SAMPLE PROFILES

Max Points*	1	2	3	4	5	2	7	8	9	10	Max Points*
Order No. (ON)	1	2	3	4	5	6	7	8	9	10	Order No. (ON)
p-value	0.58	0.58	0.55	0.52	0.51	0.43	0.43	0.48	0.48		p-value
T-001	1	1	1	1	1	2	1	1	1	1	T-001
T-002	0	1	0	0	0	0	0	0	1	0	T-002
T-003	0	1	0	1	1	2	1	0	1	1	T-003
T-004	1	1	1	1	1	2	1	1	1	1	T-004
T-005	1	0	0	1	1	0	0	1	1	0	T-005
T-006	1	0	0	0	0	2	0	0	1	0	T-006
T-007	1	0	1	1	0	0	1	1	0	0	T-007
T-008	1	1	1	1	1	2	1	0	0	1	T-008
T-009	0	1	1	0	1	0	0	1	0	1	T-009
T-010	1	1	0	0	1	1	0	0	1	0	T-010

* Unless otherwise noted, the maximum score for an item is 1.



CTB
McGraw-Hill

Rating Profiles

- The goal of the profile sorting process is to decide which of the four achievement levels best describes each student, as evidenced by the student's test scores.
- To do this, keep in mind the achievement descriptors.



CTB
McGraw-Hill

Standard Setting Simulation

- Imagine that we have four achievement levels for our 10-item math sample test:
 - Minimal
 - Basic
 - Proficient
 - Advanced
- Rate each profile into one of the four achievement levels and mark it on your rating form.
 - Rate each profile independently.



Round 1 Completing the Forms

- Using either a pencil or a pen, make your marks heavy and dark. Erase completely or cross-out to change.
- Be sure your name is printed legibly, and that your grade and content area are accurate.
- After you have checked for accuracy, give your completed rating forms to your Table Leader.
 - Table Leaders: when you have all the rating forms for your table, give them to your Group Leader.



Round 2

- After you have made your ratings, you will discuss your ratings with your colleagues at your table.
- Beginning with the first profile, each participant will reveal his or her profile rating.
 - If there is not agreement about the rating of the profile, then the table should discuss the ratings.
 - If there is agreement, then the table *may* discuss the ratings, at the discretion of the participants.



Round 2

- Continue Round 2 discussions for each profile.
- After the Round 2 discussions are complete, you may choose to change one or more of your profile ratings.
 - You will receive another rating form to capture your Round 2 profile ratings.
 - You may change any or none of your profile ratings, using the information you gathered from the Round 2 discussions.
 - Your table does *not* have to reach consensus on the rating for each profile: all ratings are made individually.



Groups with Two Grade Levels

- If your group has two assigned grade levels, then you will repeat the profile sorting process.
 - First, perform the process for the lower grade (i.e., Grades 3, 5, or 7).
 - Then, continue to the upper grade (i.e., Grades 4, 6, or 8).
- If your group has one assigned grade level, then your group will proceed to the next portion of the standard setting process.



After Profile Sorting

- After the profile sorting portion of the standard setting, you will see a presentation of the final recommendations from the profile sorting.
- You will have a chance to discuss your reaction to the final recommendations as a group.



Evaluations

- You will be asked to complete a written evaluation of the standard setting process.



CTB
McGraw-Hill

Synthesis Discussion

- Table Leaders will meet to discuss...
 - The results from the Contrasting Groups survey
 - The results from the profile sorting
 - The groups' content-based expectations of students
 - Expectations across grades
- Be sure that you have let your Table Leader know your views on the cut score recommendations before the synthesis discussion.



CTB
McGraw-Hill

Review the Achievement Descriptors

- All remaining participants will have a chance to recommend changes to the achievement descriptors.
- Achievement descriptors summarize the knowledge, skills, and abilities of students in each achievement level.



CTB
McGraw-Hill

Name: _____

Wisconsin Alternate Assessment for Students with Disabilities

Profile Sorting TRAINING MATERIALS

**Sample Profiles
Sample Rating Form
Scoring Rubrics
Wisconsin Extended Grade Band Standards
& Achievement Descriptors**

Mathematics Grade 3

 **CTB
McGraw-Hill**

**Training for Profile Sorting Workshop
Grade 3 Mathematics SAMPLE PROFILES**

Max Points*	1	2	3	4	5	6	7	8	9	10	Max Points*
Order No. (ON)	1	2	3	4	5	6	7	8	9	10	Order No. (ON)
p-value	0.58	0.58	0.55	0.52	0.51	0.51	0.49	0.49	0.48	0.48	p-value
T-001	1	1	1	1	1	2	1	1	1	1	T-001
T-002	0	1	0	0	0	0	0	0	1	0	T-002
T-003	0	1	0	1	1	2	1	0	1	1	T-003
T-004	1	1	1	1	1	2	1	1	1	1	T-004
T-005	1	0	0	1	1	0	0	1	1	0	T-005
T-006	1	0	0	0	0	2	0	0	1	0	T-006
T-007	1	0	1	1	0	0	1	1	0	0	T-007
T-008	1	1	1	1	1	2	1	0	0	1	T-008
T-009	0	1	1	0	1	0	0	1	0	1	T-009
T-010	1	1	0	0	1	1	0	0	1	0	T-010

* Unless otherwise noted, the maximum score for an item is 1.

Training for Profile Sorting Workshop
SAMPLE RATING FORM

Name: _____

Packet	Content Area	Grade	Round
① ①	<input type="radio"/> Mathematics	③	①
① ①	<input type="radio"/> Reading	④	②
② ②	<input type="radio"/> Science	⑤	
③ ③		⑥	
④ ④		⑦	
⑤ ⑤		⑧	
⑥ ⑥		⑩	
⑦ ⑦			
⑧ ⑧			
⑨ ⑨			

Profile	<i>Minimal</i>	<i>Basic</i>	<i>Proficient</i>	<i>Advanced</i>
T-001	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
T-002	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
T-003	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
T-004	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
T-005	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
T-006	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
T-007	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
T-008	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
T-009	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
T-010	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

SCORING RUBRICS FOR ALL CONTENT AREAS

Scoring Rubric for SR Item Types

Total Score	Content Score
1	Correct
0	Incorrect or Other or No response

Scoring Rubric for 2 Point CR Item Types*

Total Score	Content Score
2	Correct
1	Partially Correct/Some Error
0	Incorrect or Other or No response

*Grade 10 Science has a 3-point CR item. For this item, response choice A is worth three points, response choice B is worth two points, response choice C is worth one point, and response choices D and E are worth zero points.

Wisconsin Extended Standards and Instructional Achievement Descriptors

Mathematics - Grade Band 3-4

Model Academic Standard:

A. Mathematical Processes: Students will effectively use mathematical knowledge, skills and strategies related to reasoning, communication, connections, representation, and problem solving.

(Note: Students perform math processes in demonstrations of the content that follows.)

Model Academic Standard:

B. Number Operations & Relationships: Students will use numbers effectively for various purposes, such as counting, measuring, estimating, and problem solving.

Subskill B.a.: Concepts

Extended Grade Band 3-4 Objectives	Instructional Achievement Descriptors
<p>Mathematics Ba1 Order or rote count numbers 0-20 and represent numbers 0-10.</p> <p>MathematicsBa2 Sort coins to like groups.</p>	<p>Advanced students perform without support the following:</p> <ul style="list-style-type: none"> • Order or rote count numbers 0-50 and represent numbers 0-20. EX: Count numbers verbally; write, type, point, stamp, or use communication device; use manipulation devices. EX: Use pictures, objects, or fingers to show a requested number. • Sort and name coins into like groups. EX: Sort coins into labeled containers. EX: Point to or indicate a coin by name. <p>Proficient students perform without support the following:</p> <ul style="list-style-type: none"> • Order or rote count numbers 0-20 and represent numbers 0-10. EX: Count verbally; write, type, point, stamp, or use communication device; use manipulation devices. EX: Use pictures, objects, or fingers to show a requested number. • Sort coins to like groups. EX: Given all coins, students can sort into groups of penny, nickel, dime, quarter.

Extended Grade Band 3-4 Objectives	Instructional Achievement Descriptors
	<p>Basic students perform with minimal support the following:</p> <ul style="list-style-type: none"> • Rote count numbers 0-10. EX: Count verbally; write, type, point, stamp, or use communication device; use of manipulation devices. • Separate 2 different kinds of coins. EX: Separate a penny from a quarter, a dime from a penny. <p>Minimal students attempt to perform with significant support the following:</p> <ul style="list-style-type: none"> • Recognize numbers. EX: Indicate one object when requested. EX: Point to or indicate a number versus another symbol.

Model Academic Standard:

B. Number Operations & Relationships: Students will use numbers effectively for various purposes, such as counting, measuring, estimating, and problem solving.

Subskill B.b.: Computation

Extended Grade Band 3-4 Objectives	Instructional Achievement Descriptors
<p>Mathematics Bb1 Add and subtract one-step, single-digit number problems.</p>	<p>Advanced students perform without support the following:</p> <ul style="list-style-type: none"> • Solve addition and subtraction one-step single-digit number problems using symbols. EX: Solve written or verbal problem using paper and pencil or other communication device. • Combine or separate numbers or objects 0-20 into requested equal groups. EX: Given a bag of colored squares sort into equal groups.
<p>Mathematics Bb2 Combine and separate numbers or objects 0-20 into requested equal groups.</p>	<p>Proficient students perform without support the following:</p> <ul style="list-style-type: none"> • Add and subtract one-step single-digit number problems. EX: Solve written or verbal problem using manipulatives or pictures. • Combine or separate numbers or objects 0-20 into requested equal groups. EX: Given a group of objects will sort into requested groups (sort into 2s, 5s, etc.). EX: Given 4 groups of 5 state or indicate that there are 20 total.
	<p>Basic students perform with minimal support the following:</p> <ul style="list-style-type: none"> • Add one-step single-digit number problems. EX: Solve problem using manipulatives or pictures.
	<p>Minimal students attempt to perform with significant support the following:</p> <ul style="list-style-type: none"> • Add one to a group of objects. EX: Add a block or indicate a block needs to be added.

Model Academic Standard:

C. Geometry: Students will be able to use geometric concepts, relationships, and procedures to interpret, represent, and solve problems.

Subskill C.a.: Describing Figures

Subskill C.b: Spatial Relationships and Transformations

<p>Extended Grade Band 3-4 Objectives</p>	<p>Instructional Achievement Descriptors</p>
<p>Mathematics Ca1 Identify and match 3 basic shapes.</p>	<p>Advanced students perform without support the following:</p> <ul style="list-style-type: none"> • Identify and match 4 basic shapes. EX: State, indicate, or point to requested shape, such as triangle, square, circle rectangle (basic 2D shapes). EX: Complete a non-interlocking puzzle with the 4 basic shapes, placing pieces when requested by name of shape. <p>Proficient students perform without support the following:</p> <ul style="list-style-type: none"> • Identify and match 3 basic shapes. EX: State, indicate, or point to requested shape, such as triangle, square, circle (basic 2D shapes). EX: Complete a non-interlocking puzzle with the 3 basic shapes, placing pieces when requested by name of shape (wooden peg puzzles). <p>Basic students perform with minimal support the following:</p> <ul style="list-style-type: none"> • Identify and match 2 basic shapes. EX: State, indicate, or point to requested shape, such as triangle, square, circle (basic 2D shapes). <p>Minimal students attempt to perform with significant support the following:</p> <ul style="list-style-type: none"> • Match 1 basic shape. EX: Indicate or point to matching shapes, such as triangle to triangle.

Model Academic Standard:

C. Geometry: Students will be able to use geometric concepts, relationships, and procedures to interpret, represent, and solve problems.

Subskill C.c.: Coordinate Systems

Extended Grade Band 3-4 Objectives	Instructional Achievement Descriptors
<p>Mathematics Cc1 Recognize basic positional concepts (such as behind, over, under, in front of, next to).</p>	<p>Advanced students perform without support the following:</p> <ul style="list-style-type: none"> • Recognize basic positional concepts (such as behind, over, under, in front of, next to, and left, right). EX: Manipulate object or indicate picture which shows positional concept. EX: Indicate left or right when prompted by raising correct hand. EX: Point to an object on the right or left in addition to above, below etc. as requested.
	<p>Proficient students perform without support the following:</p> <ul style="list-style-type: none"> • Recognize basic positional concepts (such as behind, over, under, in front of, next to). EX: Manipulate object or indicate picture which shows positional concept. EX: Move hand to behind, next to, and above table when requested.
	<p>Basic students perform with minimal support the following:</p> <ul style="list-style-type: none"> • Recognize 2 basic positional concepts (such as over, under, in front of, in, out, top, bottom). EX: Manipulate object or indicate picture that shows positional concept. EX: Place a ball in front of themselves when prompted.
	<p>Minimal students attempt to perform with significant support the following:</p> <ul style="list-style-type: none"> • Recognize 1 basic positional concept (such as in, out, top, bottom). EX: Manipulate object or self to show a positional concept. EX: When requested, move to or indicate the front of the line.

Model Academic Standard:

D. Measurement: Students will select and use appropriate tools (including technology) and techniques to measure things to a specified degree of accuracy. They will use measurements in problem-solving situations.

- Subskill D.a.: **Measurable Attributes**
- Subskill D.b.: **Direct Measurement**
- Subskill D.c.: **Indirect Measurement**

Extended Grade Band 3-4 Objectives	Instructional Achievement Descriptors
<p>Mathematics Da1 Compare 2 objects by size or weight.</p>	<p>Advanced students perform without support the following:</p> <ul style="list-style-type: none"> • Compare 3 objects by size or weight. EX: Point to or identify the large/medium/small object. EX: Given a picture of 3 different sizes of the same object, indicate which is large, medium, and small. • Identify and use tools of measurement (e.g. calendar, analog and digital clocks, ruler). EX: Use a ruler to measure. EX: Match digital to analog time.
<p>Mathematics Da2 Identify purpose of basic tools of measurement (e.g., calendar, clock, ruler).</p>	<p>Proficient students perform without support the following:</p> <ul style="list-style-type: none"> • Compare 2 objects by size or weight. EX: Point to or identify the larger/smaller, heavier/lighter, longer/shorter object. EX: Given a marble and a tennis ball and asked which is larger, indicate the tennis ball. EX: Given a rock and a feather and asked which is lighter, identify the feather. • Identify purpose of basic tools of measurement (e.g., calendar, clock, ruler). EX: Identify which tool measures time. EX: Hand teacher the tool to measure water upon request.
	<p>Basic students perform with minimal support the following:</p> <ul style="list-style-type: none"> • Compare 2 objects by size. EX: Point to or identify the larger/smaller object when asked. • Identify tools of measurement. EX: Identify one of the following tools: clock, calendar, ruler, scales. EX: Hand teacher a ruler upon request.

<p>Extended Grade Band 3-4 Objectives</p>	<p>Instructional Achievement Descriptors</p>
	<p>Minimal students attempt to perform with significant support the following:</p> <ul style="list-style-type: none"> • Identify a clock or calendar. <p>EX: Point to clock or calendar when prompted for each.</p>

Model Academic Standard: Students will use data collection and analysis, statistics, and probability in problem-solving situations, employing technology where appropriate.

E. Statistics and Probability

Subskill E.a.: Data analysis and statistics

Subskill E.b.: Probability

Extended Grade Band 3-4 Objectives	Instructional Achievement Descriptors
Mathematics Ea1 Identify most, least, and same on a graph or chart.	Advanced students perform without support the following: <ul style="list-style-type: none"> • Identify and display graph showing most, least, and same. EX: Given a bag of different colored objects (e.g., erasers, rubber balls, mini toys) graph amount of different colors on paper or manipulate into columns in order to show more, least, and same.
	Proficient students perform without support the following: <ul style="list-style-type: none"> • Identify most, least, and same on a graph or chart. EX: Given a bar graph, point to or show concept of least, most, and same. EX: Given a block graph, indicate when asked which row has the least blocks, most blocks, and the same number of blocks.
	Basic students perform with minimal support the following: <ul style="list-style-type: none"> • Identify most and least on a graph or chart. EX: Given a graph, point to or show concept of same. EX: Given a block graph, indicate when asked which rows are the same.
	Minimal students attempt to perform with significant support the following: <ul style="list-style-type: none"> • Recognize a graph or chart. EX: Point to a graph.

Model Academic Standard:

F. Algebraic Relationships: Students will discover, describe, and generalize simple and complex patterns and relationships. In the context of real-world problem situations, the student will use algebraic techniques to define and describe the problem to determine and justify appropriate solutions.

Subskill F.a: Patterns, Relations, and Functions

Extended Grade Band 3-4 Objectives	Instructional Achievement Descriptors
<p>Mathematics Fa1 Recognize or extend two-part A/B pattern.</p>	<p>Advanced students perform without support the following:</p> <ul style="list-style-type: none"> • Recognize and extend three-part A/B/C pattern. EX: Use manipulative shapes or objects to complete or extend a given three-part pattern. EX: When started with red, green, yellow, red, green, yellow, indicate whether red, green, or yellow object comes next.
	<p>Proficient students perform without support the following:</p> <ul style="list-style-type: none"> • Recognize or extend two-part A/B pattern. EX: Use manipulative shapes or objects to complete or extend a given two-part pattern. EX: When started with red, green, red, green, red, green, indicate whether red or green object comes next.
	<p>Basic students perform with minimal support the following:</p> <ul style="list-style-type: none"> • Copy a two-part pattern from an existing pattern. EX: Match pictures of two patterns. EX: Recreate a pattern from an example. EX: Use pictorial form to put pegs in a board of the same pattern. EX: Use a communication device to indicate which comes next in the pattern to recreate it.
	<p>Minimal students attempt to perform with significant support the following:</p> <ul style="list-style-type: none"> • Extend a sequence of like pictures or objects. EX: Given five apples in a row, choose another apple to come next instead of an orange. EX: Given a sequence of the same picture or object and asked what goes here, indicate the matching object/picture.

Model Academic Standard:

F. Algebraic Relationships: Students will discover, describe, and generalize simple and complex patterns and relationships. In the context of real-world problem situations, the student will use algebraic techniques to define and describe the problem to determine and justify appropriate solutions.

Subskill F.b.: Expressions, Equations, and Inequalities

Subskill F.c.: Properties

(Expressions, Equations, Inequalities, and Properties are too abstract for this population to permit linkage at this grade band.)

Mathematics Extended Grade Band 3-4

Alternate Assessment Achievement Descriptors

Achievement Level	Achievement Descriptor
Advanced	<p>Students performing at the Advanced Level:</p> <ul style="list-style-type: none"> • Order or rote count numbers 0-50, represent numbers 0-20. • Add or subtract one-step single-digit number problems, and combine or separate numbers or objects 0-20 into requested equal groups. • Sort and name coins, sort the four basic shapes into like groups, and compare three objects by size. • Recognize basic positional concepts (such as behind, over, under, in front of, next to and left, right) and extend three-part A/B/C pattern. • Identify and use tools of measurement (e.g., calendar, analog, and digital clocks, ruler) • Identify and display graph showing most, least, and same.
Proficient	<p>Students performing at the Proficient Level:</p> <ul style="list-style-type: none"> • Order or rote count numbers 0-20 and represent numbers 0-10, add and subtract one-step single-digit number problems, and combine or separate numbers or objects 0-20 into requested equal groups. • Sort coins by likeness and two objects by size. • Recognize basic positional concepts (such as behind, over, under, in front of, next to); match 3 basic shapes; indicate most, least, and same on a graph; and extend simple patterns. • Identify purpose of basic tools of measurement (e.g., calendar, clock, ruler).
Basic	<p>Students performing at the Basic Level:</p> <ul style="list-style-type: none"> • Rote count numbers 0-10, add one-step single-digit number problems. • Match two basic shapes, coins and objects, and copy a two-part pattern from an existing pattern. • Recognize two basic positional concepts (such as behind, over, under, in front of, next to, in, out, top, bottom). • Identify tools of measurement (e.g., clock, calendar, ruler, scales). • Identify what is the same on a graph.
Minimal	<p>Students performing at the Minimal Level:</p> <ul style="list-style-type: none"> • Add one to a group of objects. • Match one basic shape. • Recognize a number, clock, calendar, graph, and one basic positional concept (such as in, out, top, bottom).

SECTION E

Achievement Descriptors

Mathematics Extended Grade Band 3-4

Alternate Assessment Achievement Descriptors

Achievement Level	Achievement Descriptor
Advanced	<p>Students performing at the Advanced Level:</p> <ul style="list-style-type: none"> • Order or rote count numbers 0-50, represent numbers 0-20. • Add or subtract one-step single-digit number problems, and combine or separate numbers or objects 0-20 into requested equal groups. • Sort and name coins, sort the four basic shapes into like groups, and compare three objects by size. • Recognize basic positional concepts (such as behind, over, under, in front of, next to and left, right) and extend three-part A/B/C pattern. • Identify and use tools of measurement (e.g., calendar, analog, and digital clocks, ruler) • Identify and display graph showing most, least, and same.
Proficient	<p>Students performing at the Proficient Level:</p> <ul style="list-style-type: none"> • Order or rote count numbers 0-20 and represent numbers 0-10, add and subtract one-step single-digit number problems, and combine or separate numbers or objects 0-20 into requested equal groups. • Sort coins by likeness and two objects by size. • Recognize basic positional concepts (such as behind, over, under, in front of, next to); match 3 basic shapes; indicate most, least, and same on a graph; and extend simple patterns. • Identify purpose of basic tools of measurement (e.g., calendar, clock, ruler).
Basic	<p>Students performing at the Basic Level:</p> <ul style="list-style-type: none"> • Rote count numbers 0-10, add one-step single-digit number problems. • Match two basic shapes, coins and objects, and copy a two-part pattern from an existing pattern. • Recognize two basic positional concepts (such as behind, over, under, in front of, next to, in, out, top, bottom). • Identify tools of measurement (e.g., clock, calendar, ruler, scales). • Identify what is the same on a graph.
Minimal	<p>Students performing at the Minimal Level:</p> <ul style="list-style-type: none"> • Add one to a group of objects. • Match one basic shape. • Recognize a number, clock, calendar, graph, and one basic positional concept (such as in, out, top, bottom).

Mathematics Extended Grade Band 5-6

Alternate Assessment Achievement Descriptors

Achievement Level	Achievement Descriptor
Advanced	<p>Students performing at the Advanced Level:</p> <ul style="list-style-type: none"> • Recognize, count, and order numbers (to 50) and money (like coins more than a dollar and bills to five dollars). Solve mathematical calculations (+, -, x, ÷) of single-digit whole numbers. • Compare patterns, including parts of a whole, in daily situations. • Apply directional concepts (e.g., east, west, north, south, and left and right). • Choose and use appropriate mathematical tools and shapes and sizes to make comparisons, sort, and display information. • Utilize calendars and clocks to everyday situations.
Proficient	<p>Students performing at the Proficient Level:</p> <ul style="list-style-type: none"> • Recognize, identify, and count numbers (to 50) and money (like coins to a dollar and bills to five dollars) and solve basic math computations (+ and -). • Sort and compare data to discover or extend patterns (parts of a whole, part of group, more or less, fair or unfair). • Identify basic shapes (circle, rectangle, square, and triangle) and basic directional concepts (east, west, north, south, left and right). • Identify purpose of basic tools of measurement, connect calendars and clocks to everyday situations.
Basic	<p>Students performing at the Basic Level:</p> <ul style="list-style-type: none"> • Recognize and manipulate numbers from 0-10. • Identify coins, basic shapes (circle, square, rectangle, and triangle), and positional concepts (top, bottom, front, back, in, and out). • Recognize how different groups of objects are the same and different. • Match situation to use of clock or calendar in everyday situations.
Minimal	<p>Students performing at the Minimal Level:</p> <ul style="list-style-type: none"> • Identify numbers (0-3) and basic positional concepts (top, bottom, in, out, front, and back). • Demonstrate an understanding of one-to-one correspondence and sharing. • Identify basic tools of math (circle, triangle, coin, calendar, clock).

Mathematics Extended Grade Band 7-8

Alternate Assessment Achievement Descriptors

Achievement Level	Achievement Descriptor
Advanced	<p>Students performing at the Advanced Level:</p> <ul style="list-style-type: none"> • Use numbers (100+) to solve problems using four basic operations (to two digits), use money to make change, and use basic fractions ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$, $\frac{1}{3}$, $\frac{1}{10}$) in everyday life. • Select and use the appropriate unit of measure (length, liquid capacity, weight) for everyday objects; identify, describe, and compute perimeter/circumference and area on a grid. • Locate and identify coordinates, identify parallel and intersecting lines, and create and interpret data from tables and simple graphs in real-world context. • Sort and classify a variety of two- and three- dimensional objects based on shape and size, and tell why the objects belong together; estimate more than two group sizes based on most and least.
Proficient	<p>Students performing at the Proficient Level:</p> <ul style="list-style-type: none"> • Use whole numbers (100+) to solve problems using four basic operations (to two digits) and use money and basic fractions ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$) in everyday life. • Select the appropriate unit of measure (length, liquid capacity, weight) for everyday objects, identify and describe perimeter/circumference and area on a grid. • Sort and classify a variety of three-dimensional objects based on shape. • Estimate two group sizes based on more or less. • Locate coordinates, identify parallel and intersecting lines, and interpret data from tables and simple graphs in real-world context.
Basic	<p>Students performing at the Basic Level:</p> <ul style="list-style-type: none"> • Use whole numbers (to 20) to solve problems using addition and subtraction (single digit) and identify value of money and basic fractions ($\frac{1}{2}$, $\frac{1}{4}$) in everyday life. • Select the appropriate unit of measure (length, weight) for everyday objects, identify perimeter. • Sort and classify two types of three-dimensional objects and match images of figures based on size and location. • Determine whether an event is impossible and repeat a two-item pattern. • Locate a picture on a coordinate grid, identify parallel lines, and locate information on simple graphs.
Minimal	Students performing at the Minimal Level:

Achievement Level	Achievement Descriptor
	<ul style="list-style-type: none"> • Identify whole numbers (to 10). • Match basic shapes and coins; identify lines, three-dimensional objects, and the outside of an object. • Select the appropriate unit of measure to determine the weight of everyday objects. • Identify the next item in a pattern.

Mathematics Extended Grade 10

Alternate Assessment Achievement Descriptors

Achievement Level	Achievement Descriptor
Advanced	<p>Students performing at the Advanced Level:</p> <ul style="list-style-type: none"> • Solve problems using positive and negative integers; compare fractions, decimals, and percents in terms of more or less; compare angles in relationship to a right angle. • Solve problems using measurement tools; determine perimeter and area of irregular shapes. • Collect and organize data in simple graphs using real-world contexts; determine the likelihood of events occurring. • Describe what the letters represent in a given formula; predict a simple mathematical pattern.
Proficient	<p>Students performing at the Proficient Level:</p> <ul style="list-style-type: none"> • Compare and order whole positive and negative integers, -20 to 20; apply the idea of more or less using fractions, decimals, and percents. • Select and use tools to determine measurement; determine perimeter, area, and circumference of basic shapes; identify lines that form right angles. • Organize, read, and compare data from simple graphs; determine the likelihood of events occurring. • Relate simple formulas to practical problems; predict or explain a simple mathematical pattern.
Basic	<p>Students performing at the Basic Level:</p> <ul style="list-style-type: none"> • Recognize whole positive and negative integers; identify the difference between two simple fractions, decimals, or percents. • Recognize appropriate tools used for measurement; the perimeter and area of regular shapes; right angles as corners. • Recognize points on a simple graph and their meaning; determine if an event is impossible or certain. • Solve a simple one-step open number sentence; describe a simple mathematical pattern.
Minimal	<p>Students performing at the Minimal Level:</p> <ul style="list-style-type: none"> • Identify and locate whole positive integers 0-20 on a number line. • Find the corner of an object; name a tool of measurement. • Continue a pattern in a set of numbers or objects.

Reading Extended Grade Band 3-4 Alternate Assessment Achievement Descriptors

Achievement Level	Achievement Descriptor
Advanced	<p>Students performing at the Advanced Level:</p> <ul style="list-style-type: none"> • Use words or pictures to determine meaning. • Recall basic facts from a short paragraph of 5 sentences in length. • Sequence three events from text 5 sentences in length. • Make a prediction before, during, and after reading a text. • Connect text to self and text to text.
Proficient	<p>Students performing at the Proficient Level:</p> <ul style="list-style-type: none"> • Match words to pictures. • Recall basic facts from a short paragraph of 3 simple sentences. • Identify beginning and end of text. • Given a series of events, predict what will happen next. • Connect text to self.
Basic	<p>Students performing at the Basic Level:</p> <ul style="list-style-type: none"> • Identify correct object when given two word choices. • Recall basic facts from a short paragraph of 2 simple sentences. • Identify one event that occurred in a 3-sentence story. • Predict next activity in a known routine. • Connect text to pictures.
Minimal	<p>Students performing at the Minimal Level:</p> <ul style="list-style-type: none"> • Identify one picture or object from a set of two. • Recall one fact from a simple sentence. • Make connections between related pictures.

Reading Extended Grade Band 5-6 Alternate Assessment Achievement Descriptors

Achievement Level	Achievement Descriptor
Advanced	<p>Students performing at the Advanced Level:</p> <ul style="list-style-type: none"> • Identify word meanings, at least 4 story elements, and topic sentence. • Sequence events including detail and/or over more than a week time span. • Follow a multistep process. • Make connections, including text-to-text and text-to-self, and predict using 2-3 story elements. • Explain why something is fact or fantasy.
Proficient	<p>Students performing at the Proficient Level:</p> <ul style="list-style-type: none"> • Identify word meaning using cues, at least 3 story elements, the topic, and sequence of events. • Follow 2-3 steps in a process. • Make text-to-self connections, and make simple predictions. • Distinguish between fact and fantasy.
Basic	<p>Students performing at the Basic Level:</p> <ul style="list-style-type: none"> • Given choices, determine word meaning, 2 story elements (character and event), and the topic. • Sequence 2 events. • Participate in steps to follow a process. • Answer directed questions about text-to-self connections and predictions. • Classify fact and fantasy.
Minimal	<p>Students performing at the Minimal Level:</p> <ul style="list-style-type: none"> • Communicate basic personal needs and wants. • Follow basic steps in daily living skills. • Choose a book on a given topic. • Indicate like or dislike of a story.

Reading Extended Grade Band 7-8

Alternate Assessment Achievement Descriptors

Achievement Level	Achievement Descriptor
Advanced	<p>Students performing at the Advanced Level:</p> <ul style="list-style-type: none"> • Use and apply context clues to understand meaning of words and phrases. • Identify story elements, main ideas and supporting details, text features, and five sequenced events from stated information. • Connect to text, predict outcomes, draw conclusions, and distinguish between fact and opinion from literary and informational text.
Proficient	<p>Students performing at the Proficient Level:</p> <ul style="list-style-type: none"> • Use context clues to understand meaning of words. • Identify stated information and events in sequence in literary and informational text. • Connect to text, make predictions, and draw conclusions from literary and informational text.
Basic	<p>Students performing at the Basic Level:</p> <ul style="list-style-type: none"> • Use verbal or picture clues to understand word meaning. • Identify stated information from either literary and/or informational text and identify first and last events. • Connect to text and make predictions from literary and/or informational text.
Minimal	<p>Students performing at the Minimal Level:</p> <ul style="list-style-type: none"> • Recognize that words or symbols have meaning. • Identify stated information in text. • Connect text to self.

Reading Extended Grade 10 Alternate Assessment Achievement Descriptors

Achievement Level	Achievement Descriptor
Advanced	<p>Students performing at the Advanced Level:</p> <ul style="list-style-type: none"> • Apply varied word meanings. • Classify information about the text and distinguish multiple viewpoints. • Draw and justify conclusions from literary and informational text.
Proficient	<p>Students performing at the Proficient Level:</p> <ul style="list-style-type: none"> • Interpret word meanings within a passage according to context. • Classify information and distinguish different viewpoints. • Draw conclusions from literary and informational text.
Basic	<p>Students performing at the Basic Level:</p> <ul style="list-style-type: none"> • Identify words and their meanings. • Organize information and recognize a viewpoint. • Connect text with self and world.
Minimal	<p>Students performing at the Minimal Level:</p> <ul style="list-style-type: none"> • Use visual or picture clues to understand the meaning of words and symbols. • Recognize feelings in text and pictures. • Connect text to self.

Science Extended Grade 4 Alternate Assessment Achievement Descriptors

Achievement Level	Achievement Descriptor
Advanced	<p>Students performing at the Advanced Level:</p> <ul style="list-style-type: none"> • Select and use appropriate science resources (including tools, books) to gather information. • Describe changes in earth and sky (seasons, day/night) and changes in characteristics of objects. • Describe properties of earth features (mountains, lakes, oceans) and needs of living things. • Describe the benefits of science on their life.
Proficient	<p>Students performing at the Proficient Level:</p> <ul style="list-style-type: none"> • Use basic science resources (including tools and vocabulary) to gather information. • Recognize changes in earth and sky (seasons, day/night) and differences in characteristics of objects. • Recognize properties of earth features (mountains, lakes, oceans) and needs of living things. • Recognize the benefits of science on their life.
Basic	<p>Students performing at the Basic Level:</p> <ul style="list-style-type: none"> • Recognize basic science resources, vocabulary, and tools. • Recognize the physical characteristics of an object and the elements of earth versus sky. • Recognize their own basic needs. • Access technology in their lives.
Minimal	<p>Students performing at the Minimal Level:</p> <ul style="list-style-type: none"> • Attend to and observe (see, hear, touch) presented science materials and use of scientific tools. • Sort objects by color. • Recognize edible versus nonedible items.

Science Extended Grade 8

Alternate Assessment Achievement Descriptors

Achievement Level	Achievement Descriptor
Advanced	<p>Students performing at the Advanced Level:</p> <ul style="list-style-type: none"> • Describe the materials and safe habits used, and explain cause and effect relationships in science. • Predict changes in the earth (e.g., storms, natural disasters) and its cycles (e.g., seasons, day and night). • Predict the direction of motion of thrown objects. • Compare characteristics of living (e.g., reproduction) and non-living (e.g., state of matter, color, shape, size) things.
Proficient	<p>Students performing at the Proficient Level:</p> <ul style="list-style-type: none"> • Identify specific materials and safe habits used, and identify simple cause and effect relationships in science. • Recognize that the earth goes through cycles (e.g., seasons, day and night) and changes (e.g., storms, natural disasters). • Identify 2 or more characteristics of living (e.g., reproduction) and non-living (e.g., state of matter, color, shape, size) things. • Identify the direction of motion of released objects.
Basic	<p>Students performing at the Basic Level:</p> <ul style="list-style-type: none"> • Recognize safe habits to use while participating in simple science activities and identify effect when a science-related event is presented. • Identify seasons, day versus night, and living versus non-living things. • Identify a characteristic of matter (e.g., state of matter, color, shape, size, direction of motion).
Minimal	<p>Students performing at the Minimal Level:</p> <ul style="list-style-type: none"> • Imitate safe behaviors while attending to science instruction and activities. • Identify the direction of a dropped object. • Identify things that are living. • Recognize day or night.

Science Extended Grade 10

Alternate Assessment Achievement Descriptors

Achievement Level	Achievement Descriptor
Advanced	<p>Students performing at the Advanced Level:</p> <ul style="list-style-type: none"> • Construct and use models and follow the steps of science inquiry to make observations about the natural world (e.g., solar system, force and motion, natural disasters). • Explain why certain characteristics of organisms (e.g., physical characteristics, heredity, energy, adaptations) improve their quality of life. • Identify different scientific career options that may be of personal interest.
Proficient	<p>Students performing at the Proficient Level:</p> <ul style="list-style-type: none"> • Use models and the basic steps of science inquiry as directed to make observations about the natural world (e.g., solar system, force and motion, natural disasters). • Identify characteristics of organisms (e.g., physical characteristics, heredity, energy, adaptations). • Determine an action that improves quality of life. • Identify different career options related to science.
Basic	<p>Students performing at the Basic Level:</p> <ul style="list-style-type: none"> • Identify parts of a model (e.g., earth and sun within the solar system, arms and legs on a skeleton) to make an observation about the natural world. • Identify a way to improve their own quality of life by assisting in a science experiment using two or more basic steps of science inquiry. • Recognize different animals have different needs (e.g., food, shelter) and pass unique characteristics to their children. • Match scientific equipment with career.
Minimal	<p>Students performing at the Minimal Level:</p> <ul style="list-style-type: none"> • Recognize that models exist (e.g., plastic apple, globe represents the earth). • Attend to other's use of one basic step of science inquiry and safe behaviors in experiments, such as those related to movement. • Recognize that humans and animals need food and shelter. • Recognize science-related careers.

SECTION F

Detailed Summary of Ratings for Uniform Distribution and Total Distribution

- **Profile Sorting Results
for Rounds 1 and 2**
- **Synthesis Discussion Results**
- **Approved Cut Scores
and Associated Impact Data**

Round 1 Profile Sorting Results Based on Uniform Distribution

Mathematics

Results from Round 1 Profile Sorting (Logistic Regression) based on Uniform Distribution Data

Percentage of students in each achievement level

	3	4	5	6	7	8	10	Impact
Minimal Performance	23%	19%	31%	31%	25%	20%	19%	
Basic	31%	31%	29%	32%	29%	29%	37%	
Proficient	23%	29%	26%	23%	32%	26%	23%	
Advanced	23%	21%	14%	14%	14%	26%	20%	
Proficient & Above	46%	50%	40%	37%	46%	51%	43%	

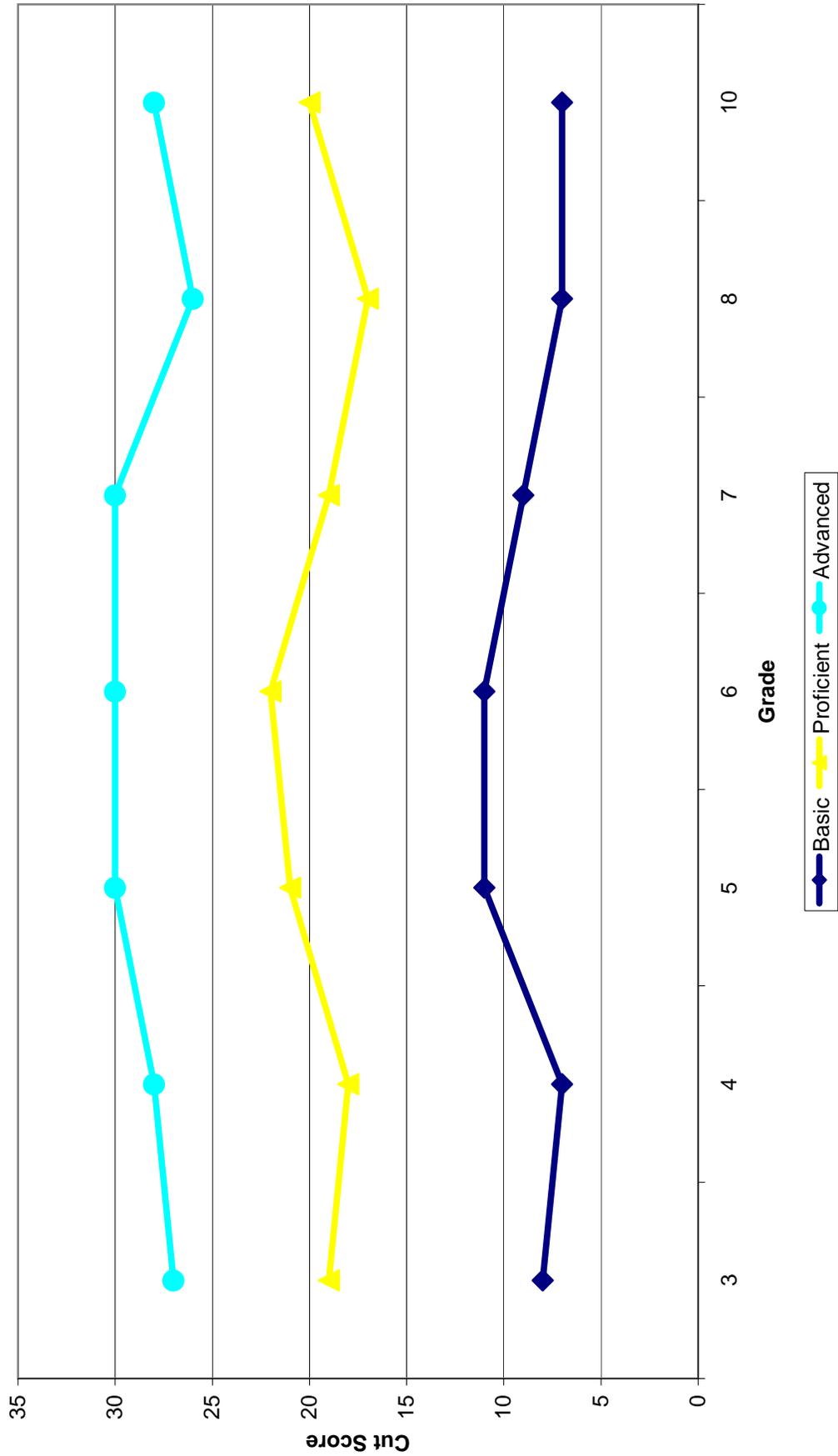
	8	7	11	11	9	7	Cut Scores
Basic	19	18	21	22	19	17	20
Proficient	27	28	30	30	30	26	28

Max Score

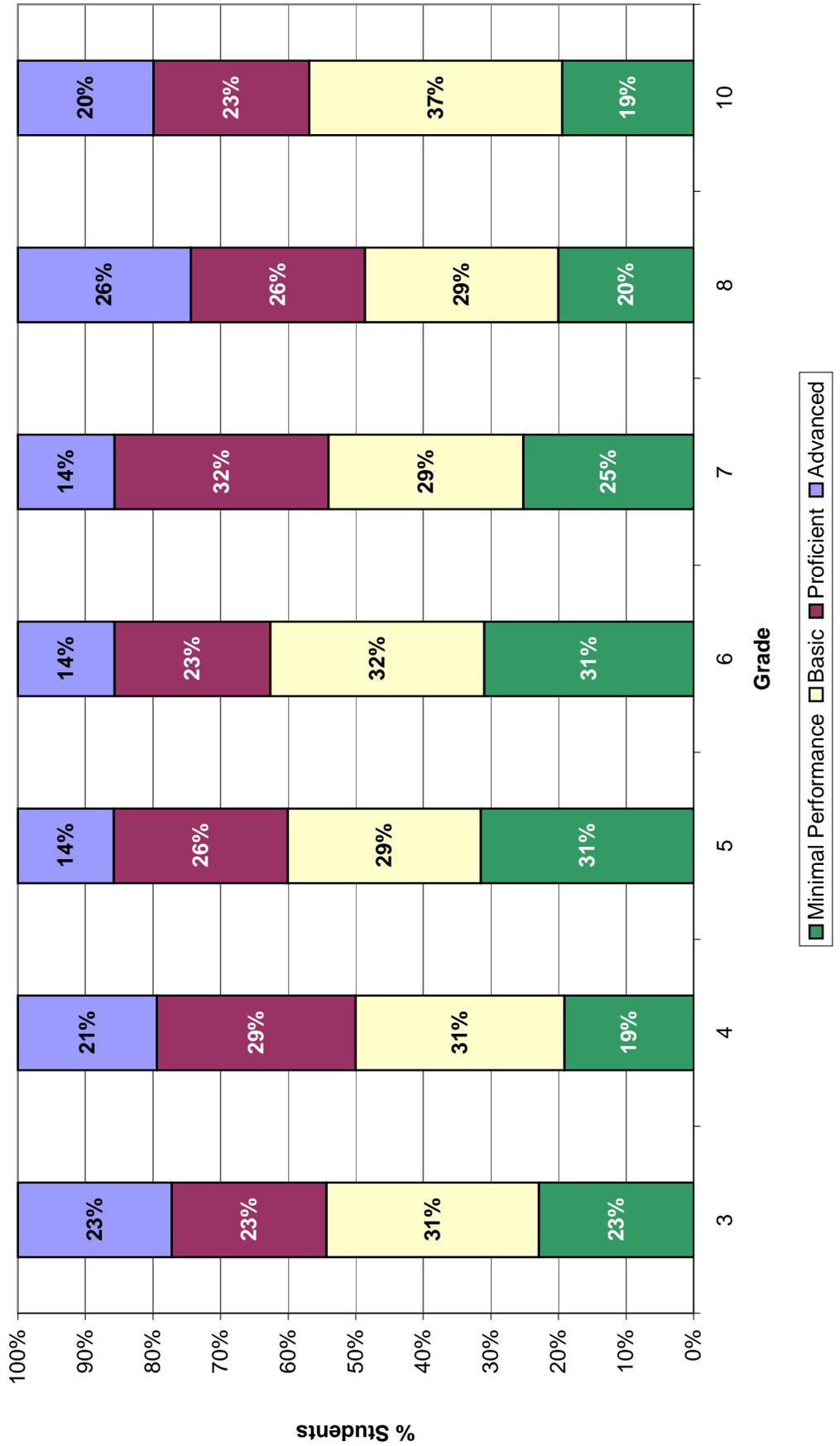
34 34 34 34 34 34 34

The number of participants for profile sorting can be found in Section B Table 2.

**Wisconsin Alternate Assessment for Students with Disabilities
 Mathematics Round 1 Profile Sorting, Uniform Distribution
 Cut Scores by Achievement Level**



**Wisconsin Alternate Assessment for Students with Disabilities
 Mathematics Round 1 Profile Sorting, Uniform Distribution
 Percent of Students by Achievement Level**



Reading

Results from Round 1 Profile Sorting (Logistic Regression) based on Uniform Distribution Data

Percentage of students in each achievement level

	3	4	5	6	7	8	10	Impact
Minimal Performance	32%	31%	23%	19%	26%	25%	33%	
Basic	29%	26%	39%	42%	39%	36%	27%	
Proficient	26%	23%	26%	26%	19%	23%	27%	
Advanced	13%	20%	13%	13%	16%	16%	13%	
Proficient & Above	39%	43%	39%	39%	35%	39%	40%	

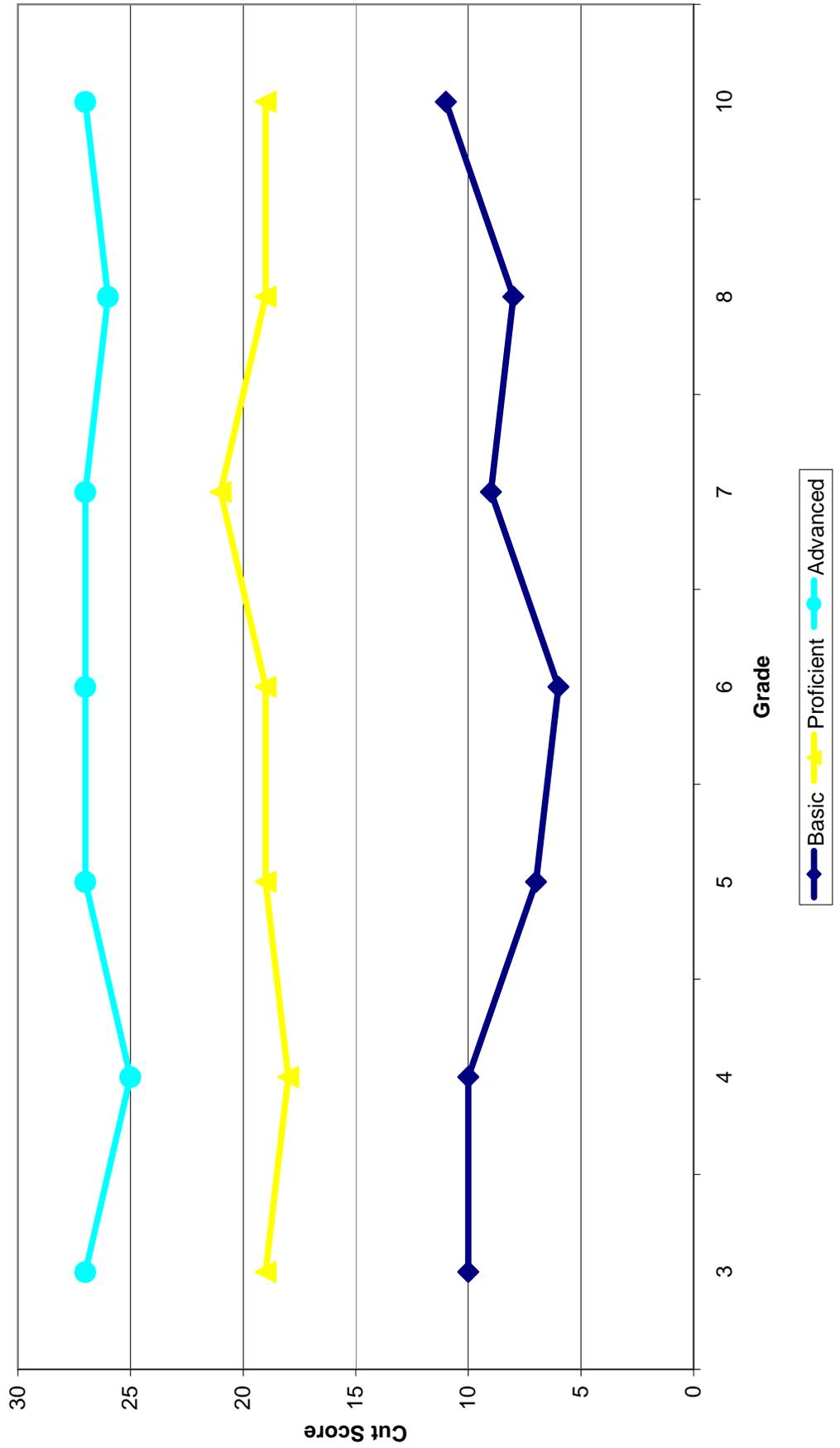
	Cut Scores						
Basic	10	10	7	6	9	8	11
Proficient	19	18	19	19	21	19	19
Advanced	27	25	27	27	27	26	27

Max Score

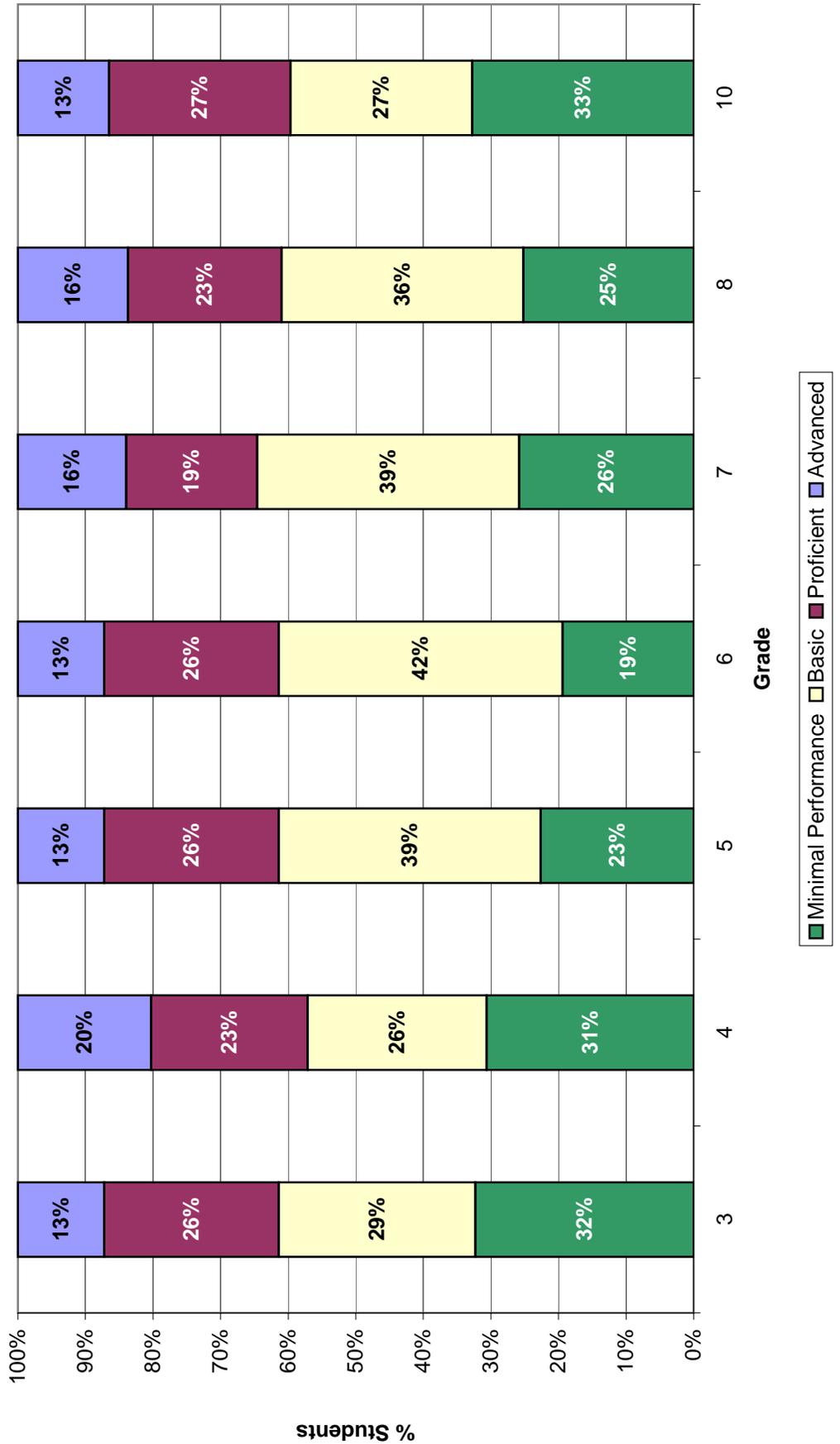
30 30 30 30 31 30 30

The number of participants for profile sorting can be found in Section B Table 2.

**Wisconsin Alternate Assessment for Students with Disabilities
 Reading Round 1 Profile Sorting, Uniform Distribution
 Cut Scores by Achievement Level**



**Wisconsin Alternate Assessment for Students with Disabilities
Reading Round 1 Profile Sorting, Uniform Distribution
Percent of Students by Achievement Level**



Science

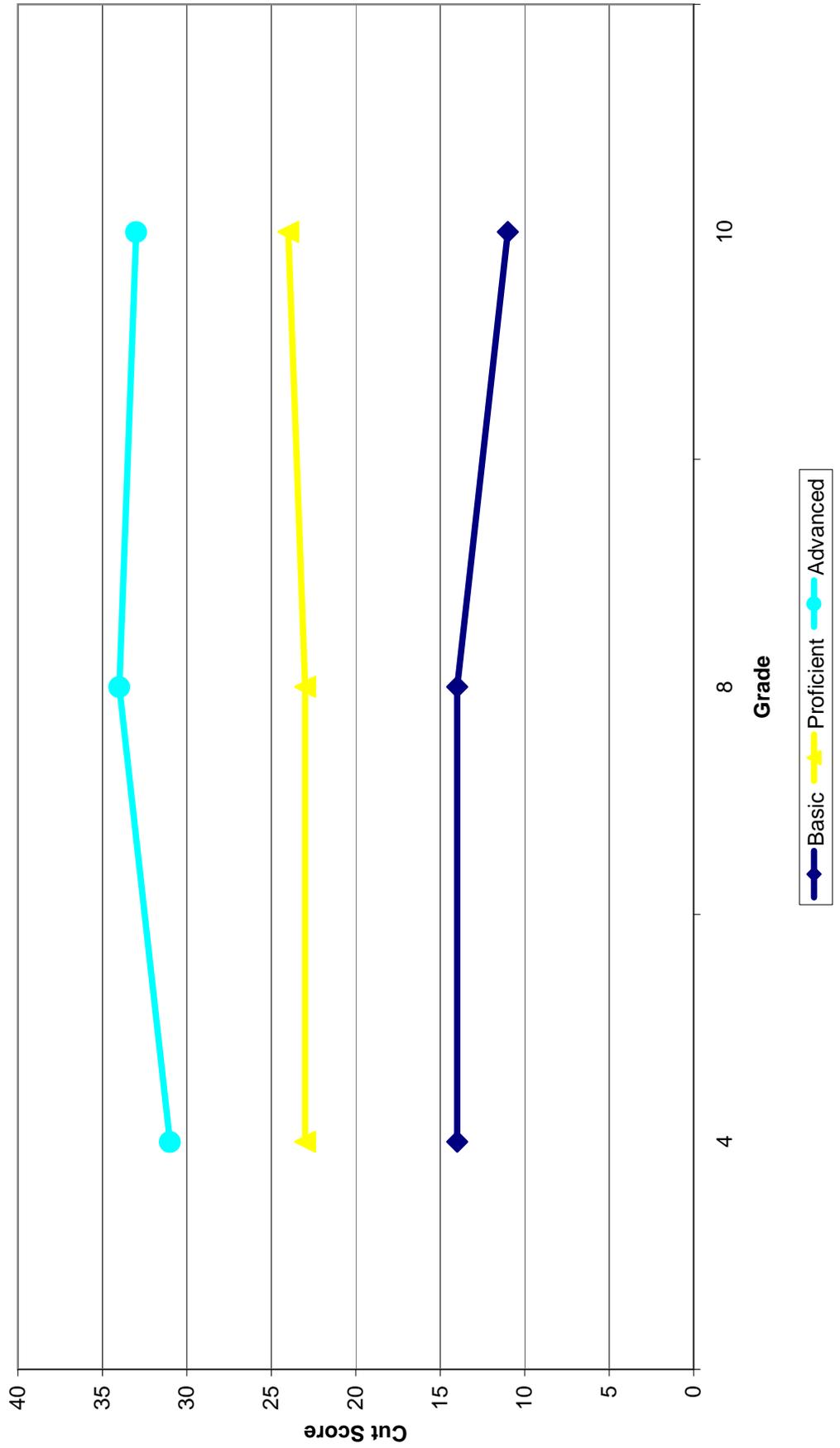
Results from Round 1 Profile Sorting (Logistic Regression) based on Uniform Distribution Data

Percentage of students in each achievement level

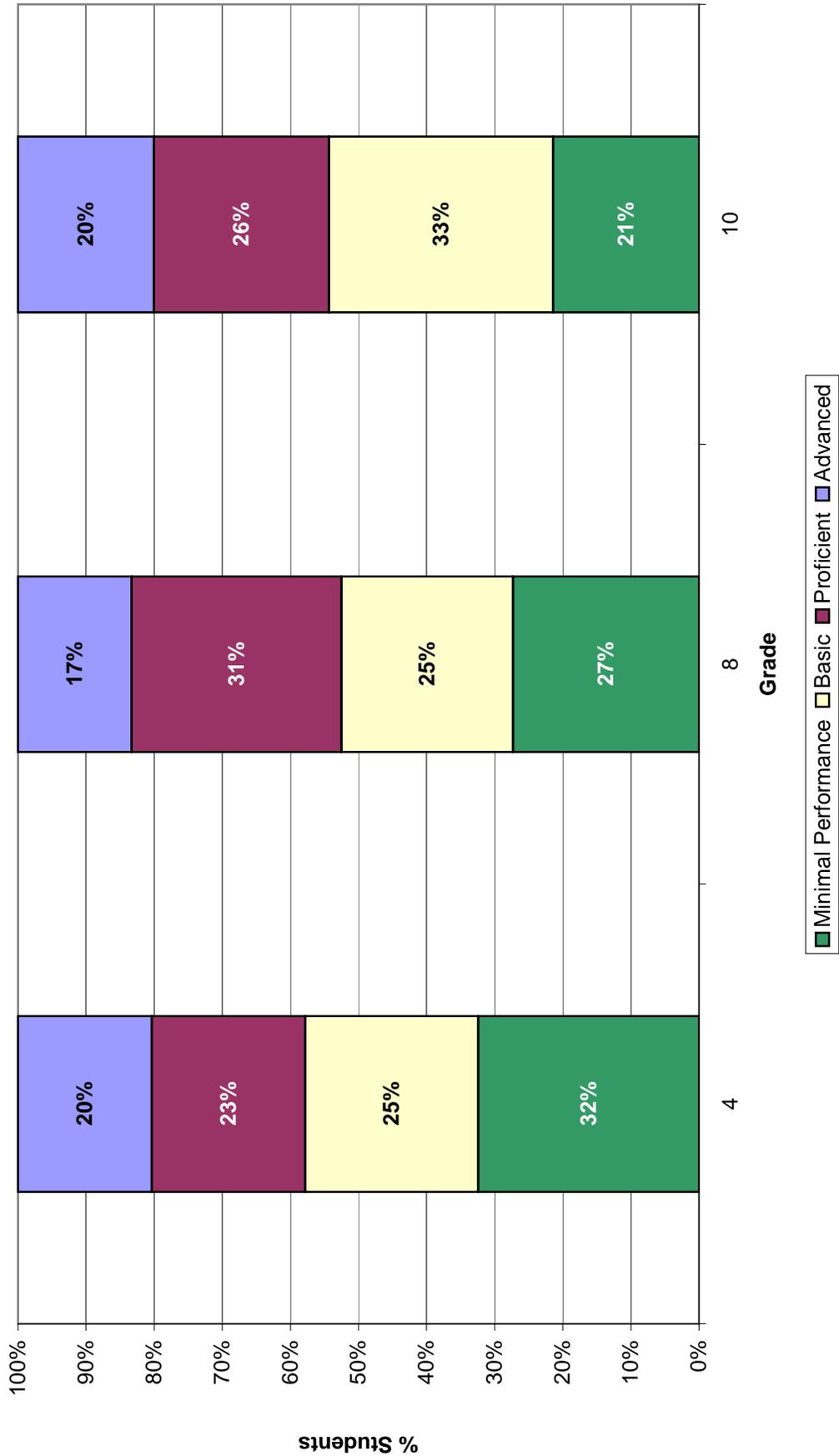
	4	8	10	Impact
Minimal Performance				
Basic	32%	27%	21%	
Proficient	25%	25%	33%	
Advanced	23%	31%	26%	
Proficient & Above	20%	17%	20%	
	42%	48%	46%	
Basic	14	14	11	
Proficient	23	23	24	
Advanced	31	34	33	
Max Score	37	39	39	

The number of participants for profile sorting can be found in Section B Table 2.

**Wisconsin Alternate Assessment for Students with Disabilities
 Science Round 1 Profile Sorting, Uniform Distribution
 Cut Scores by Achievement Level**



**Wisconsin Alternate Assessment for Students with Disabilities
 Science Round 1 Profile Sorting, Uniform Distribution
 Percent of Students by Achievement Level**



Round 1 Profile Sorting Results Based on Total Population

Mathematics

Results from Round 1 Profile Sorting (Logistic Regression) based on Total Population Data

Percentage of students in each achievement level

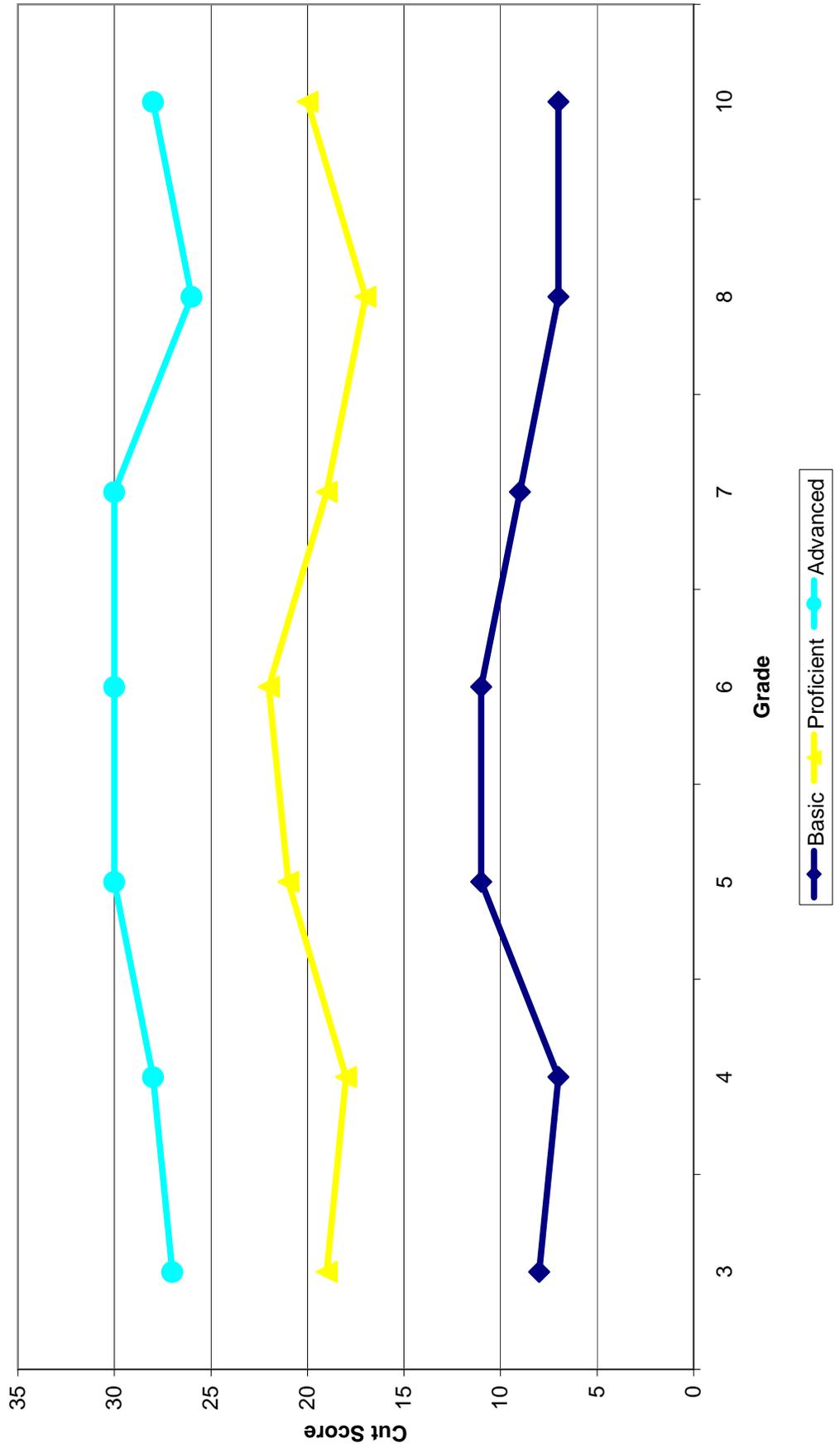
	3	4	5	6	7	8	10	Impact
Minimal Performance	15%	12%	16%	15%	14%	15%	15%	15%
Basic	14%	14%	17%	21%	16%	16%	30%	30%
Proficient	24%	29%	31%	28%	35%	20%	30%	30%
Advanced	47%	45%	35%	36%	35%	48%	25%	25%
Proficient & Above	71%	74%	67%	64%	70%	69%	54%	

	8	7	11	11	9	7	7	Cut Scores
Basic	19	18	21	22	19	17	20	
Proficient	27	28	30	30	30	26	28	
Advanced								

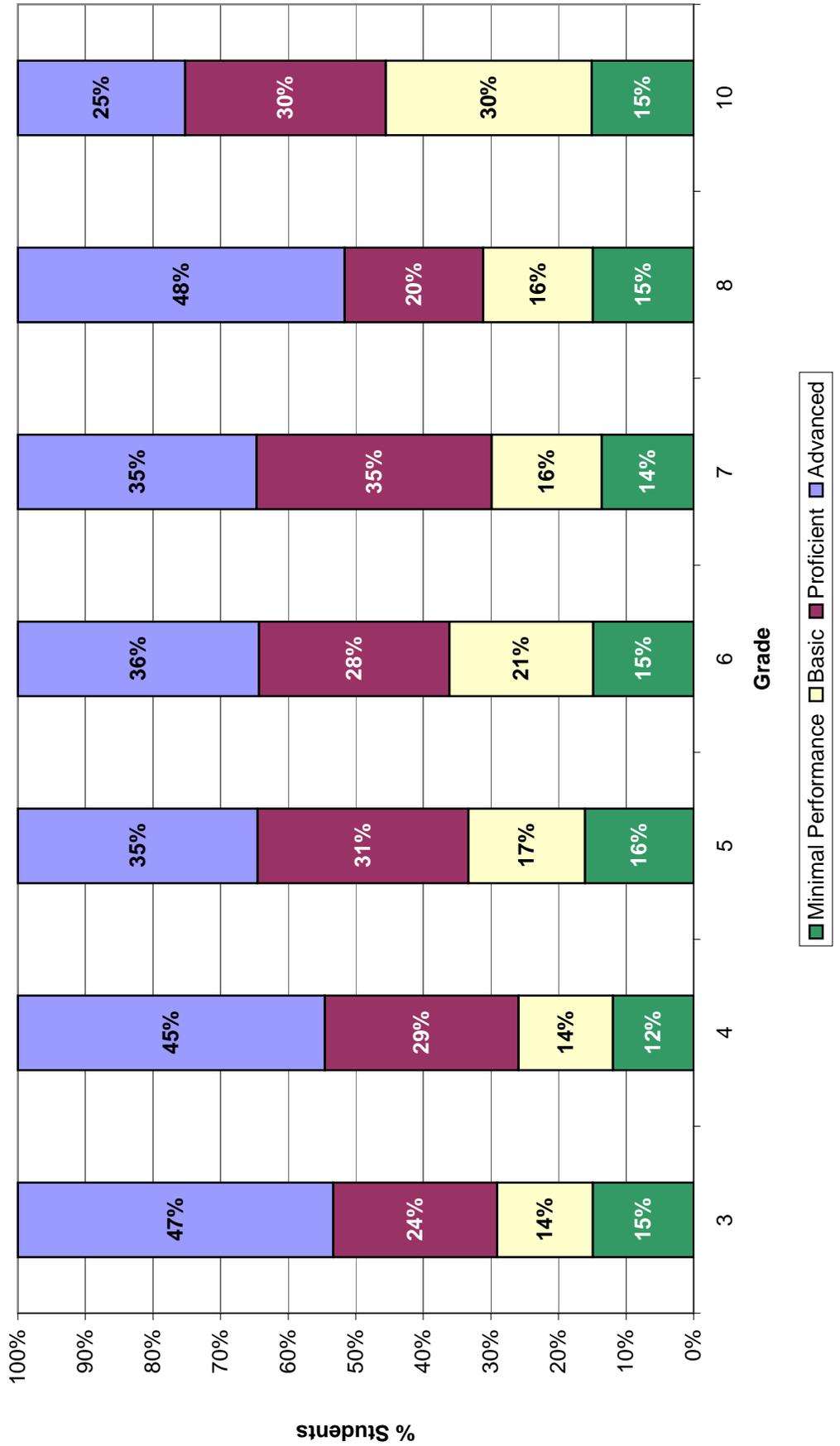
Max Score 34 34 34 34 34 34 34 34

The number of participants for profile sorting can be found in Section B Table 2.

**Wisconsin Alternate Assessment for Students with Disabilities
 Mathematics Round 1 Profile Sorting, Total Population
 Cut Scores by Achievement Level**



**Wisconsin Alternate Assessment for Students with Disabilities
Mathematics Round 1 Profile Sorting, Total Population
Percent of Students by Achievement Level**



Reading

Results from Round 1 Profile Sorting (Logistic Regression) based on Total Population Data

Percentage of students in each achievement level

	3	4	5	6	7	8	10	Impact
Minimal Performance	15%	12%	12%	10%	13%	14%	18%	
Basic	14%	10%	14%	18%	23%	24%	17%	
Proficient	36%	17%	29%	31%	22%	26%	34%	
Advanced	36%	61%	45%	41%	41%	37%	31%	
Proficient & Above	71%	78%	74%	72%	63%	63%	65%	

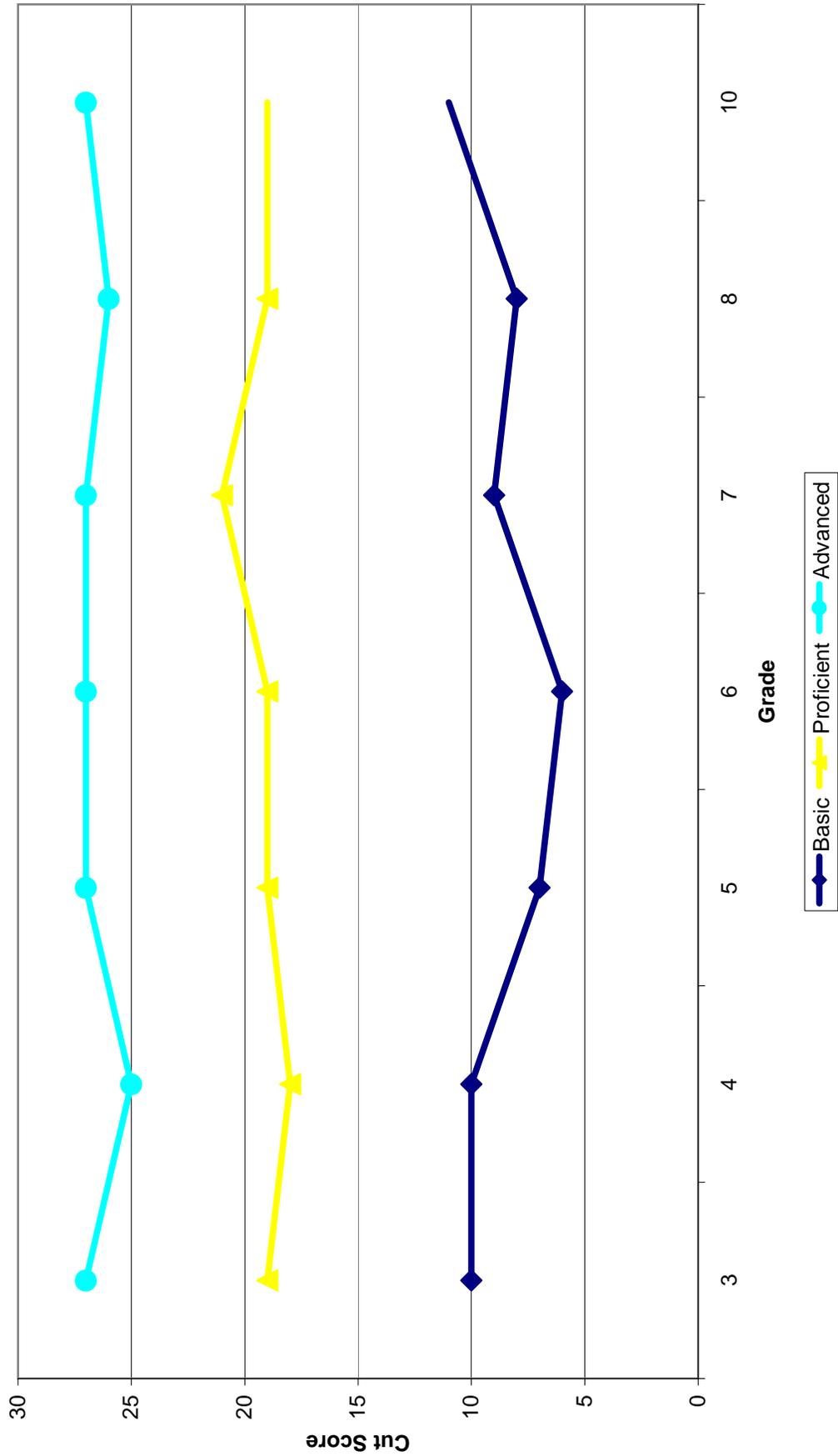
	Cut Scores						
Basic	10	10	7	6	9	8	11
Proficient	19	18	19	19	21	19	19
Advanced	27	25	27	27	27	26	27

Max Score

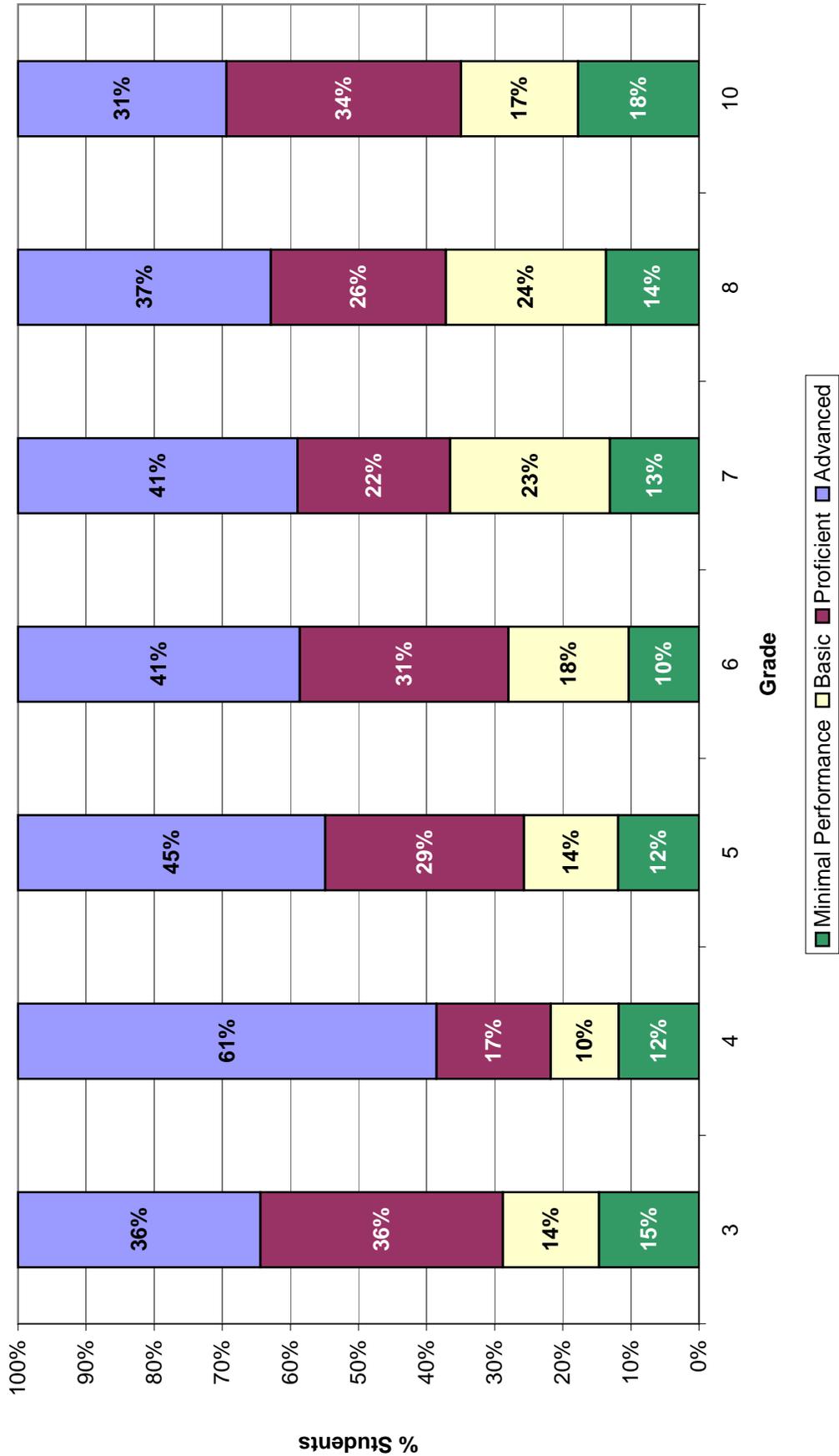
30 30 30 30 31 30 30

The number of participants for profile sorting can be found in Section B Table 2.

**Wisconsin Alternate Assessment for Students with Disabilities
 Reading Round 1 Profile Sorting, Total Population
 Cut Scores by Achievement Level**



**Wisconsin Alternate Assessment for Students with Disabilities
Reading Round 1 Profile Sorting, Total Population
Percent of Students by Achievement Level**



Science

Results from Round 1 Profile Sorting (Logistic Regression) based on Total Population Data

Percentage of students in each achievement level

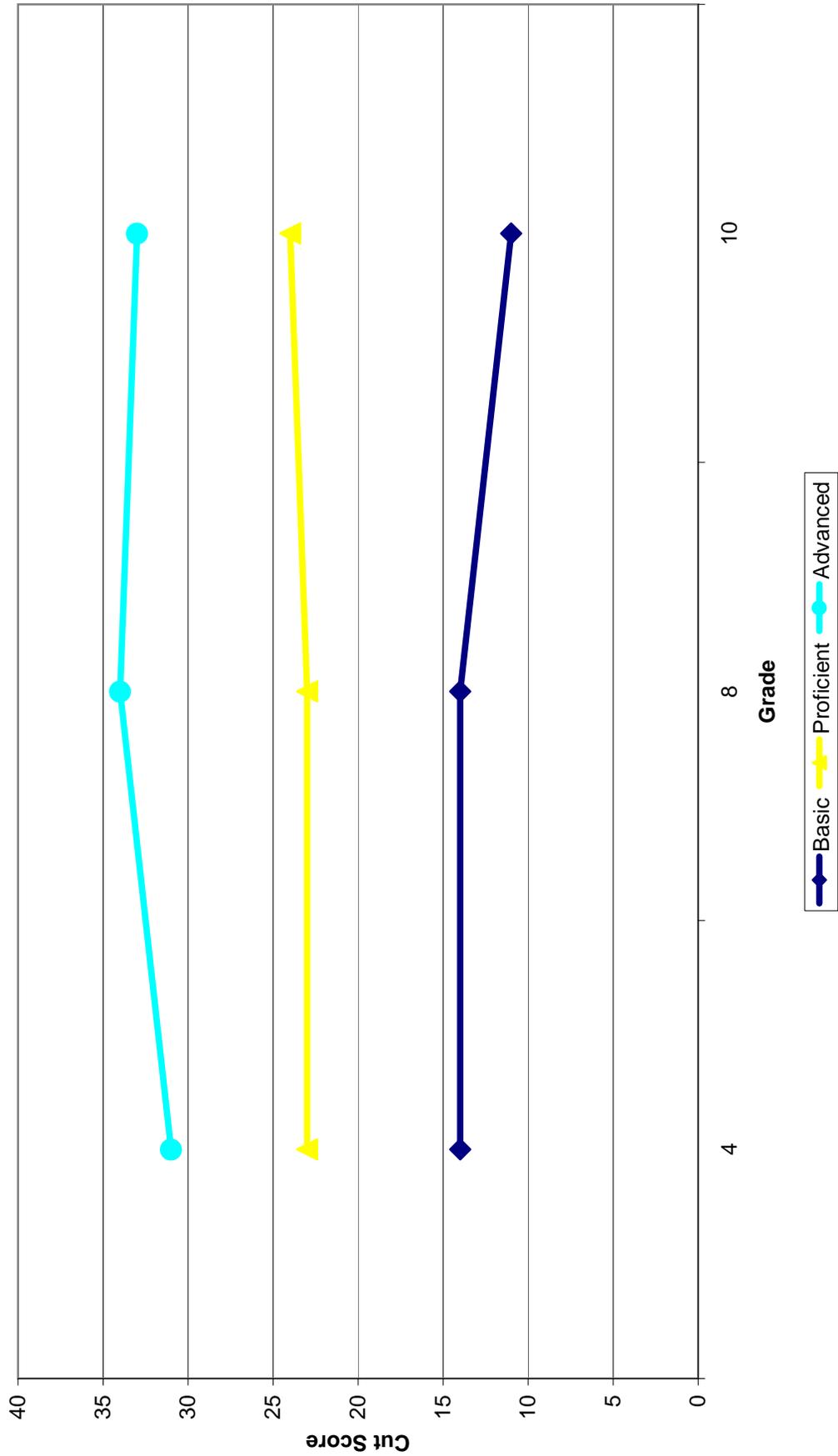
	4	8	10	Impact
Minimal Performance	18%	16%	14%	
Basic	10%	9%	12%	
Proficient	14%	27%	17%	
Advanced	57%	48%	56%	
Proficient & Above	72%	76%	73%	

	Cut Scores		
Basic	14	14	11
Proficient	23	23	24
Advanced	31	34	33

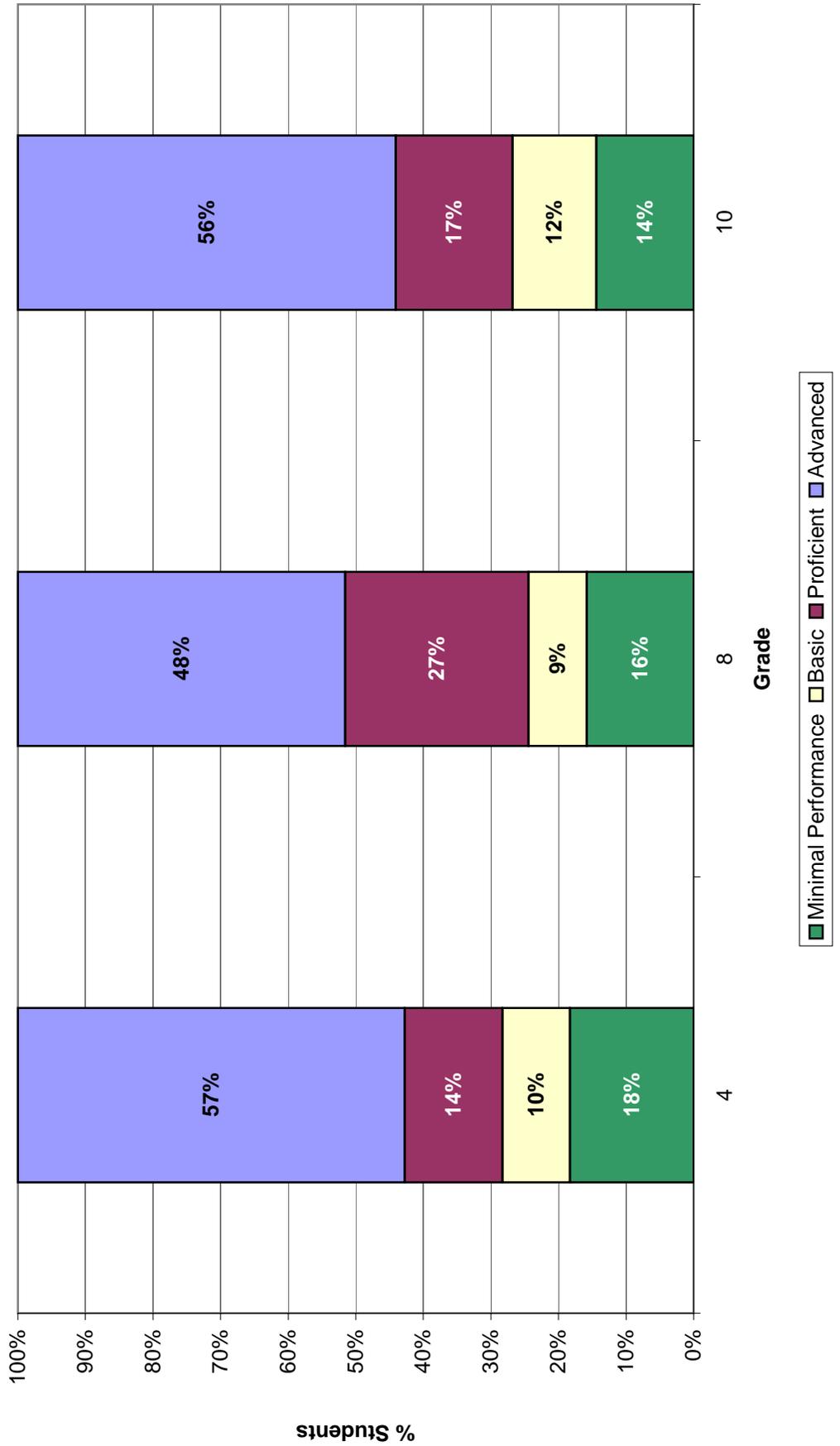
Max Score 37 39 39

The number of participants for profile sorting can be found in Section B Table 2.

**Wisconsin Alternate Assessment for Students with Disabilities
 Science Round 1 Profile Sorting, Total Population
 Cut Scores by Achievement Level**



**Wisconsin Alternate Assessment for Students with Disabilities
 Science Round 1 Profile Sorting, Total Population
 Percent of Students by Achievement Level**



Round 2 Profile Sorting Results Based on Uniform Distribution

Mathematics

Results from Round 2 Profile Sorting (Logistic Regression) based on Uniform Distribution Data

Percentage of students in each achievement level

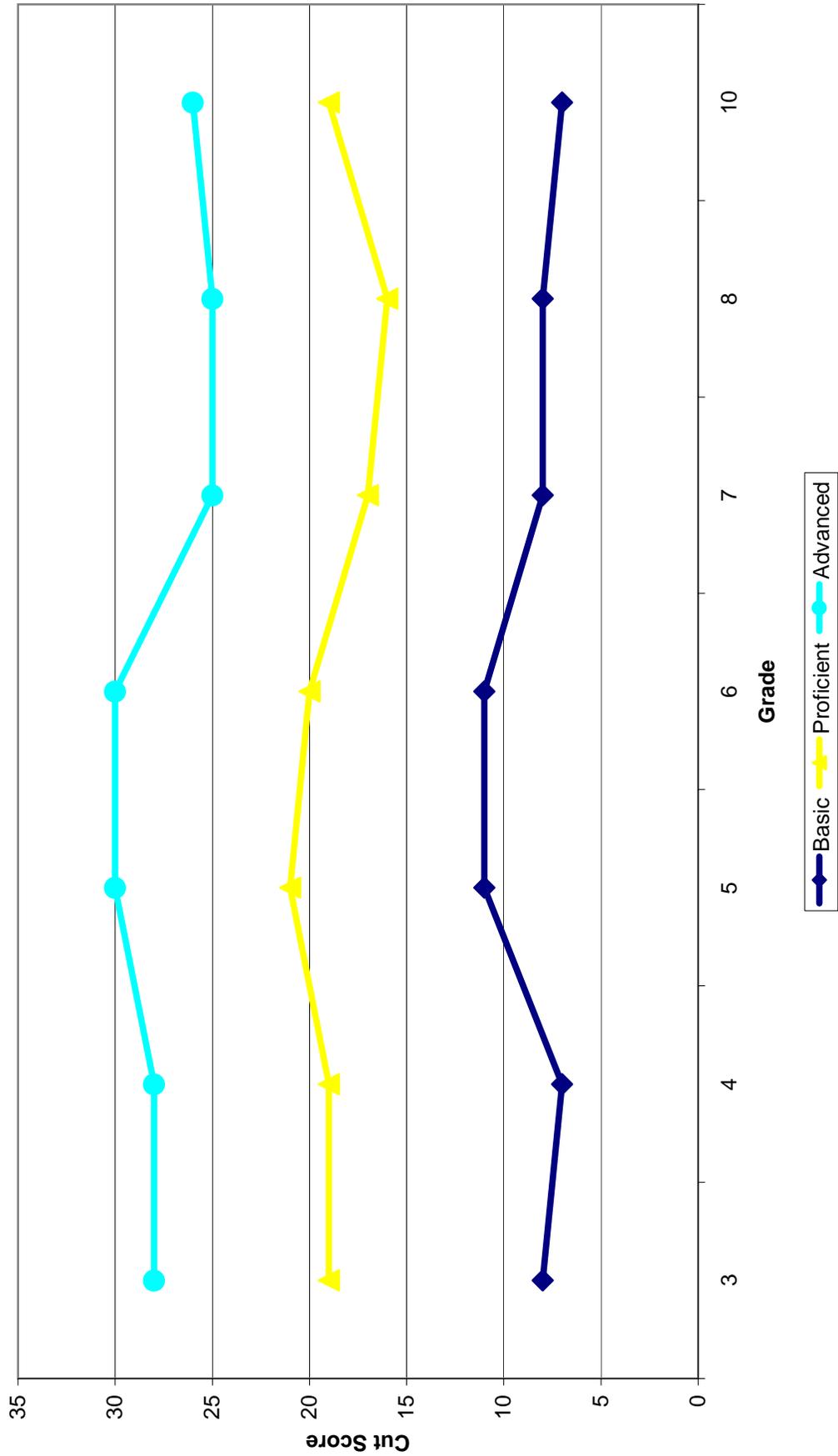
	3	4	5	6	7	8	10	Impact
Minimal Performance	23%	19%	31%	31%	22%	23%	19%	
Basic	31%	34%	29%	26%	26%	23%	35%	
Proficient	26%	26%	26%	29%	23%	26%	20%	
Advanced	20%	21%	14%	14%	29%	29%	26%	
Proficient & Above	46%	47%	40%	43%	52%	54%	46%	

	8	7	11	11	8	8	7	Cut Scores
Basic	19	19	21	20	17	16	19	
Proficient	28	28	30	30	25	25	26	
Advanced								

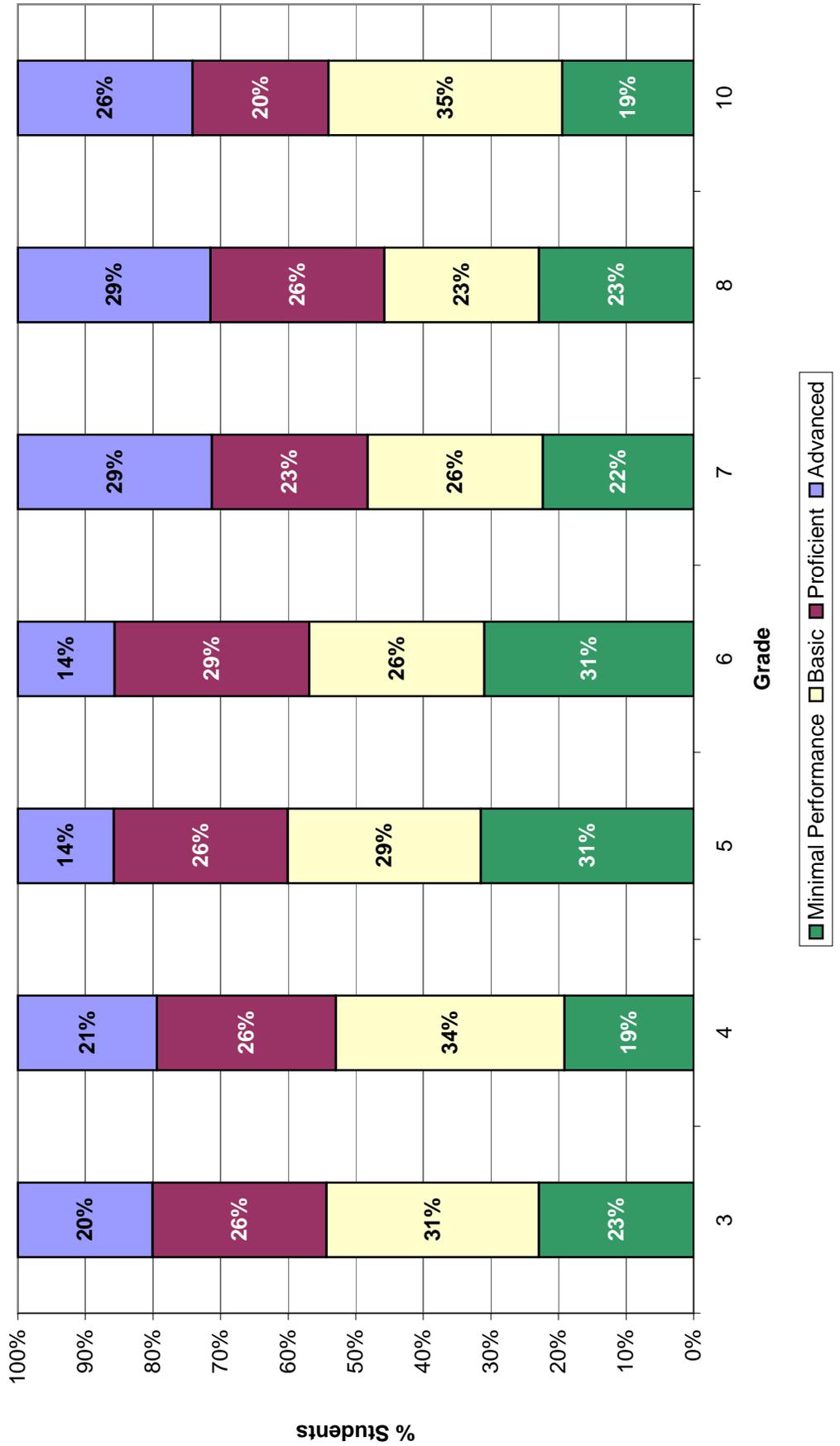
Max Score 34 34 34 34 34 34 34

The number of participants for profile sorting can be found in Section B Table 2.

**Wisconsin Alternate Assessment for Students with Disabilities
 Mathematics Round 2 Profile Sorting, Uniform Distribution
 Cut Scores by Achievement Level**



**Wisconsin Alternate Assessment for Students with Disabilities
 Mathematics Round 2 Profile Sorting, Uniform Distribution
 Percent of Students by Achievement Level**



Reading

Results from Round 2 Profile Sorting (Logistic Regression) based on Uniform Distribution Data

Percentage of students in each achievement level

	3	4	5	6	7	8	10	Impact
Minimal Performance	32%	27%	19%	19%	26%	25%	33%	
Basic	26%	30%	45%	42%	39%	36%	20%	
Proficient	23%	20%	23%	23%	16%	23%	30%	
Advanced	19%	23%	13%	16%	19%	16%	17%	
Proficient & Above	42%	43%	35%	39%	35%	39%	47%	

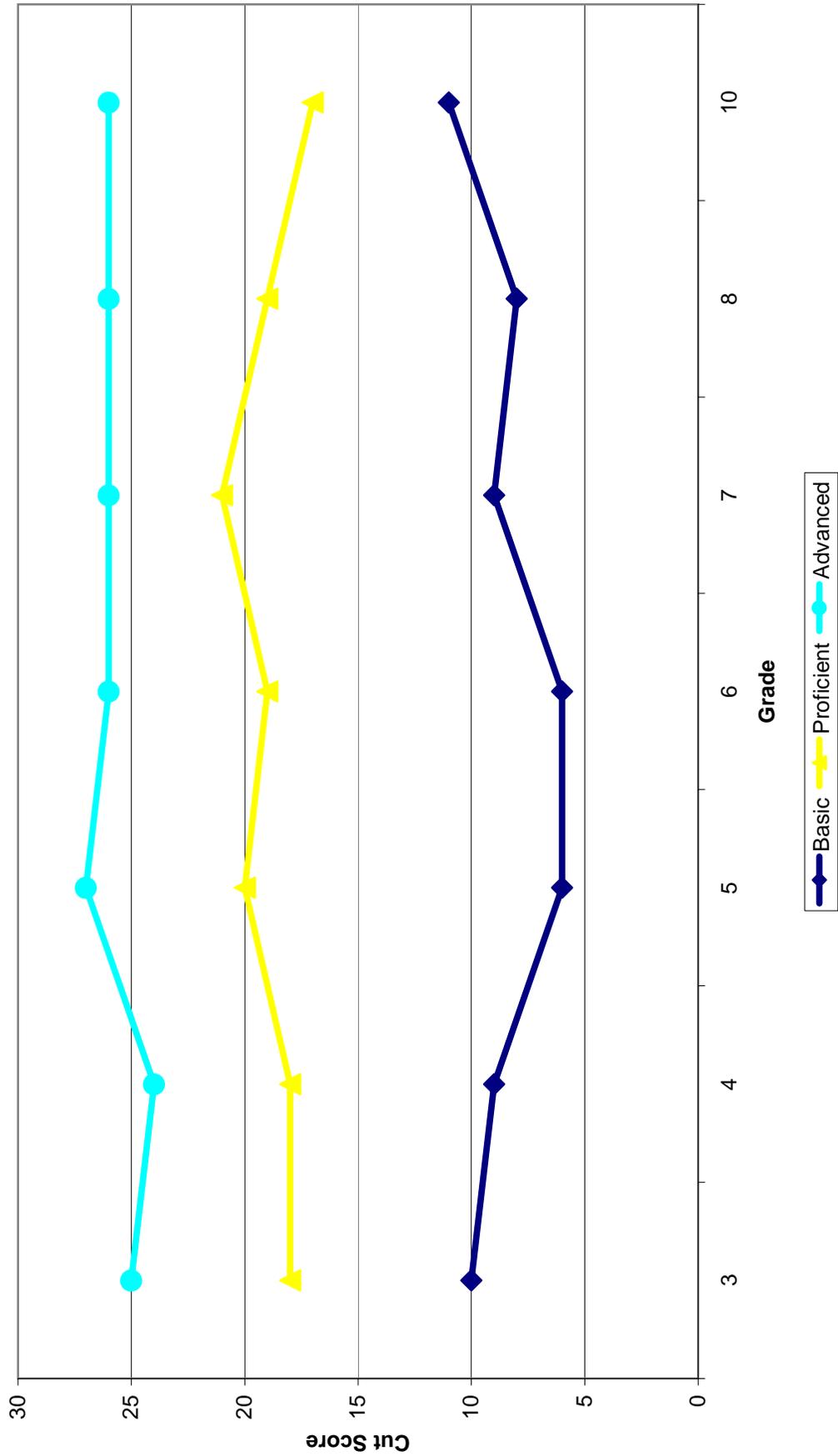
	Cut Scores						
Basic	10	9	6	6	9	8	11
Proficient	18	18	20	19	21	19	17
Advanced	25	24	27	26	26	26	26

Max Score

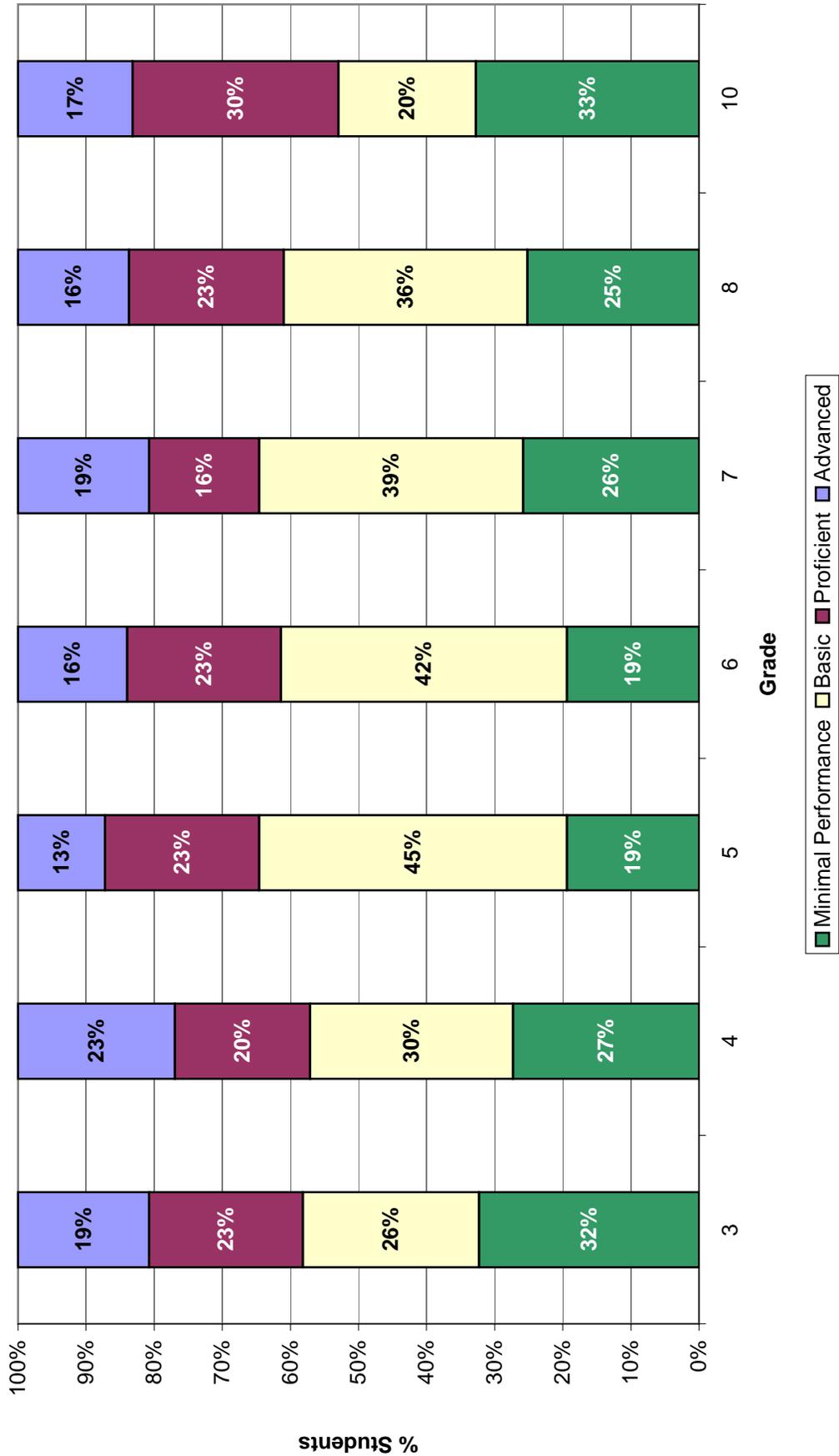
30 30 30 30 31 30 30

The number of participants for profile sorting can be found in Section B Table 2.

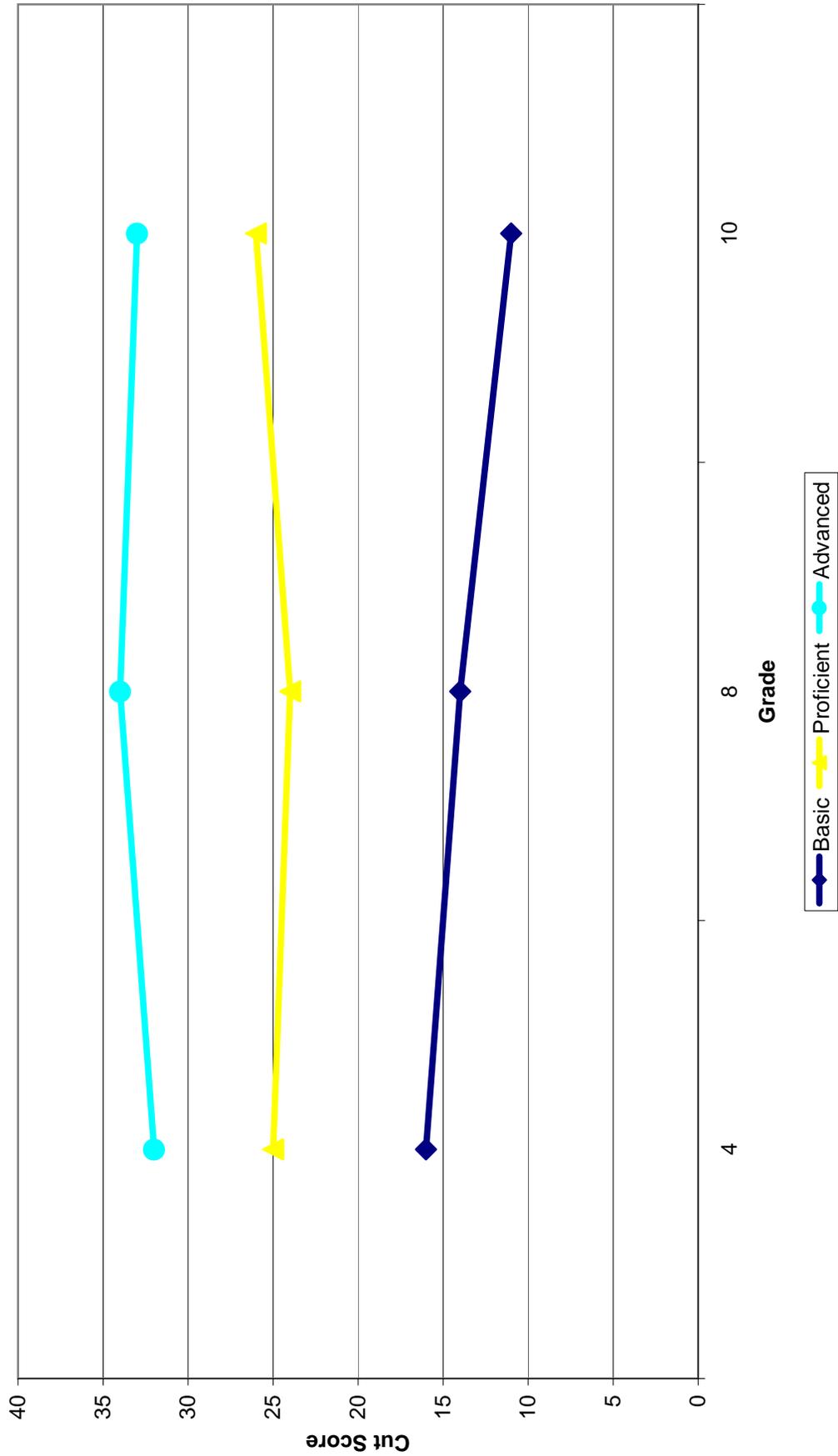
**Wisconsin Alternate Assessment for Students with Disabilities
 Reading Round 2 Profile Sorting, Uniform Distribution
 Cut Scores by Achievement Level**



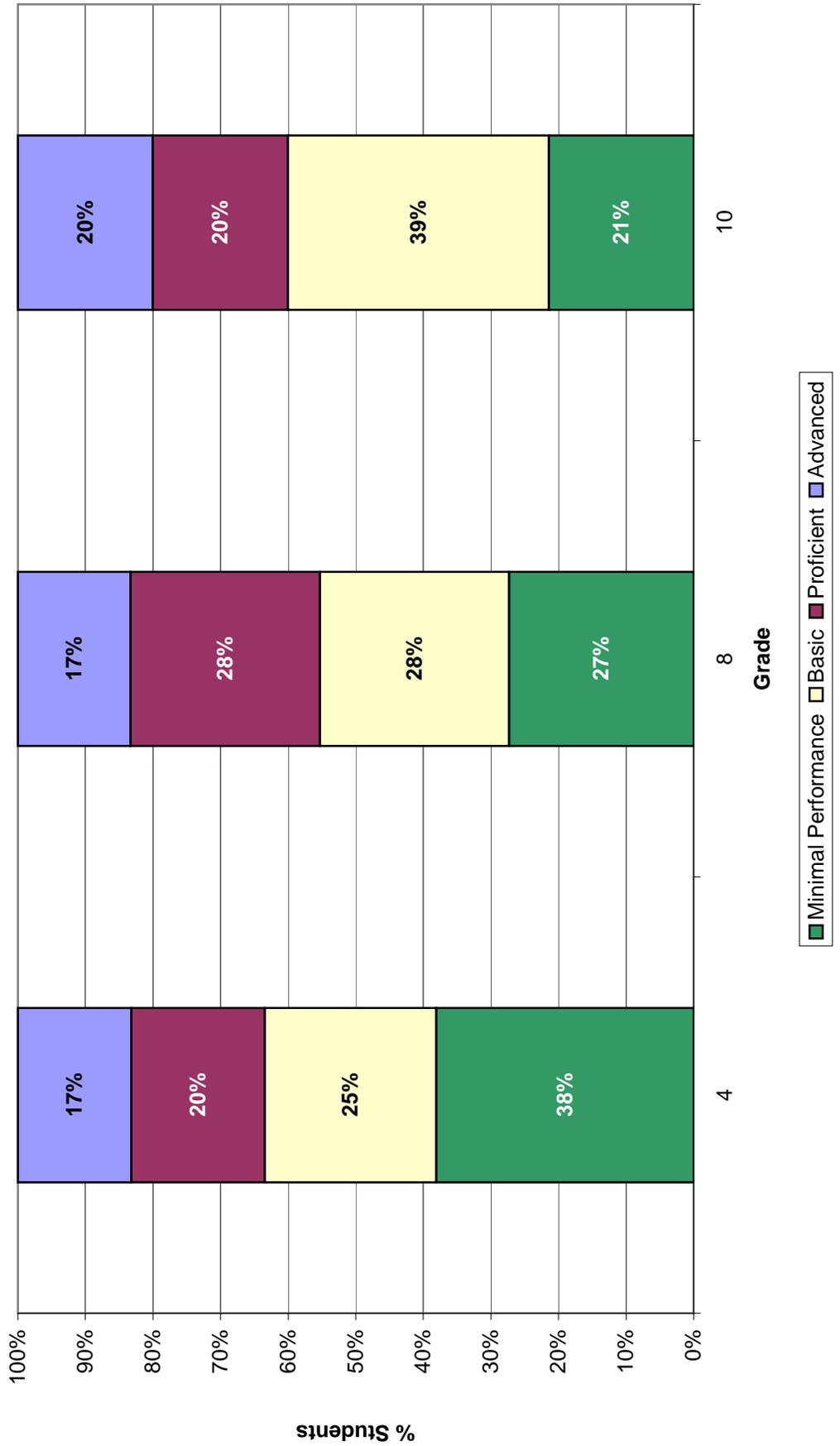
**Wisconsin Alternate Assessment for Students with Disabilities
Reading Round 2 Profile Sorting, Uniform Distribution
Percent of Students by Achievement Level**



**Wisconsin Alternate Assessment for Students with Disabilities
 Science Round 2 Profile Sorting, Uniform Distribution
 Cut Scores by Achievement Level**



**Wisconsin Alternate Assessment for Students with Disabilities
 Science Round 2 Profile Sorting, Uniform Distribution
 Percent of Students by Achievement Level**



Round 2 Profile Sorting Results Based on Total Population

Mathematics

Results from Round 2 Profile Sorting (Logistic Regression) based on Total Population Data

Percentage of students in each achievement level

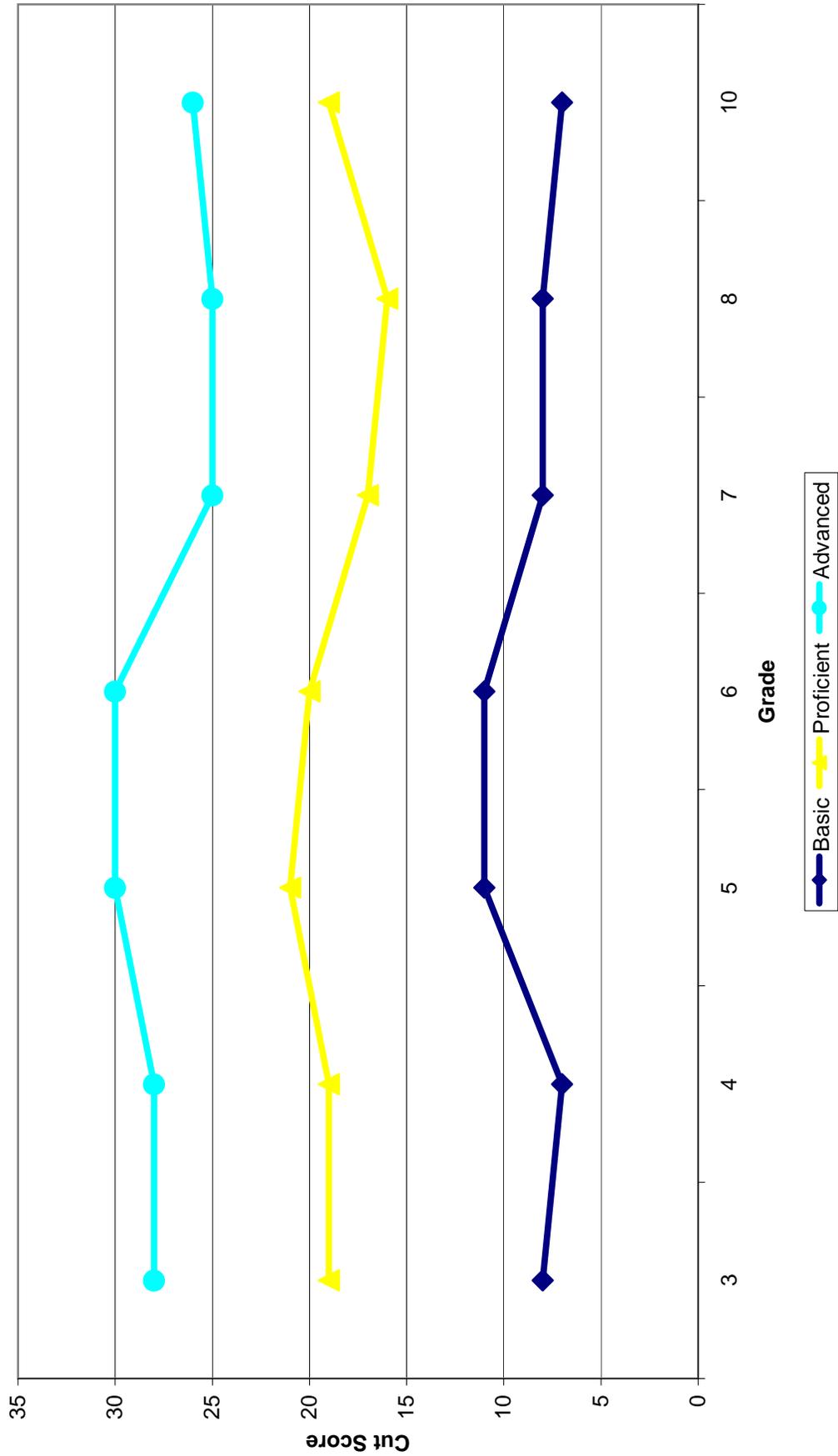
	3	4	5	6	7	8	10	Impact
Minimal Performance	15%	12%	16%	15%	13%	16%	15%	
Basic	14%	16%	17%	18%	14%	13%	27%	
Proficient	30%	27%	31%	32%	16%	21%	25%	
Advanced	41%	45%	35%	36%	57%	51%	33%	
Proficient & Above	71%	72%	67%	67%	74%	72%	58%	

	Cut Scores						
Basic	8	7	11	11	8	8	7
Proficient	19	19	21	20	17	16	19
Advanced	28	28	30	30	25	25	26

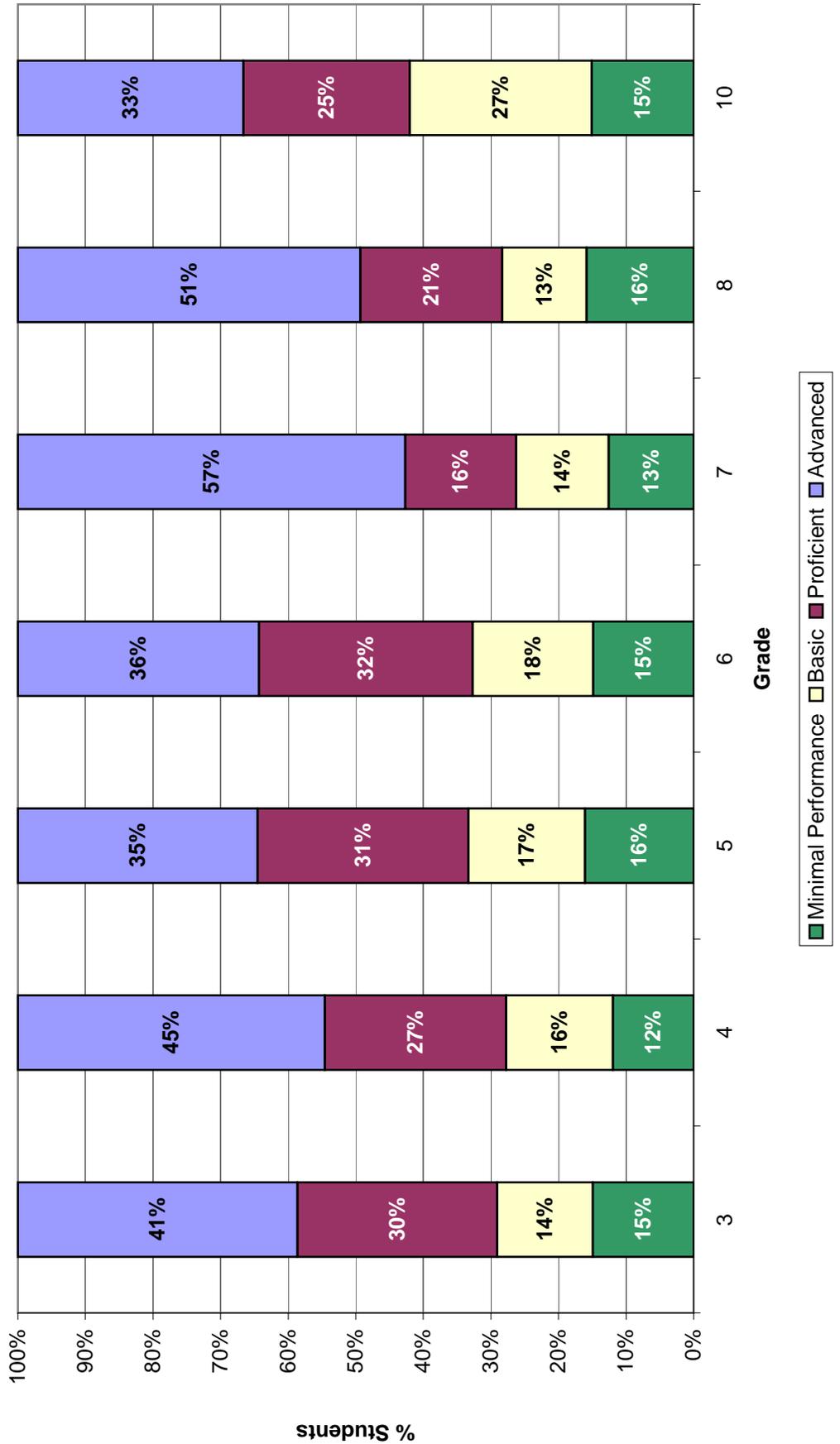
Max Score	34	34	34	34	34	34	34
------------------	----	----	----	----	----	----	----

The number of participants for profile sorting can be found in Section B Table 2.

**Wisconsin Alternate Assessment for Students with Disabilities
 Mathematics Round 2 Profile Sorting, Total Population
 Cut Scores by Achievement Level**



**Wisconsin Alternate Assessment for Students with Disabilities
Mathematics Round 2 Profile Sorting, Total Population
Percent of Students by Achievement Level**



Reading

Results from Round 2 Profile Sorting (Logistic Regression) based on Total Population Data

Percentage of students in each achievement level

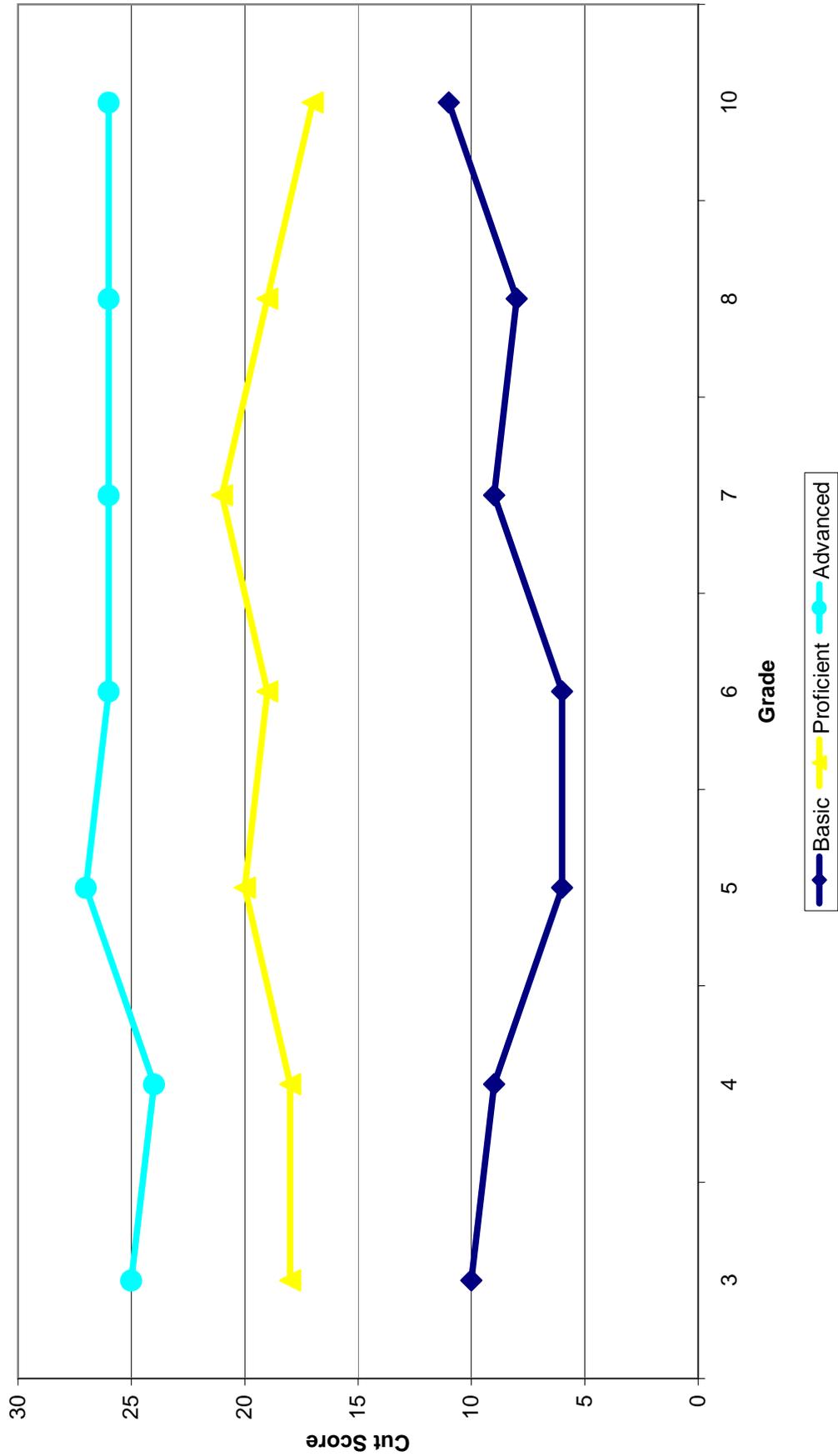
	3	4	5	6	7	8	10	Impact
Minimal Performance	15%	11%	11%	10%	13%	14%	18%	
Basic	12%	11%	17%	18%	23%	24%	10%	
Proficient	26%	13%	27%	24%	17%	26%	35%	
Advanced	48%	65%	45%	48%	47%	37%	37%	
Proficient & Above	73%	78%	72%	72%	63%	63%	72%	

	Cut Scores						
Basic	10	9	6	6	9	8	11
Proficient	18	18	20	19	21	19	17
Advanced	25	24	27	26	26	26	26

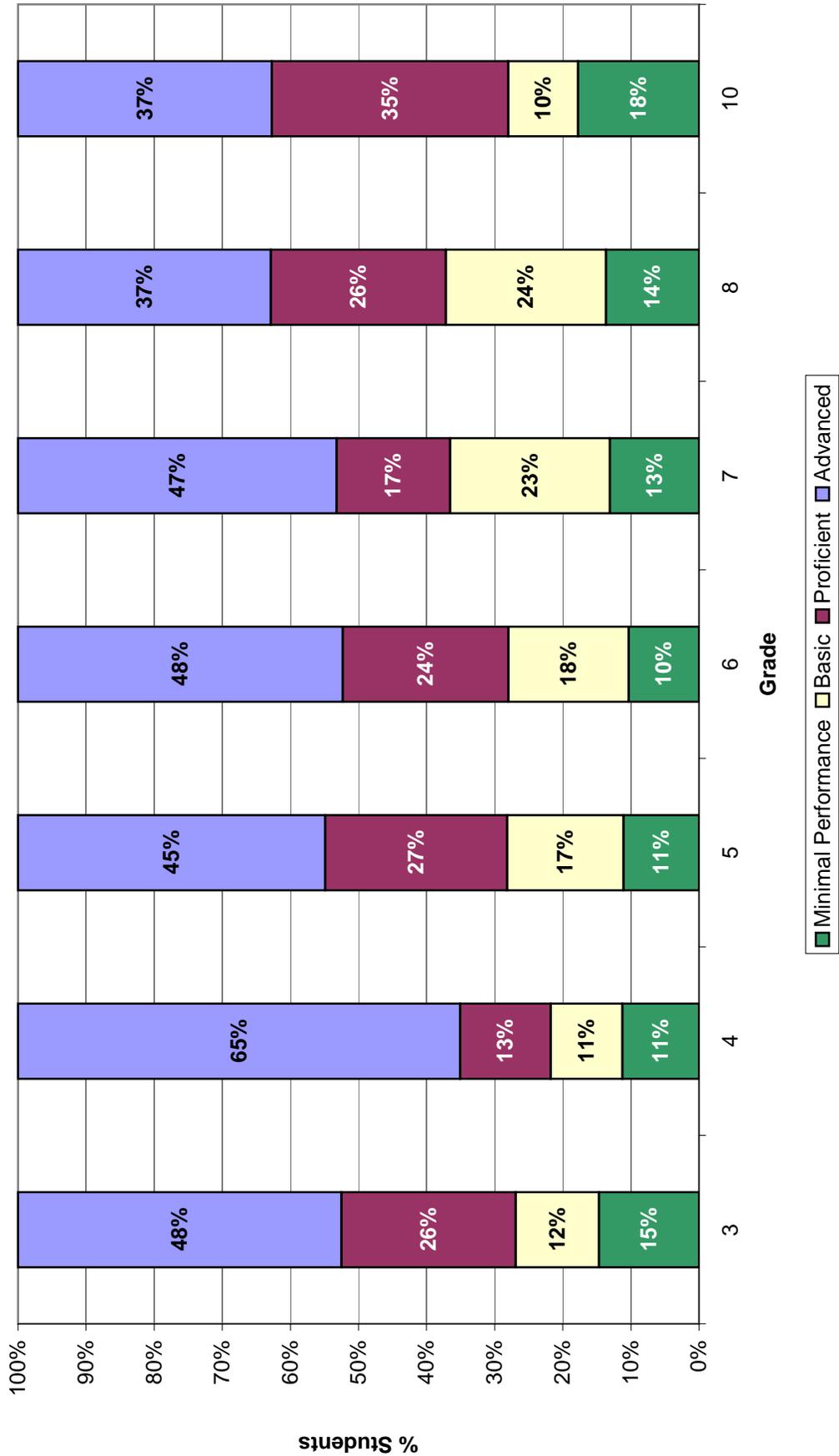
Max Score 30 30 30 30 31 30 30

The number of participants for profile sorting can be found in Section B Table 2.

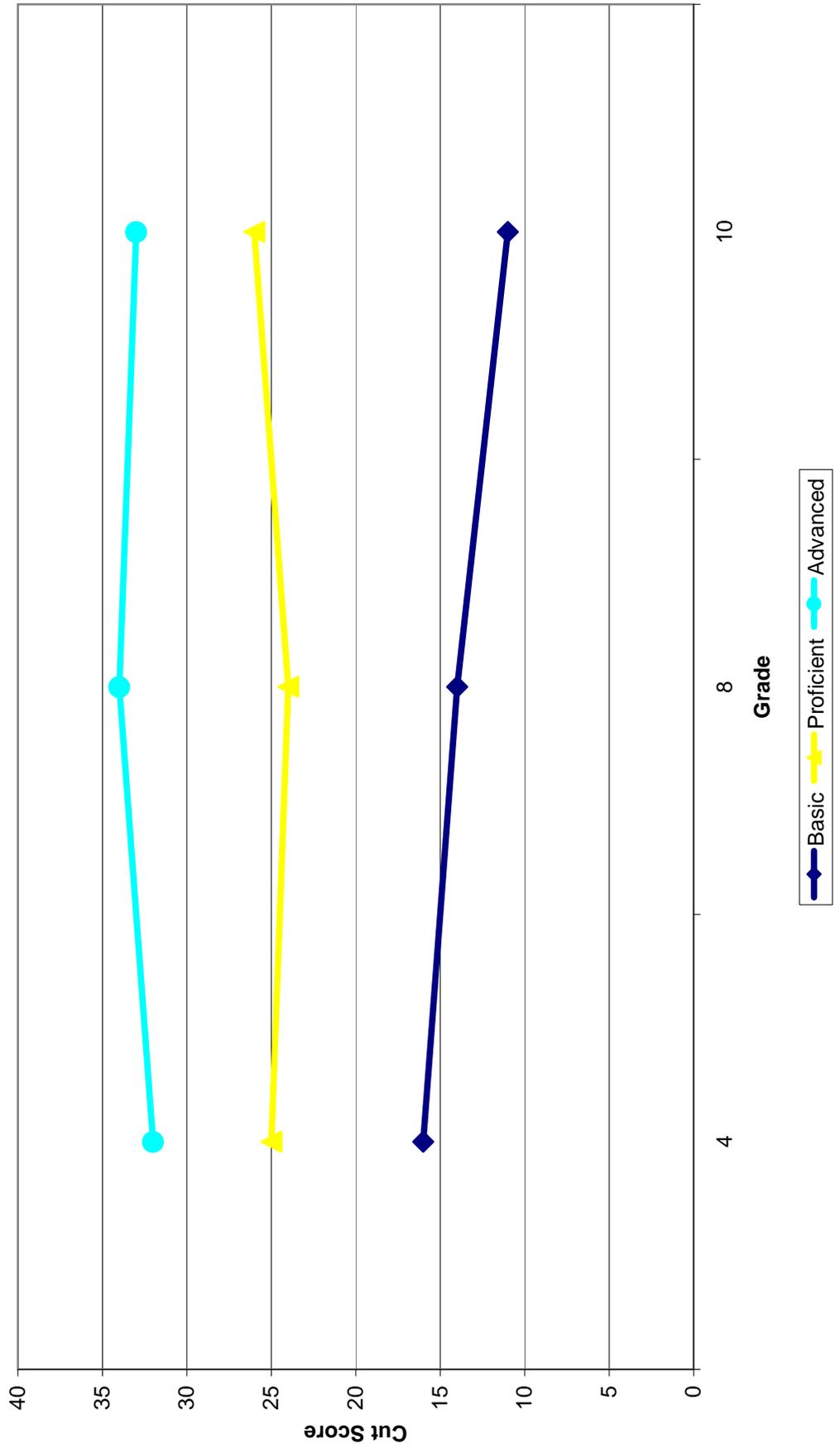
**Wisconsin Alternate Assessment for Students with Disabilities
 Reading Round 2 Profile Sorting, Total Population
 Cut Scores by Achievement Level**



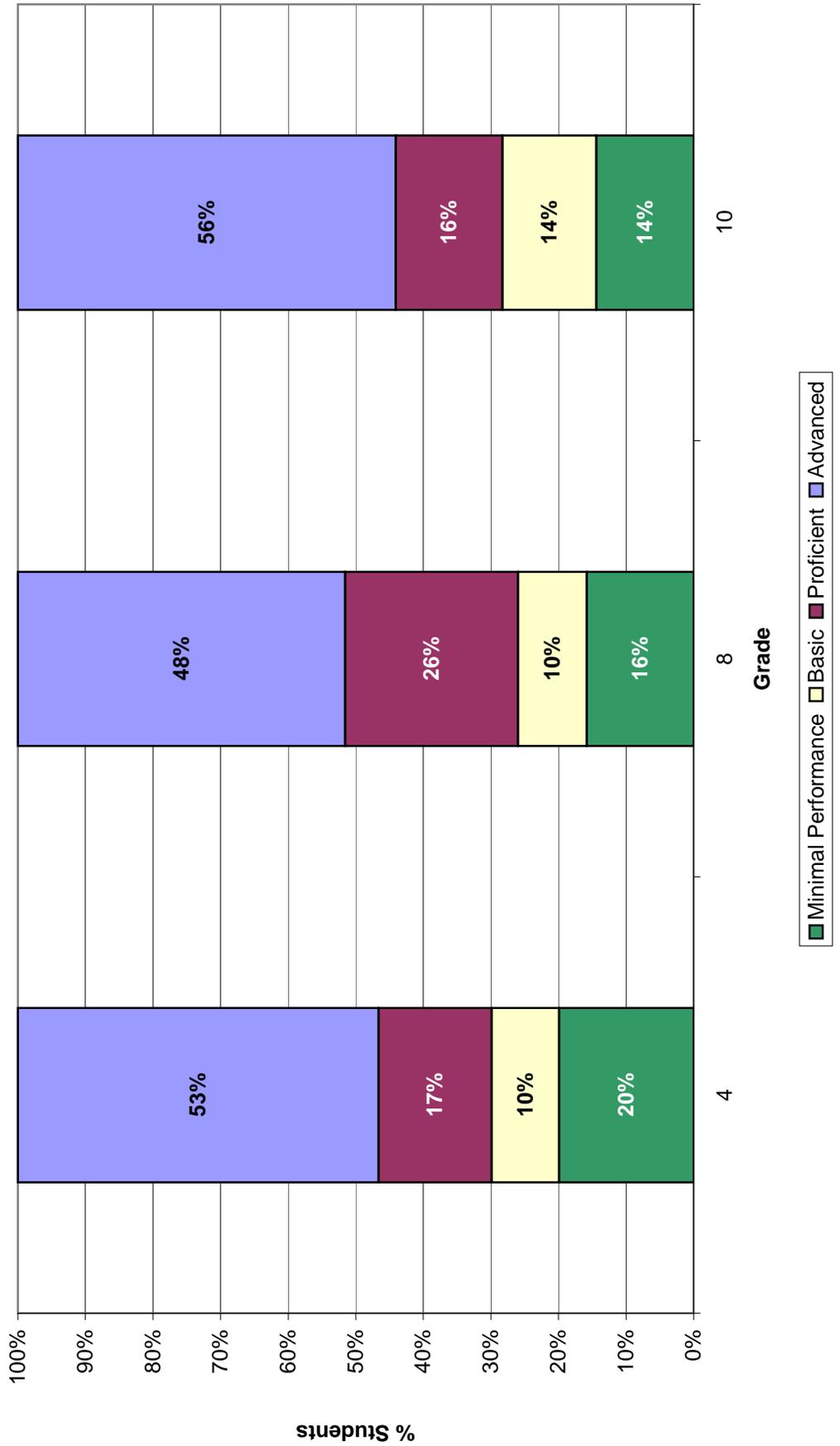
**Wisconsin Alternate Assessment for Students with Disabilities
Reading Round 2 Profile Sorting, Total Population
Percent of Students by Achievement Level**



**Wisconsin Alternate Assessment for Students with Disabilities
 Science Round 2 Profile Sorting, Total Population
 Cut Scores by Achievement Level**

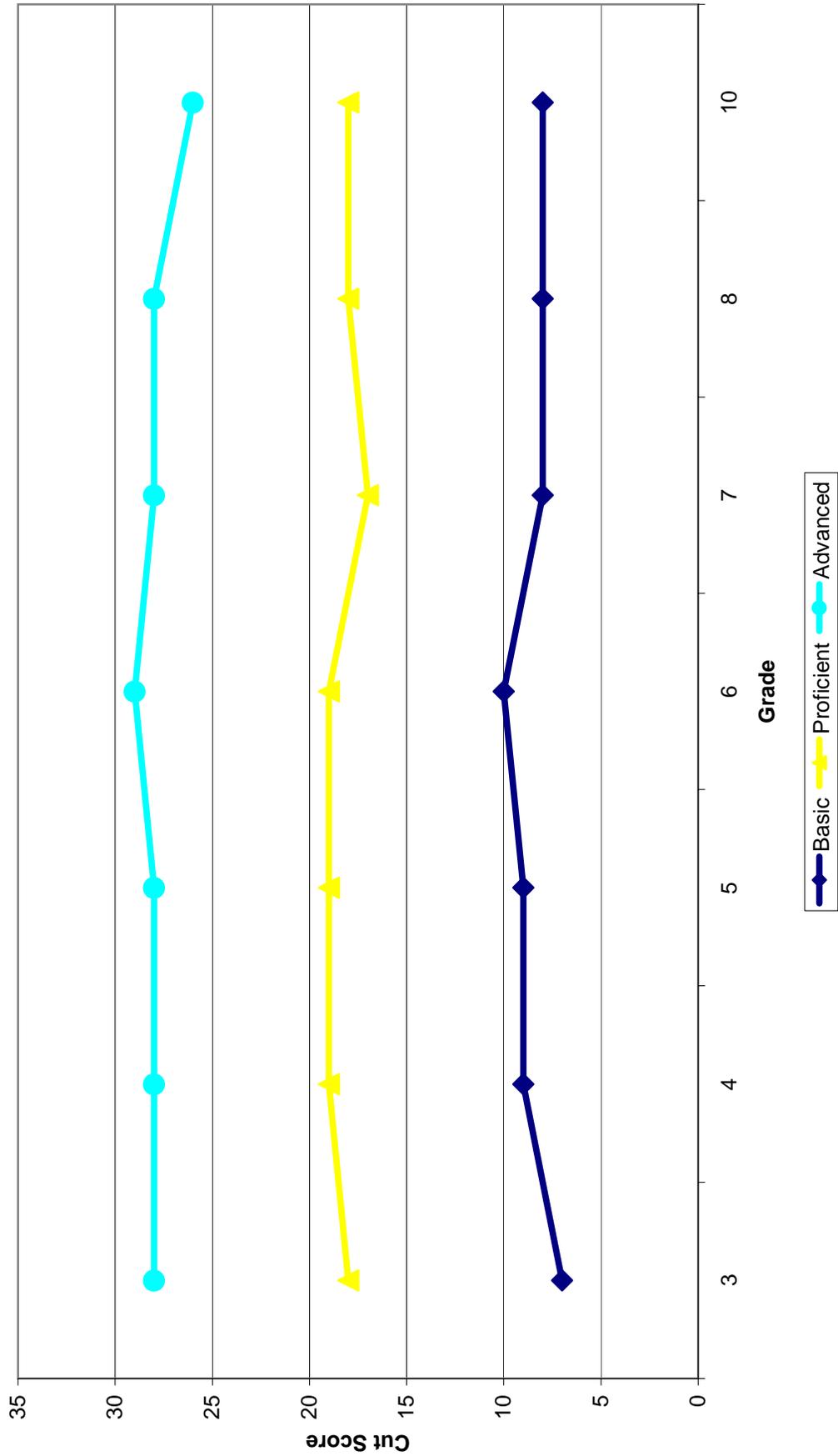


**Wisconsin Alternate Assessment for Students with Disabilities
 Science Round 2 Profile Sorting, Total Population
 Percent of Students by Achievement Level**

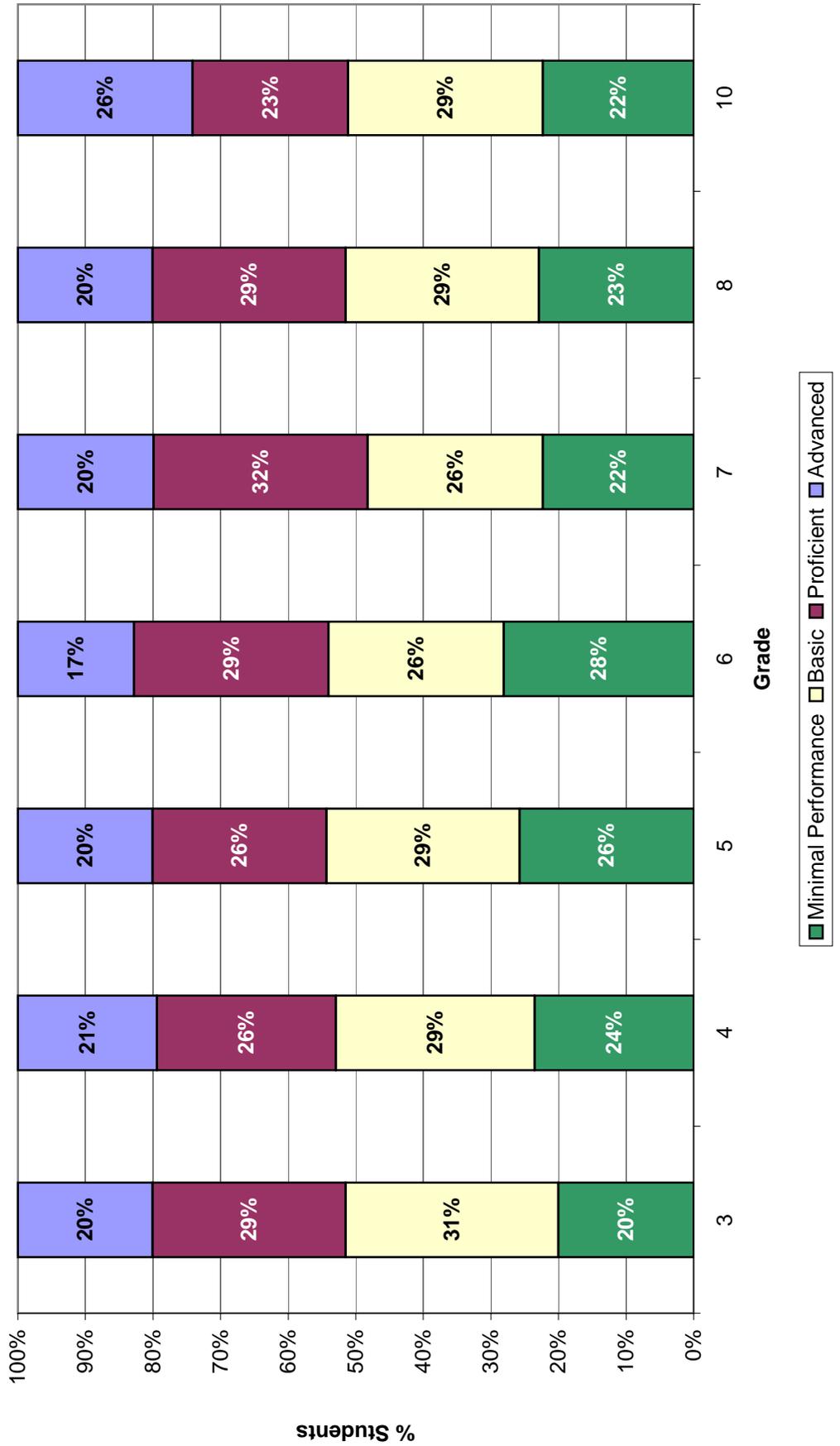


Synthesis Discussion Results Based on Uniform Distribution

**Wisconsin Alternate Assessment for Students with Disabilities
 Mathematics Synthesis Discussion, Uniform Distribution
 Cut Scores by Achievement Level**



**Wisconsin Alternate Assessment for Students with Disabilities
 Mathematics Synthesis Discussion, Uniform Distribution
 Percent of Students by Achievement Level**



Reading

Results from Synthesis Discussion based on Uniform Distribution Data

Percentage of students in each achievement level

	3	4	5	6	7	8	10	Impact
Minimal Performance								
Basic	32%	27%	19%	19%	26%	25%	29%	
Proficient	26%	30%	45%	42%	39%	36%	27%	
Advanced	26%	26%	23%	23%	16%	23%	27%	
Proficient & Above	16%	16%	13%	16%	19%	16%	17%	
	42%	43%	35%	39%	35%	39%	44%	

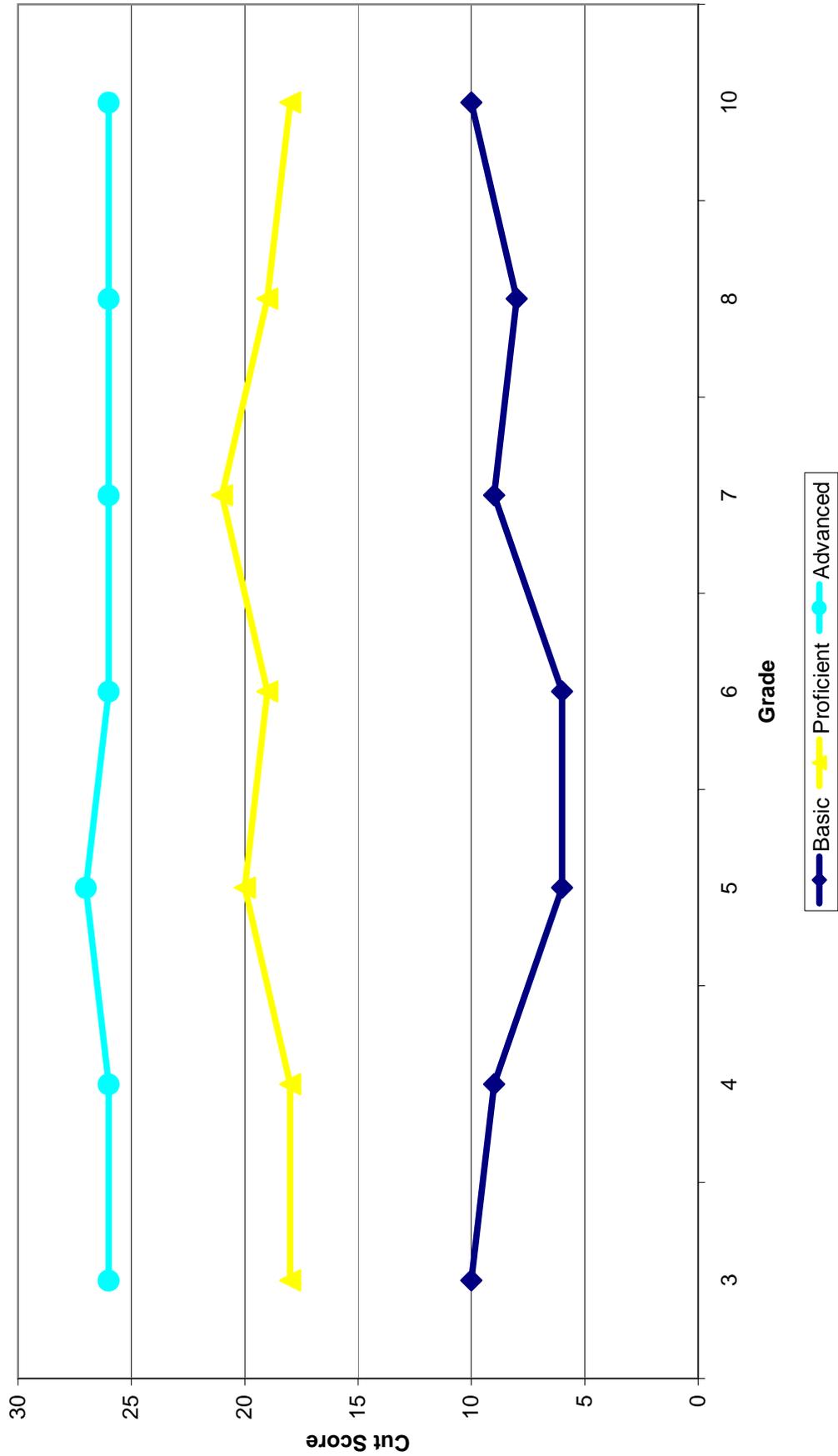
	Cut Scores						
Basic	10	9	6	6	9	8	10
Proficient	18	18	20	19	21	19	18
Advanced	26	26	27	26	26	26	26

Max Score

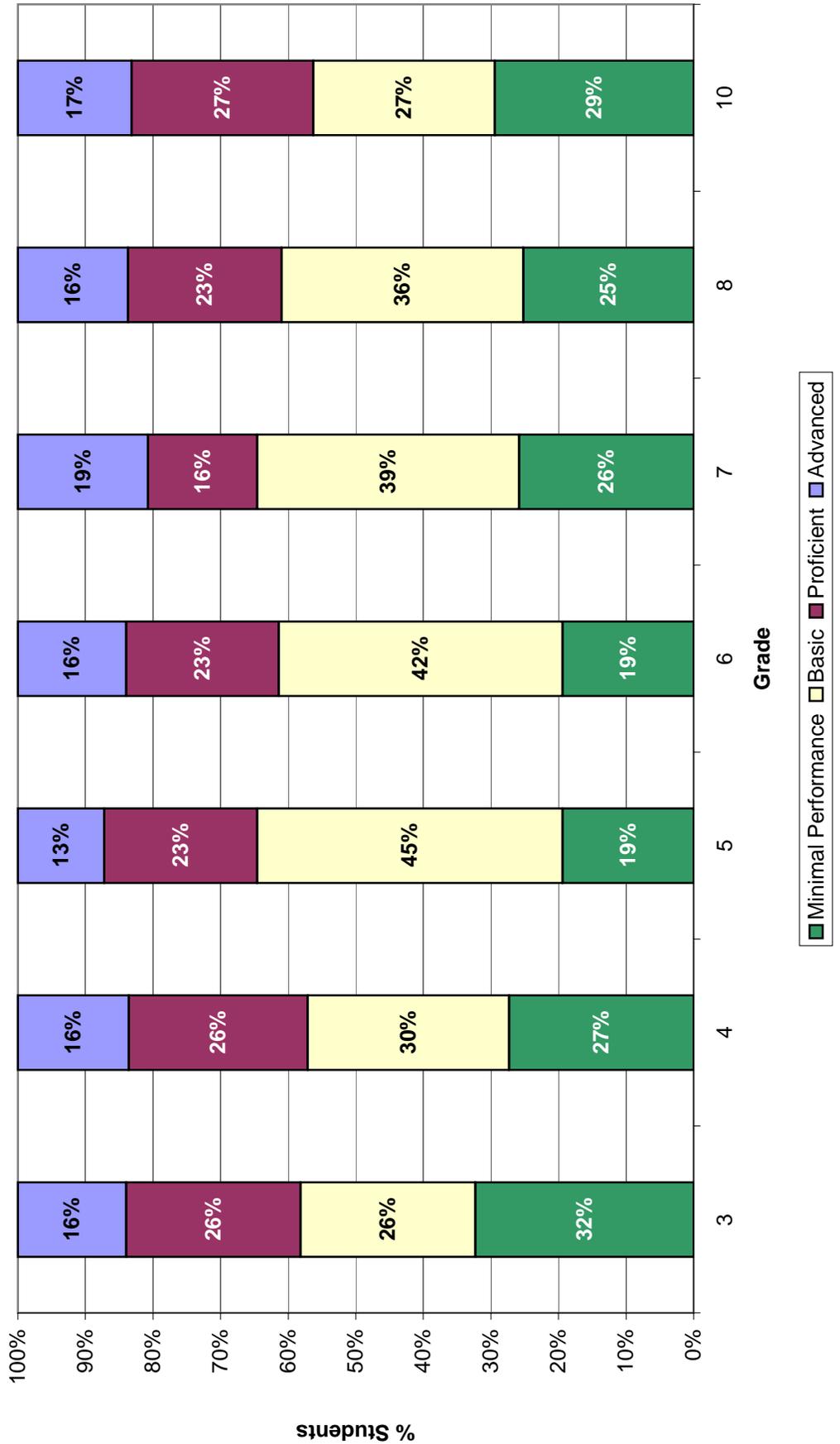
30 30 30 30 31 30 30

The number of participants for profile sorting can be found in Section B Table 2.

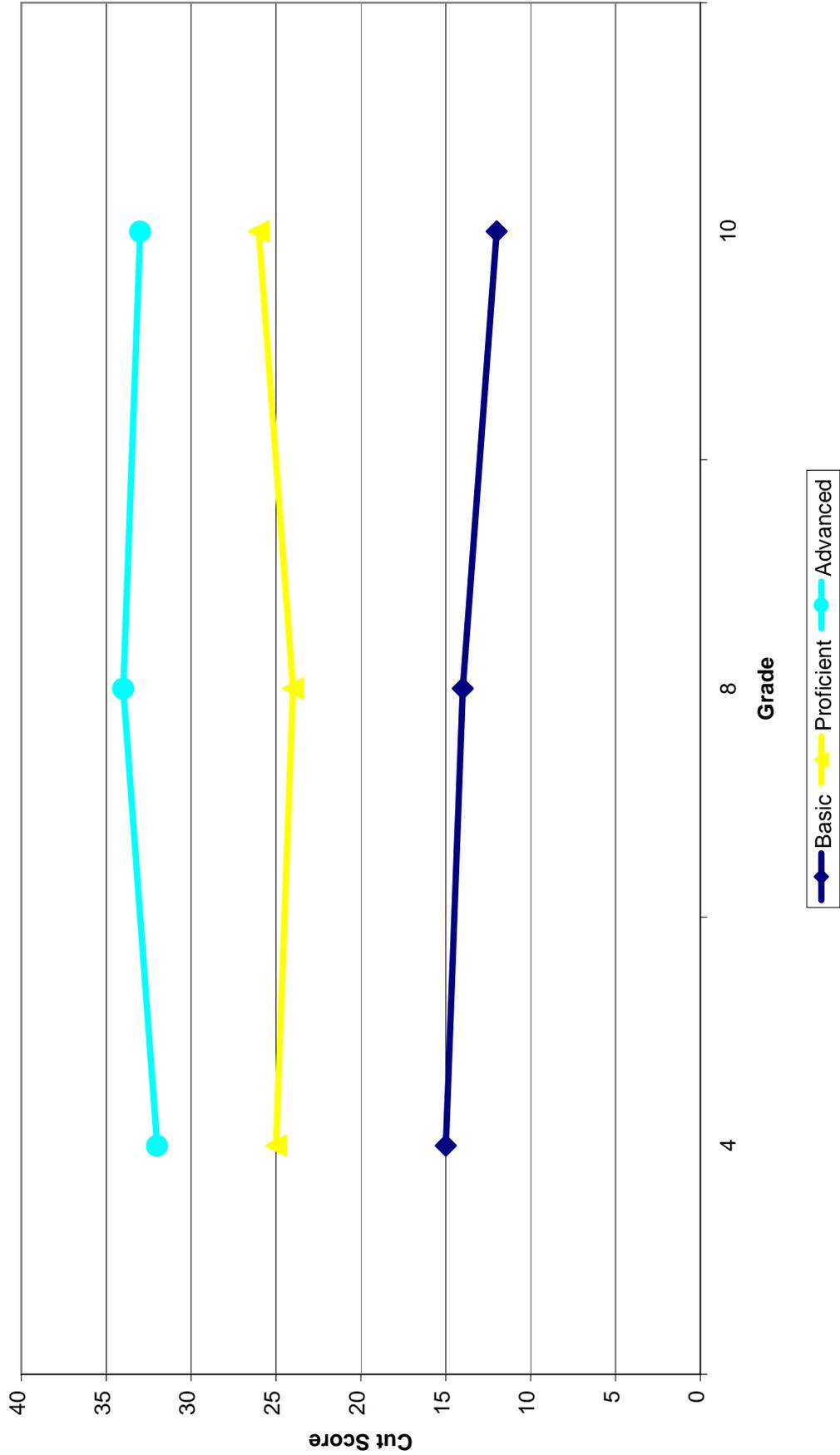
**Wisconsin Alternate Assessment for Students with Disabilities
Reading Synthesis Discussion, Uniform Distribution
Cut Scores by Achievement Level**



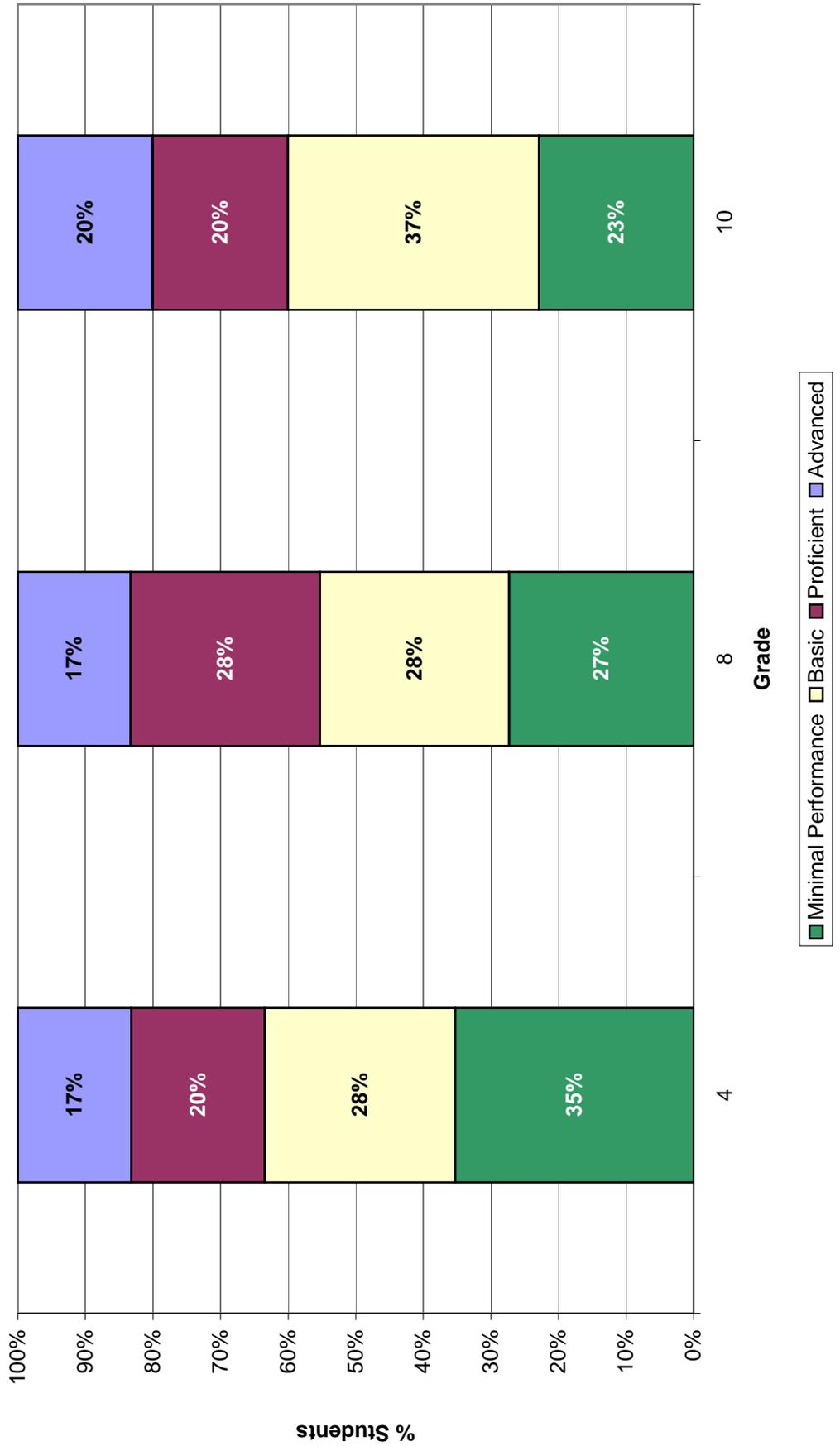
**Wisconsin Alternate Assessment for Students with Disabilities
Reading Synthesis Discussion, Uniform Distribution
Percent of Students by Achievement Level**



**Wisconsin Alternate Assessment for Students with Disabilities
 Science Cut Scores by Achievement Level from Synthesis Discussion, Uniform Distribution**



**Wisconsin Alternate Assessment for Students with Disabilities
 Science Synthesis Discussion, Uniform Distribution
 Percent of Students by Achievement Level**



Synthesis Discussion Results Based on Total Population

Mathematics

Results from Synthesis Discussion based on Total Population Data

Percentage of students in each achievement level

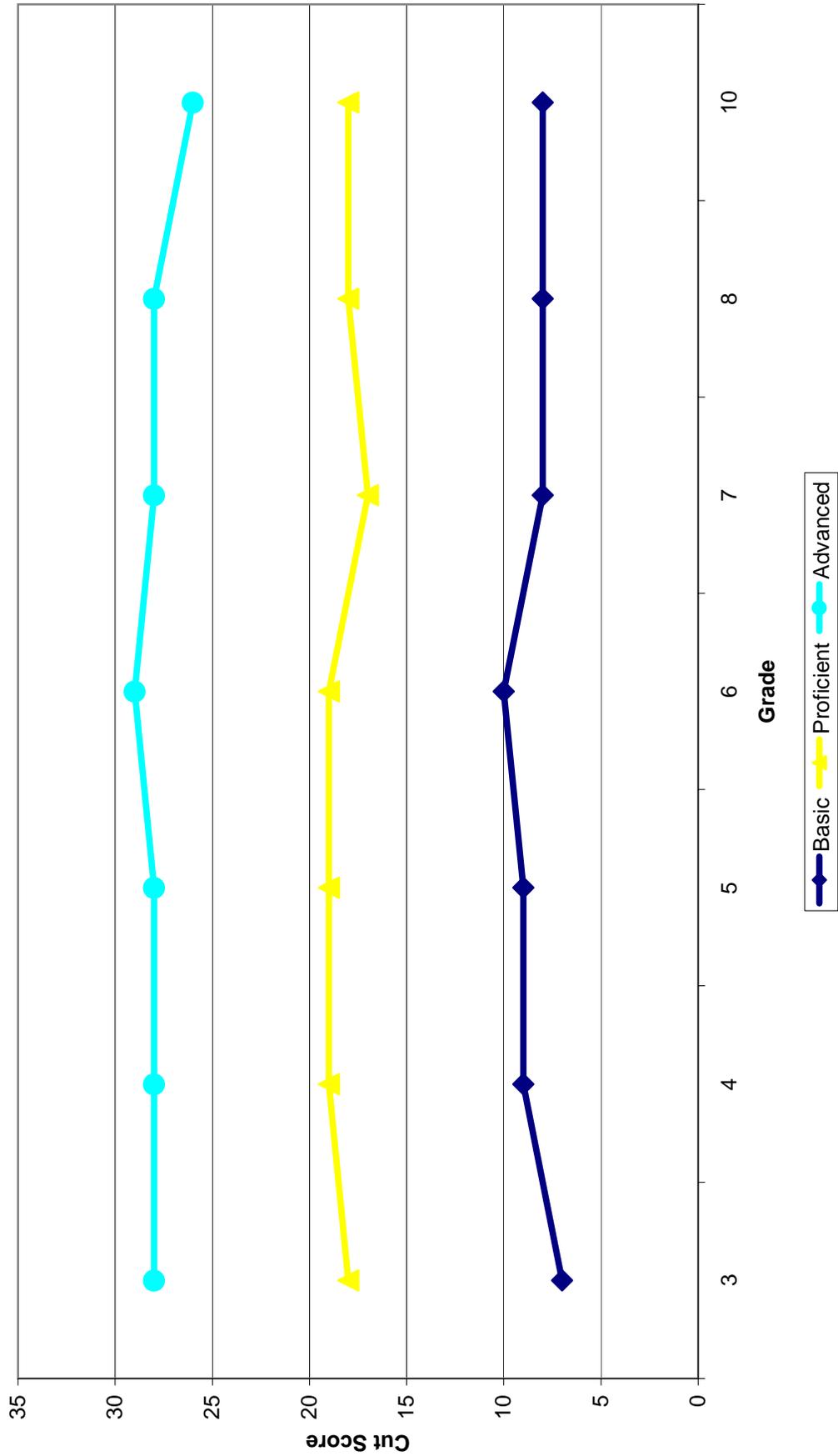
	3	4	5	6	7	8	10	Impact
Minimal Performance	14%	13%	15%	14%	13%	16%	16%	
Basic	14%	15%	15%	16%	14%	18%	23%	
Proficient	31%	27%	26%	29%	28%	24%	28%	
Advanced	41%	45%	45%	41%	46%	42%	33%	
Proficient & Above	72%	72%	71%	70%	74%	66%	61%	

	7	9	10	8	8	8	Cut Scores
Basic	7	9	10	8	8	8	8
Proficient	18	19	19	17	18	18	18
Advanced	28	28	29	28	28	28	26

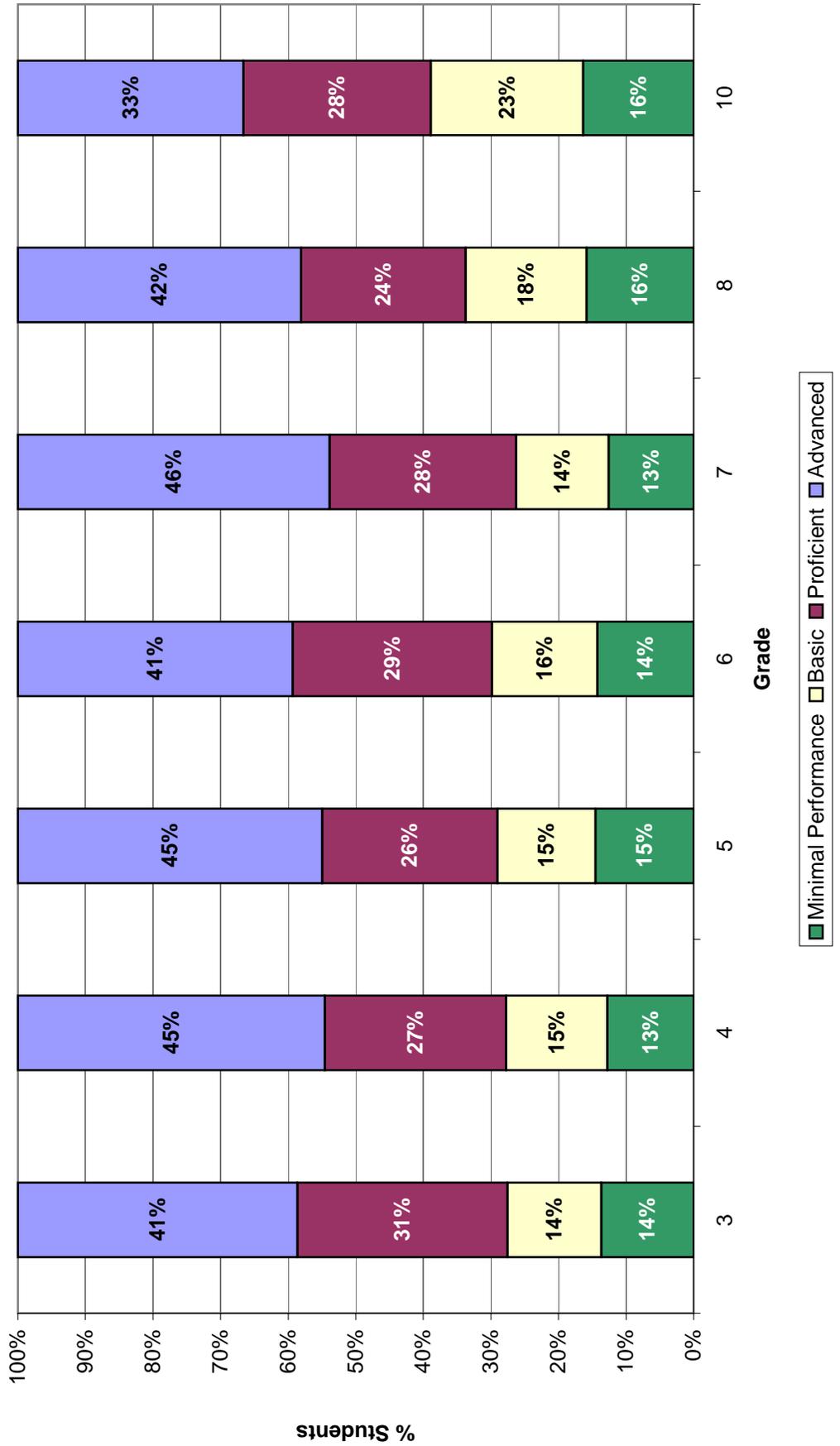
Max Score 34 34 34 34 34 34

The number of participants for profile sorting can be found in Section B Table 2.

**Wisconsin Alternate Assessment for Students with Disabilities
 Mathematics Synthesis Discussion, Total Population
 Cut Scores by Achievement Level**



**Wisconsin Alternate Assessment for Students with Disabilities
Mathematics Synthesis Discussion, Total Population
Percent of Students by Achievement Level**



Reading

Results from Synthesis Discussion based on Total Population Data

Percentage of students in each achievement level

	3	4	5	6	7	8	10	Impact
Minimal Performance								
Basic	15%	11%	11%	10%	13%	14%	16%	
Proficient	12%	11%	17%	18%	23%	24%	15%	
Advanced	31%	21%	27%	24%	17%	26%	32%	
Proficient & Above	42%	57%	45%	48%	47%	37%	37%	
	73%	78%	72%	72%	63%	63%	69%	

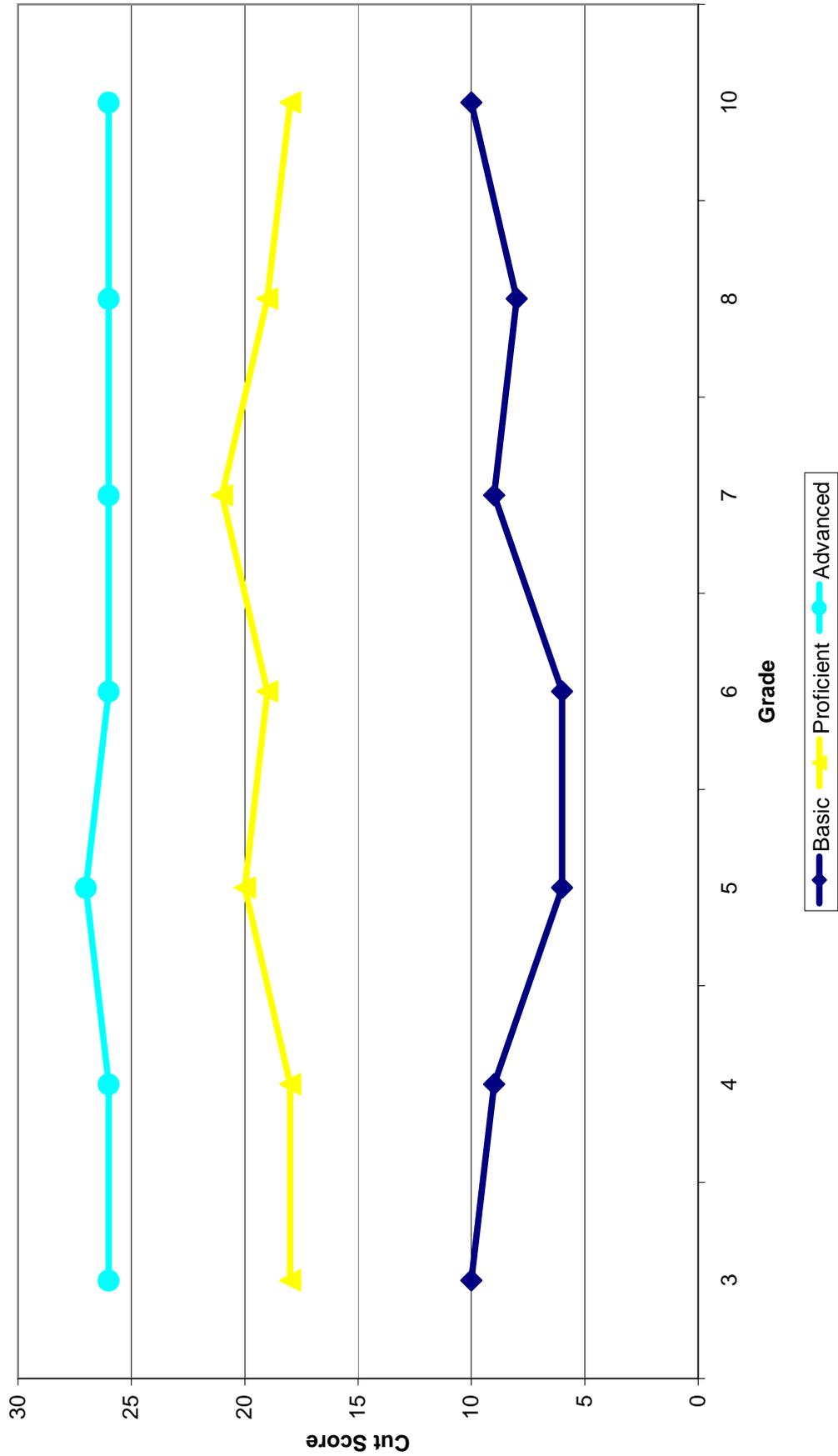
	Cut Scores						
Basic	10	9	6	6	9	8	10
Proficient	18	18	20	19	21	19	18
Advanced	26	26	27	26	26	26	26

Max Score

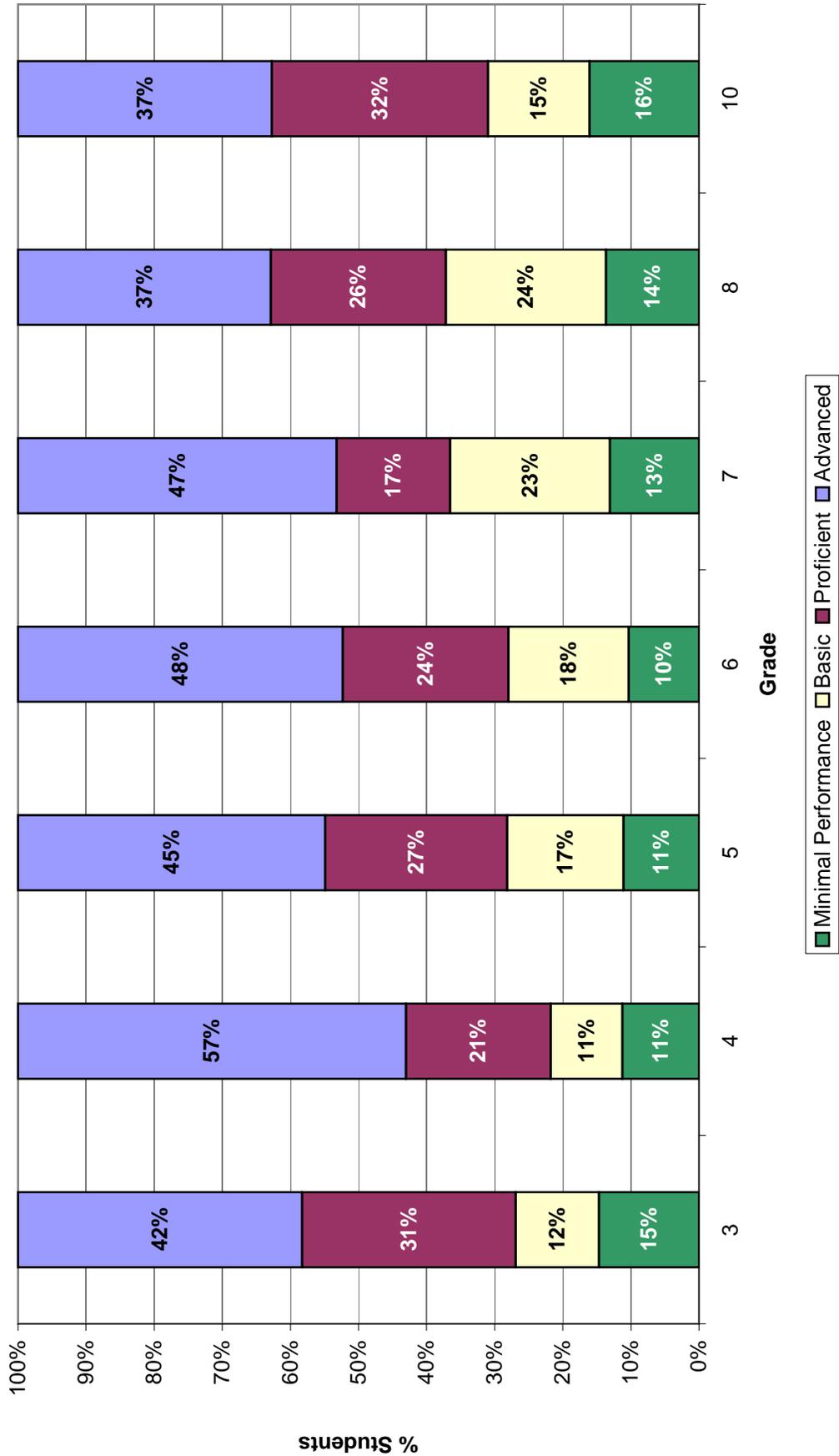
30 30 30 30 31 30 30

The number of participants for profile sorting can be found in Section B Table 2.

**Wisconsin Alternate Assessment for Students with Disabilities
Reading Synthesis Discussion, Total Population
Cut Scores by Achievement Level**



**Wisconsin Alternate Assessment for Students with Disabilities
Reading Synthesis Discussion, Total Population
Percent of Students by Achievement Level**



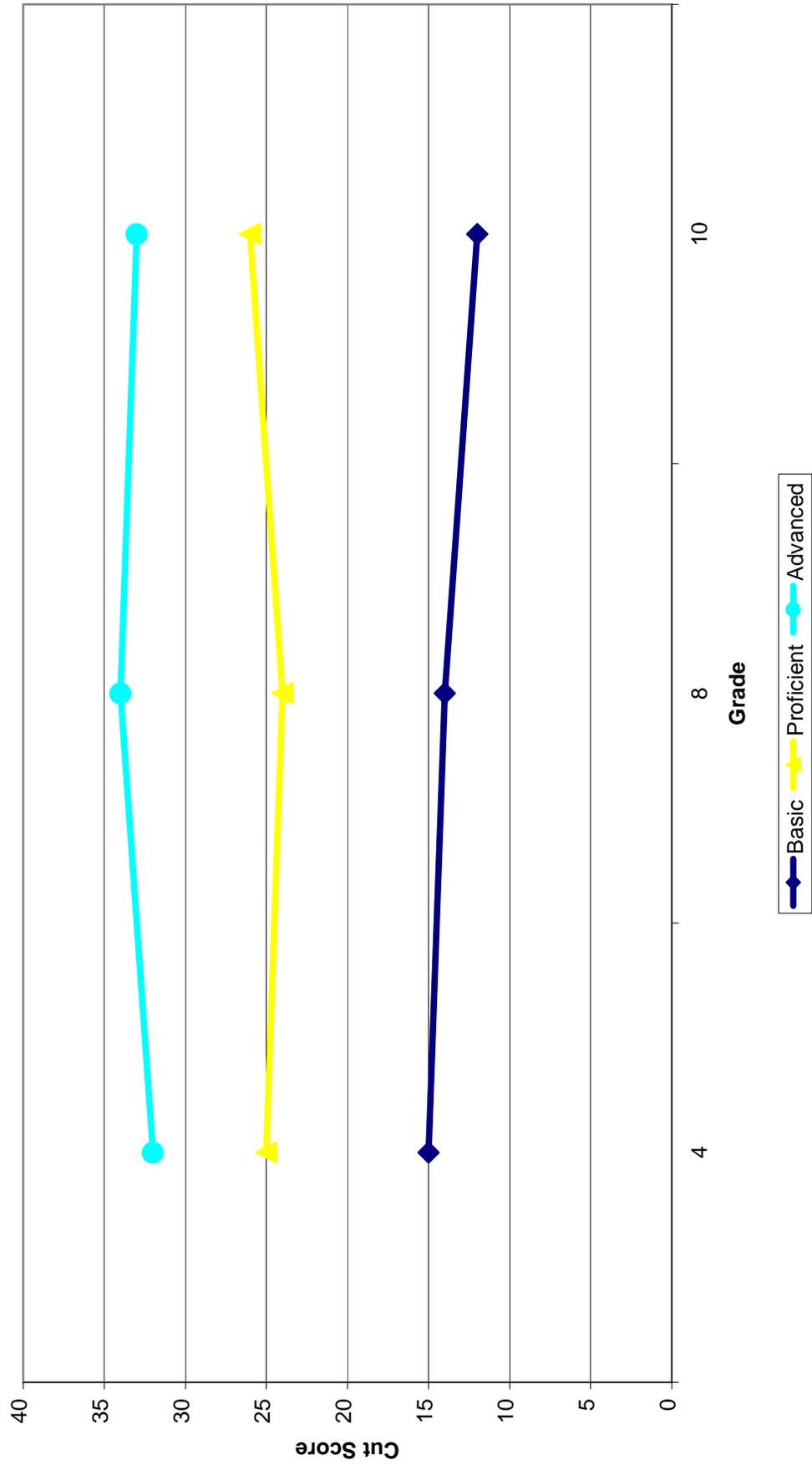
Science**Results from Synthesis Discussion
Based on Total Population Data**

Percentage of students in each achievement level

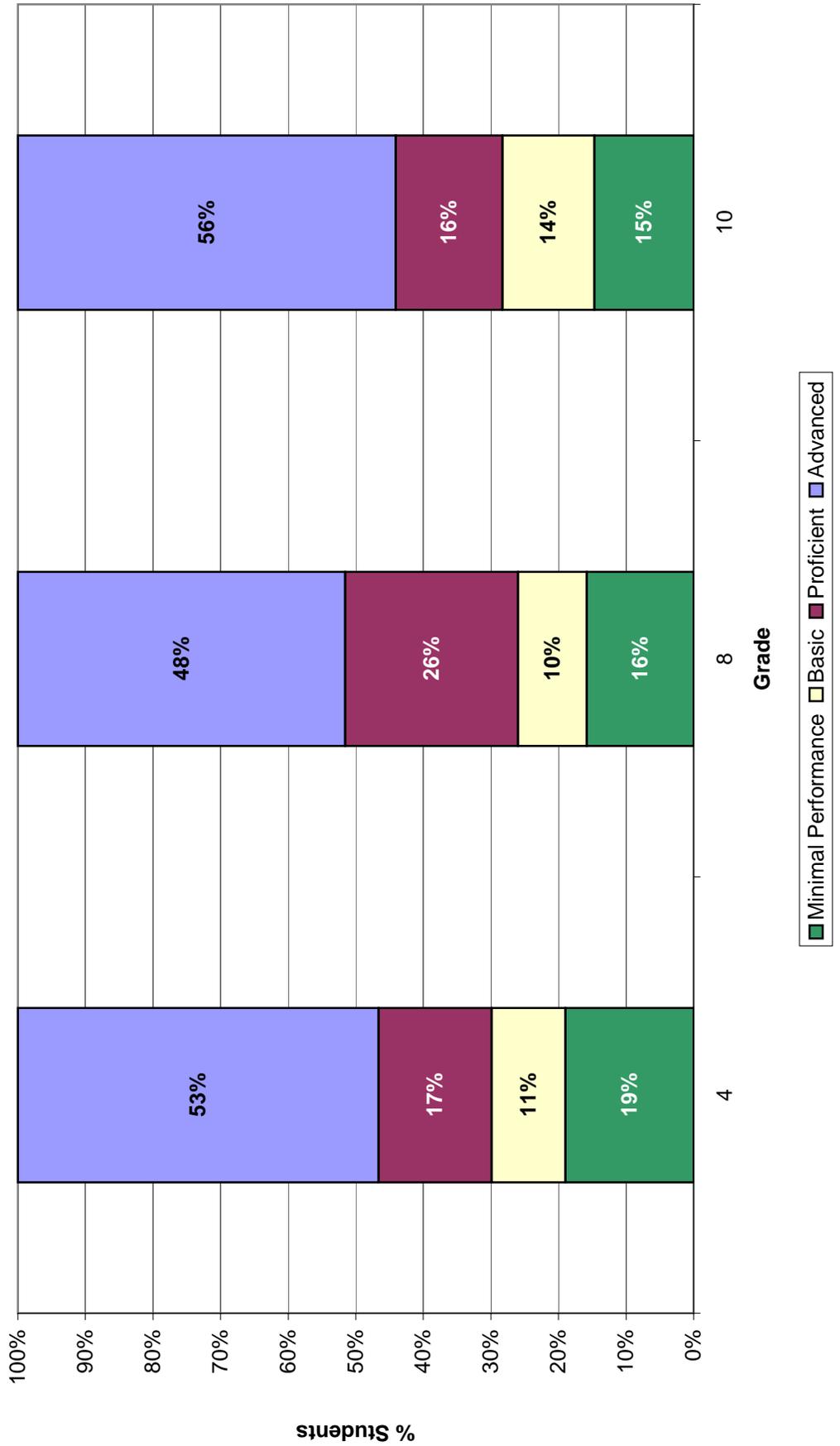
	4	8	10	Impact
Minimal Performance	19%	16%	15%	
Basic	11%	10%	14%	
Proficient	17%	26%	16%	
Advanced	53%	48%	56%	
Proficient & Above	70%	74%	72%	
	15	14	12	Cut Scores
Basic	25	24	26	
Proficient	32	34	33	
Advanced				
Max Score	37	39	39	

The number of participants for profile sorting can be found in Section B Table 2.

**Wisconsin Alternate Assessment for Students with Disabilities
Science Cut Scores by Achievement Level from Synthesis Discussion, Total Population**



**Wisconsin Alternate Assessment for Students with Disabilities
 Science Synthesis Discussion, Total Population
 Percent of Students by Achievement Level**



**Approved Cut Scores
and Associated Impact Data
Based on Uniform Distribution**

Mathematics**Approved Results****Based on Uniform Distribution Data**

Percentage of students in each achievement level

	3	4	5	6	7	8	10	Impact
Minimal Performance	20%	24%	26%	28%	22%	23%	22%	
Basic	31%	29%	29%	26%	26%	29%	29%	
Proficient	29%	26%	26%	29%	32%	29%	23%	
Advanced	20%	21%	20%	17%	20%	20%	26%	
Proficient & Above	49%	47%	46%	46%	52%	49%	49%	

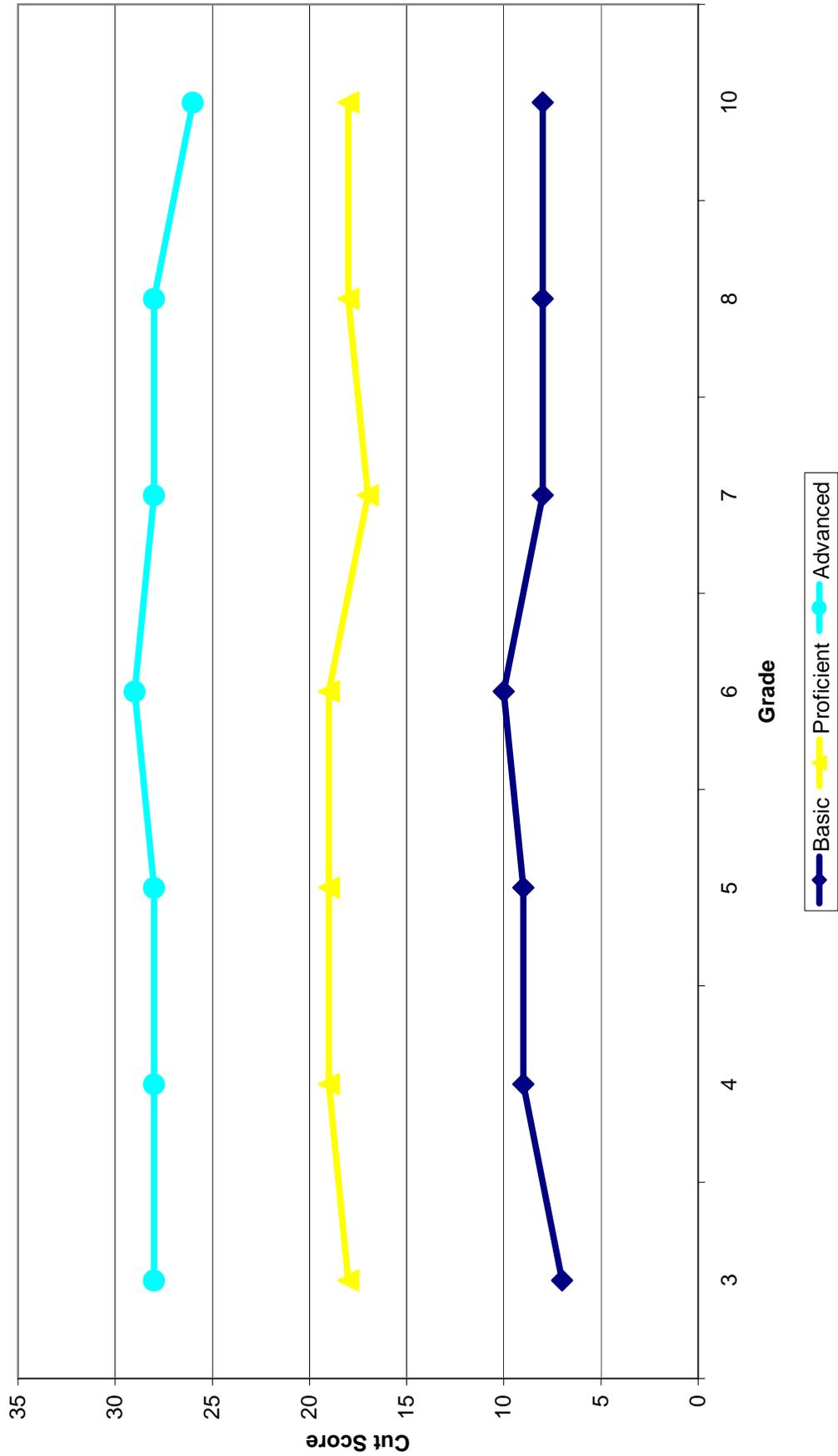
	7	9	9	10	8	8	Cut Scores
Basic	18	19	19	19	17	18	8
Proficient	28	28	28	29	28	28	18
Advanced							26

Max Score

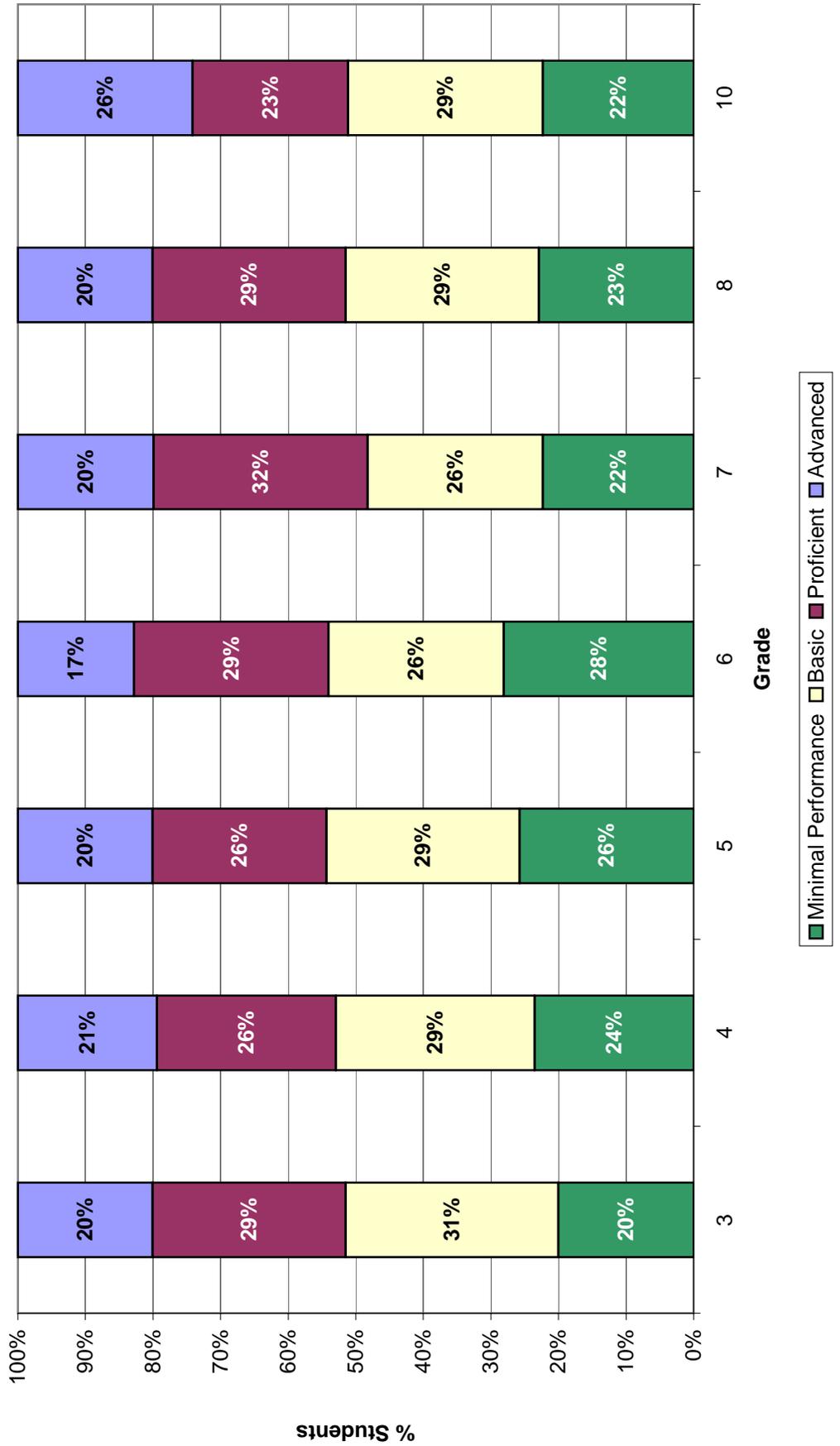
34 34 34 34 34 34 34

The number of participants for profile sorting can be found in Section B Table 2.

Wisconsin Alternate Assessment for Students with Disabilities
 Approved Mathematics Cut Scores by Achievement Level, Uniform Distribution



**Wisconsin Alternate Assessment for Students with Disabilities
Percent of Students by Achievement Level based on Approved Mathematics Cut Scores
Uniform Distribution**



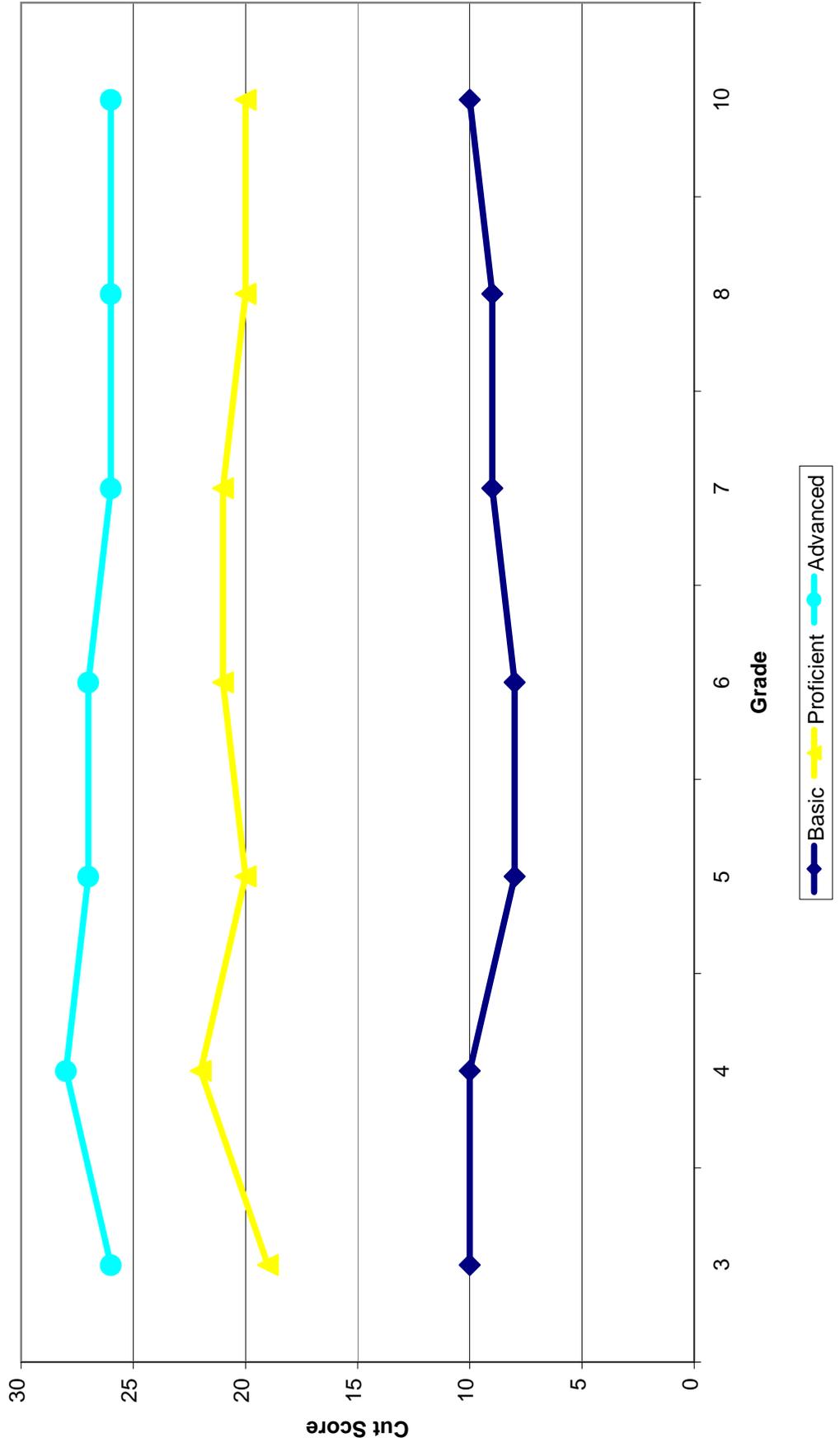
Reading**Approved Results****Based on Uniform Distribution Data**

Percentage of students in each achievement level

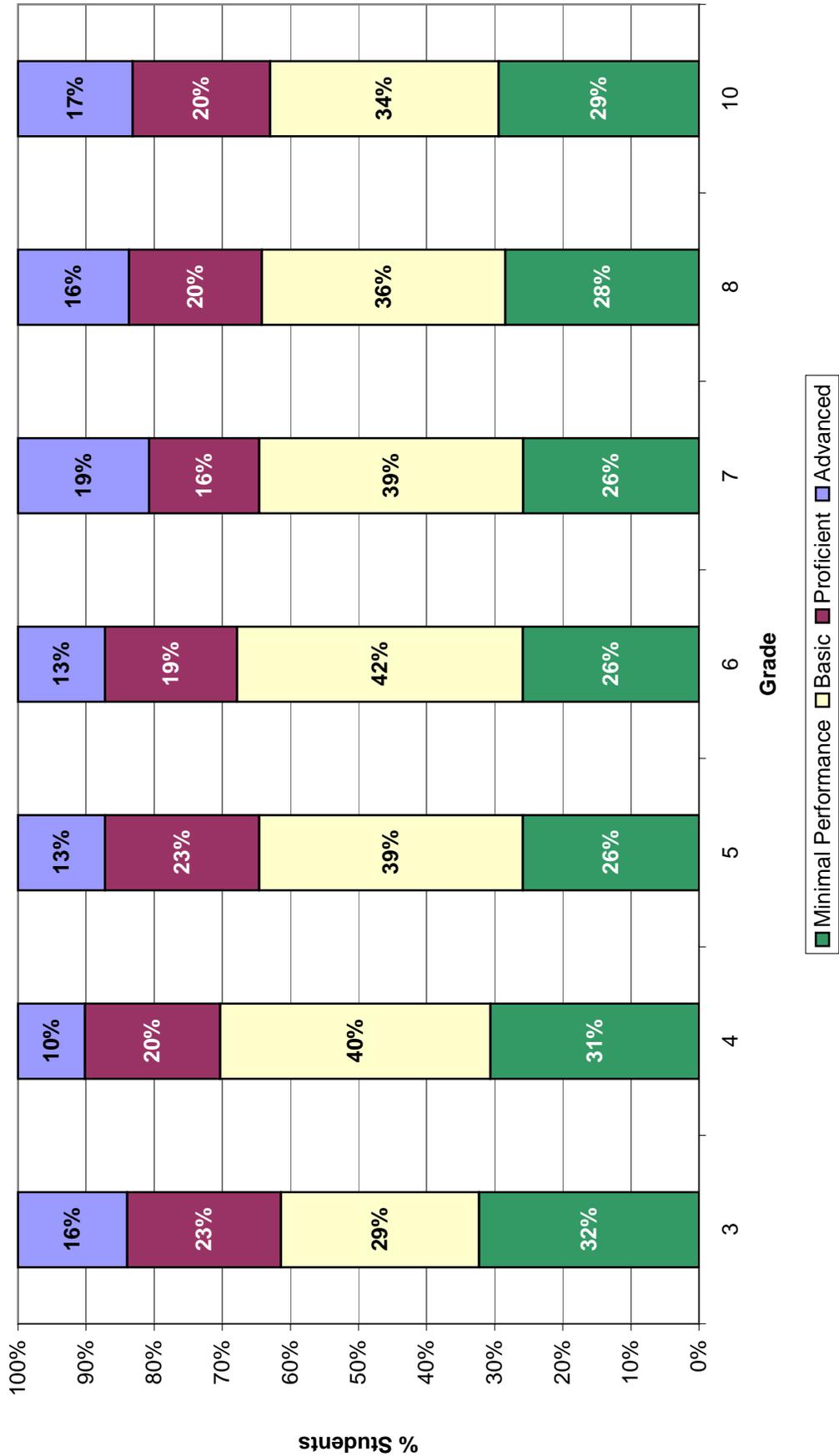
	3	4	5	6	7	8	10	Impact
Minimal Performance								
Basic	32%	31%	26%	26%	26%	28%	29%	
Proficient	29%	40%	39%	42%	39%	36%	34%	
Advanced	23%	20%	23%	19%	16%	20%	20%	
Proficient & Above	16%	10%	13%	13%	19%	16%	17%	
	39%	30%	35%	32%	35%	36%	37%	
Basic	10	10	8	8	9	9	10	
Proficient	19	22	20	21	21	20	20	
Advanced	26	28	27	27	26	26	26	
Max Score	30	30	30	30	31	30	30	
								Cut Scores

The number of participants for profile sorting can be found in Section B Table 2.

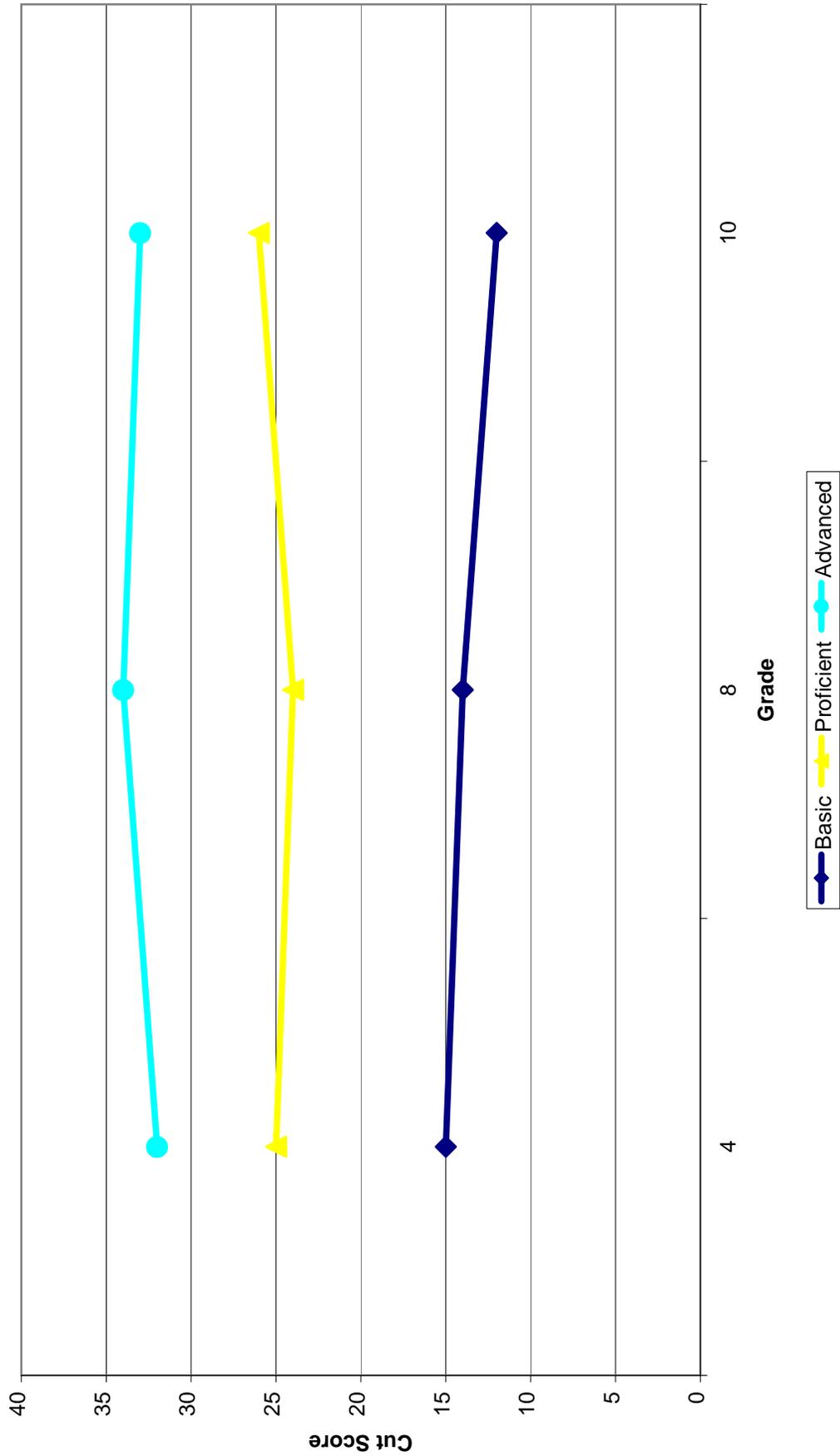
Wisconsin Alternate Assessment for Students with Disabilities
 Approved Reading Cut Scores by Achievement Level, Uniform Distribution



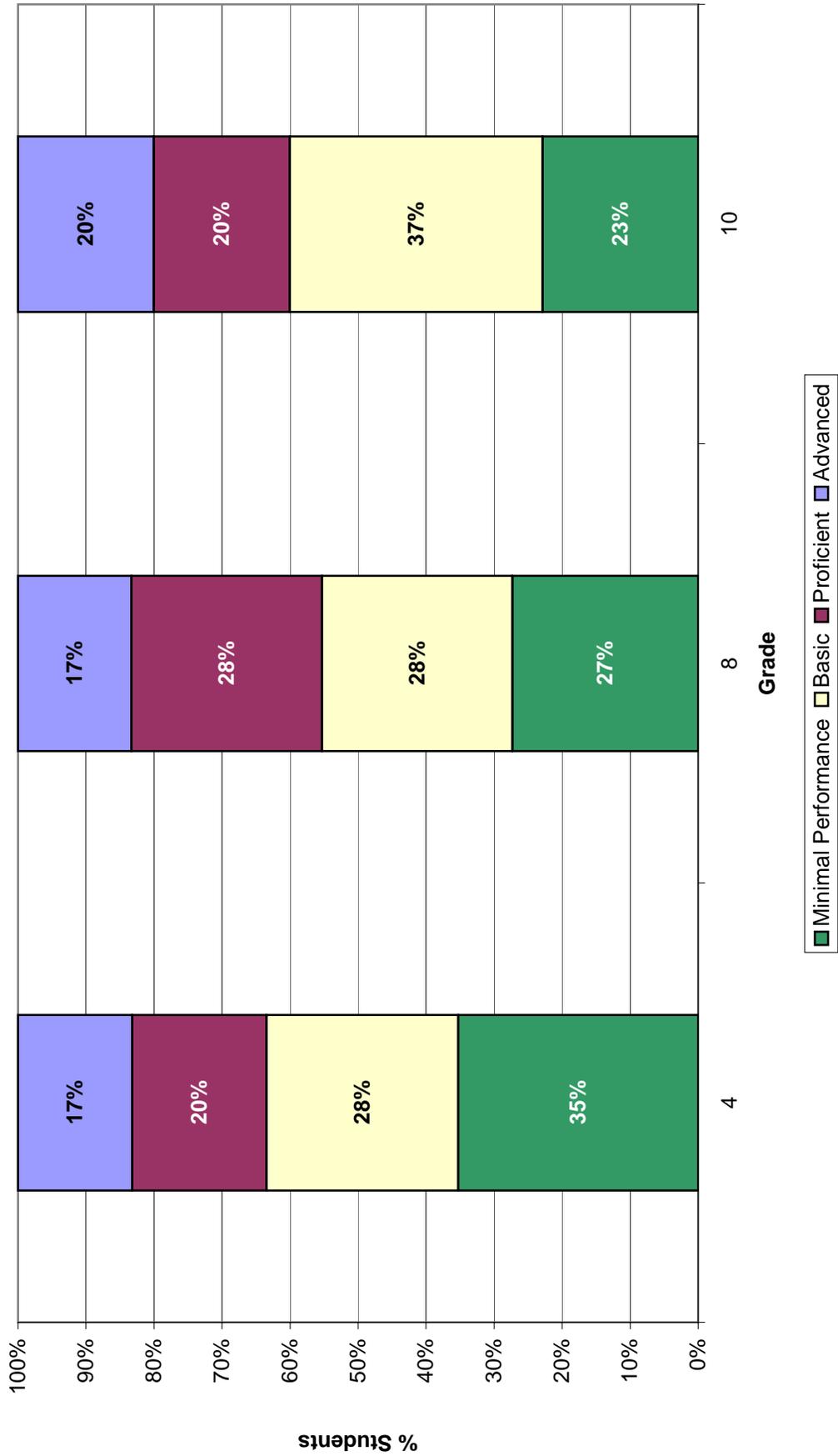
**Wisconsin Alternate Assessment for Students with Disabilities
Percent of Students by Achievement Level based on Approved Reading Cut Scores
Uniform Distribution**



**Wisconsin Alternate Assessment for Students with Disabilities
Approved Science Cut Scores by Achievement Level, Uniform Distribution**



**Wisconsin Alternate Assessment for Students with Disabilities
Percent of Students by Achievement Level based on Approved Science Cut Scores
Uniform Distribution**



**Approved Cut Scores
and Associated Impact Data
Based on Total Population**

Mathematics

Approved Results

Based on Total Population Data

Percentage of students in each achievement level

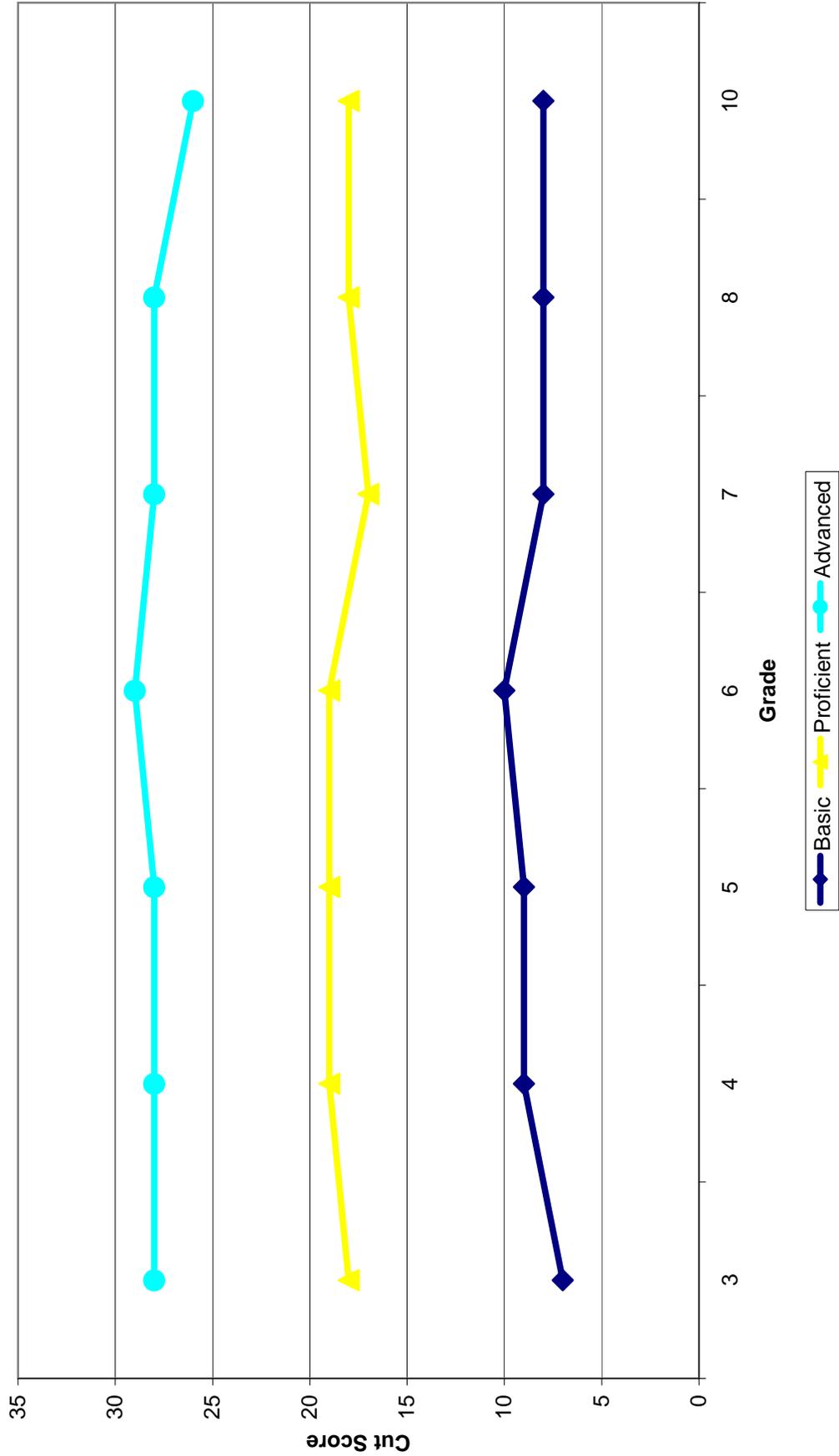
	3	4	5	6	7	8	10	Impact
Minimal Performance	14%	13%	15%	14%	13%	16%	16%	16%
Basic	14%	15%	15%	16%	14%	18%	23%	23%
Proficient	31%	27%	26%	29%	28%	24%	28%	28%
Advanced	41%	45%	45%	41%	46%	42%	33%	33%
Proficient & Above	72%	72%	71%	70%	74%	66%	61%	

	7	9	10	8	8	8	Cut Scores
Basic	18	19	19	17	18	18	8
Proficient	28	28	29	28	28	28	18
Advanced							26

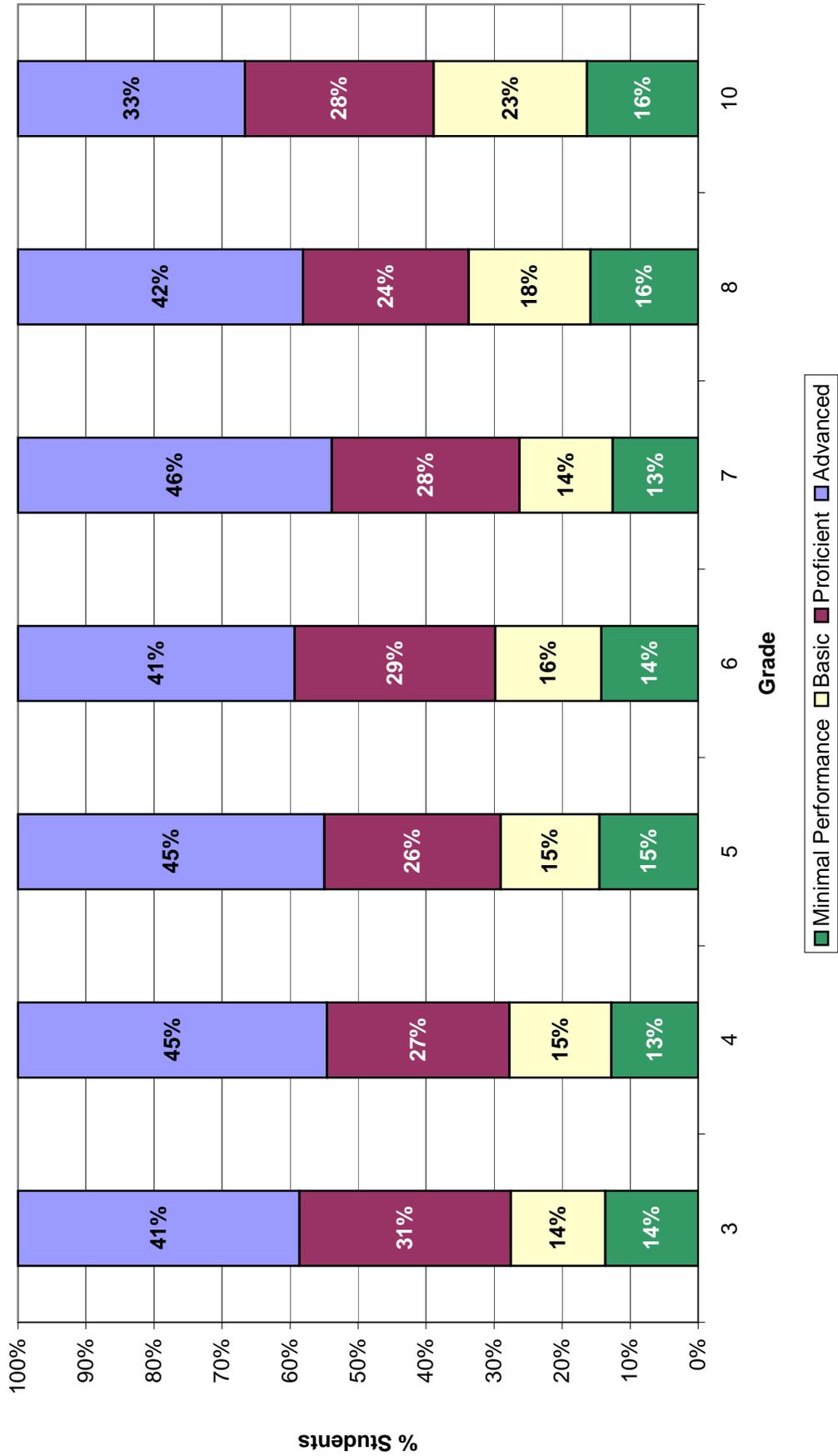
Max Score 34 34 34 34 34 34 34

The number of participants for profile sorting can be found in Section B Table 2.

**Wisconsin Alternate Assessment for Students with Disabilities
Approved Mathematics Cut Scores by Achievement Level, Total Population**



**Wisconsin Alternate Assessment for Students with Disabilities
Percent of Students by Achievement Level based on Approved Mathematics Cut Scores
Total Population**



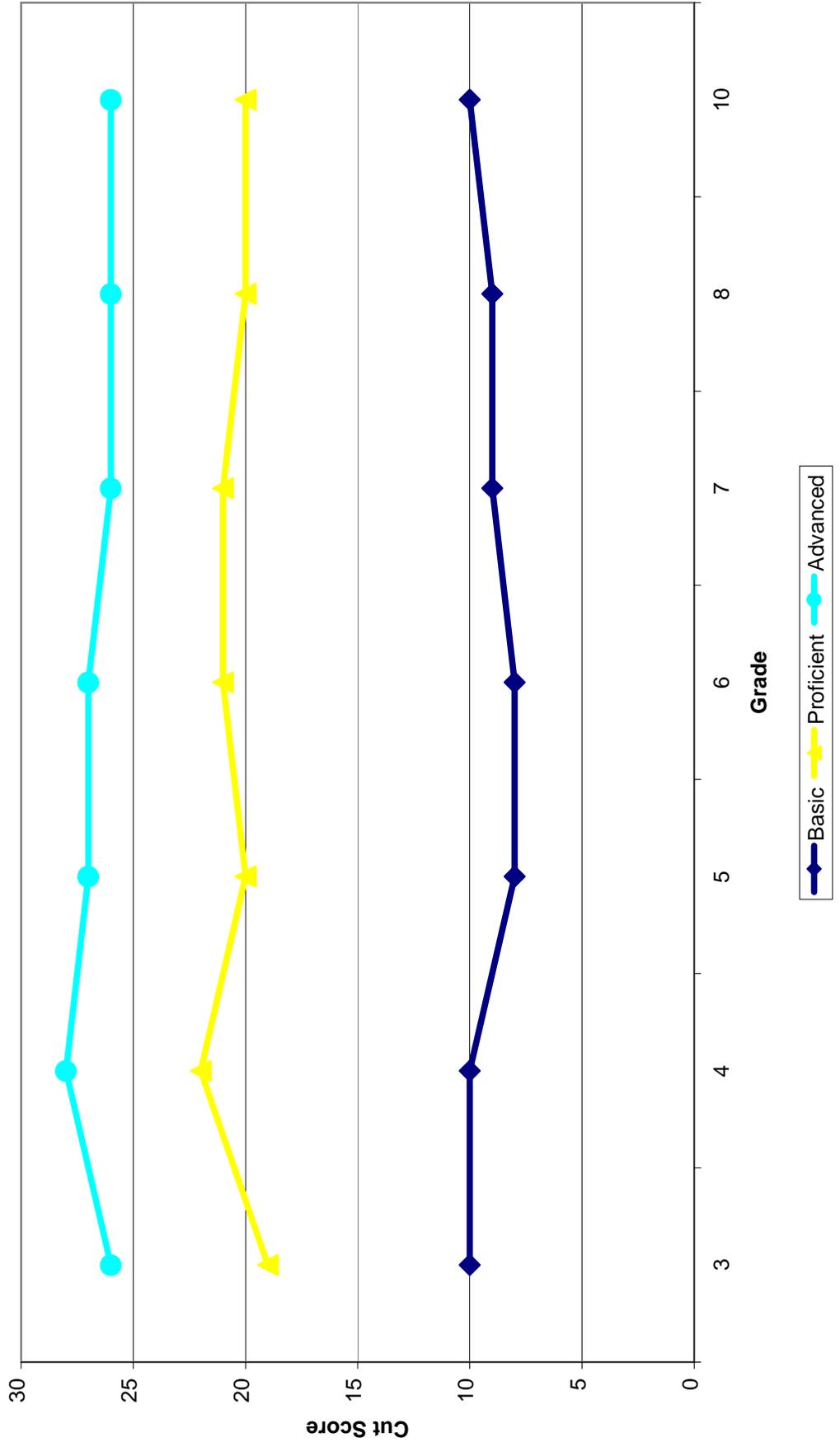
Reading**Approved Results****Based on Total Population Data**

Percentage of students in each achievement level

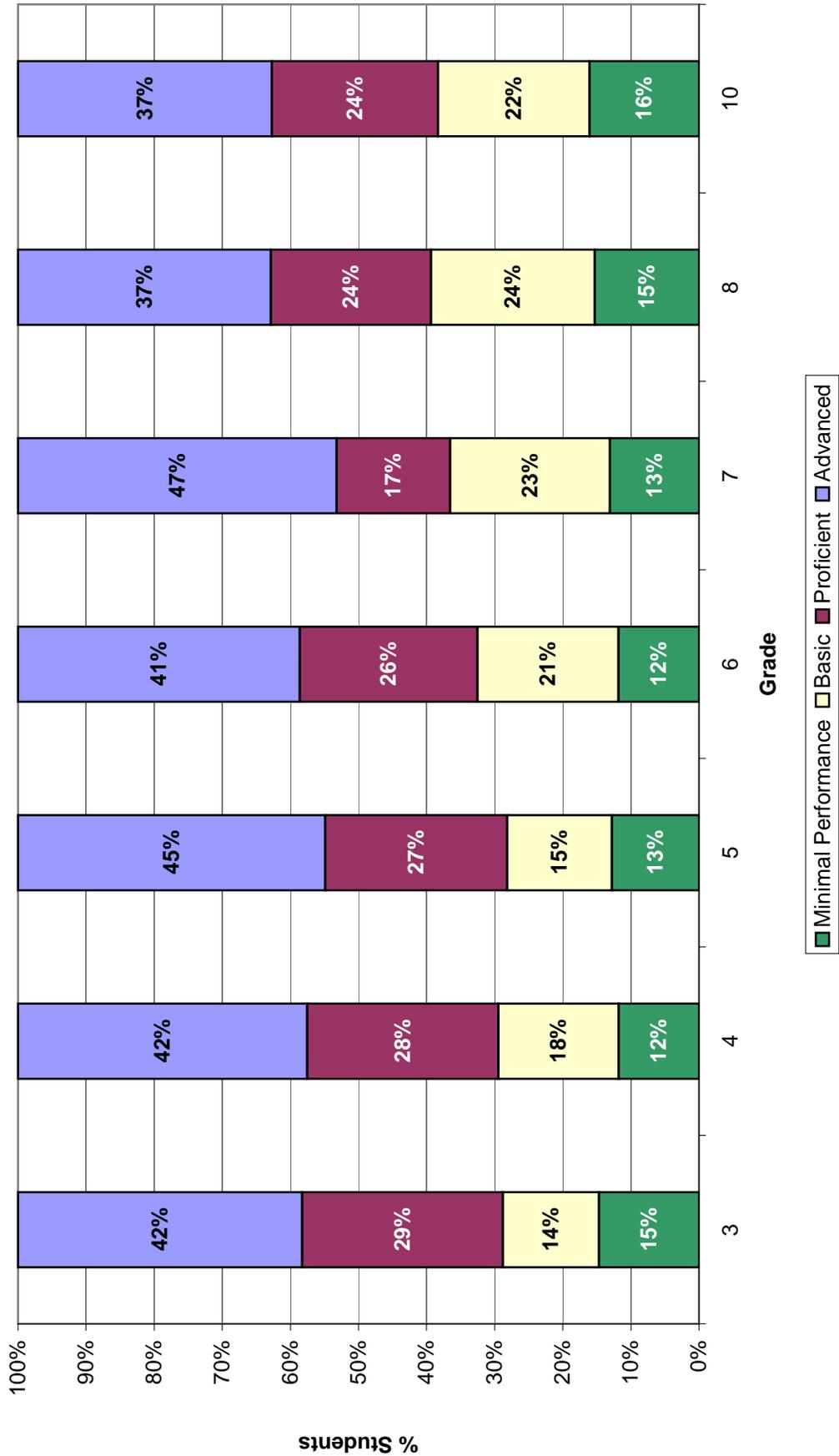
	3	4	5	6	7	8	10	Impact
Minimal Performance	15%	12%	13%	12%	13%	15%	16%	
Basic	14%	18%	15%	21%	23%	24%	22%	
Proficient	29%	28%	27%	26%	17%	24%	24%	
Advanced	42%	42%	45%	41%	47%	37%	37%	
Proficient & Above	71%	71%	72%	67%	63%	61%	62%	
Basic	10	10	8	8	9	9	10	
Proficient	19	22	20	21	21	20	20	
Advanced	26	28	27	27	26	26	26	
Max Score	30	30	30	30	31	30	30	
								Cut Scores

The number of participants for profile sorting can be found in Section B Table 2.

Wisconsin Alternate Assessment for Students with Disabilities
 Approved Reading Cut Scores by Achievement Level, Total Population



**Wisconsin Alternate Assessment for Students with Disabilities
Percent of Students by Achievement Level based on Approved Reading Cut Scores
Total Population**



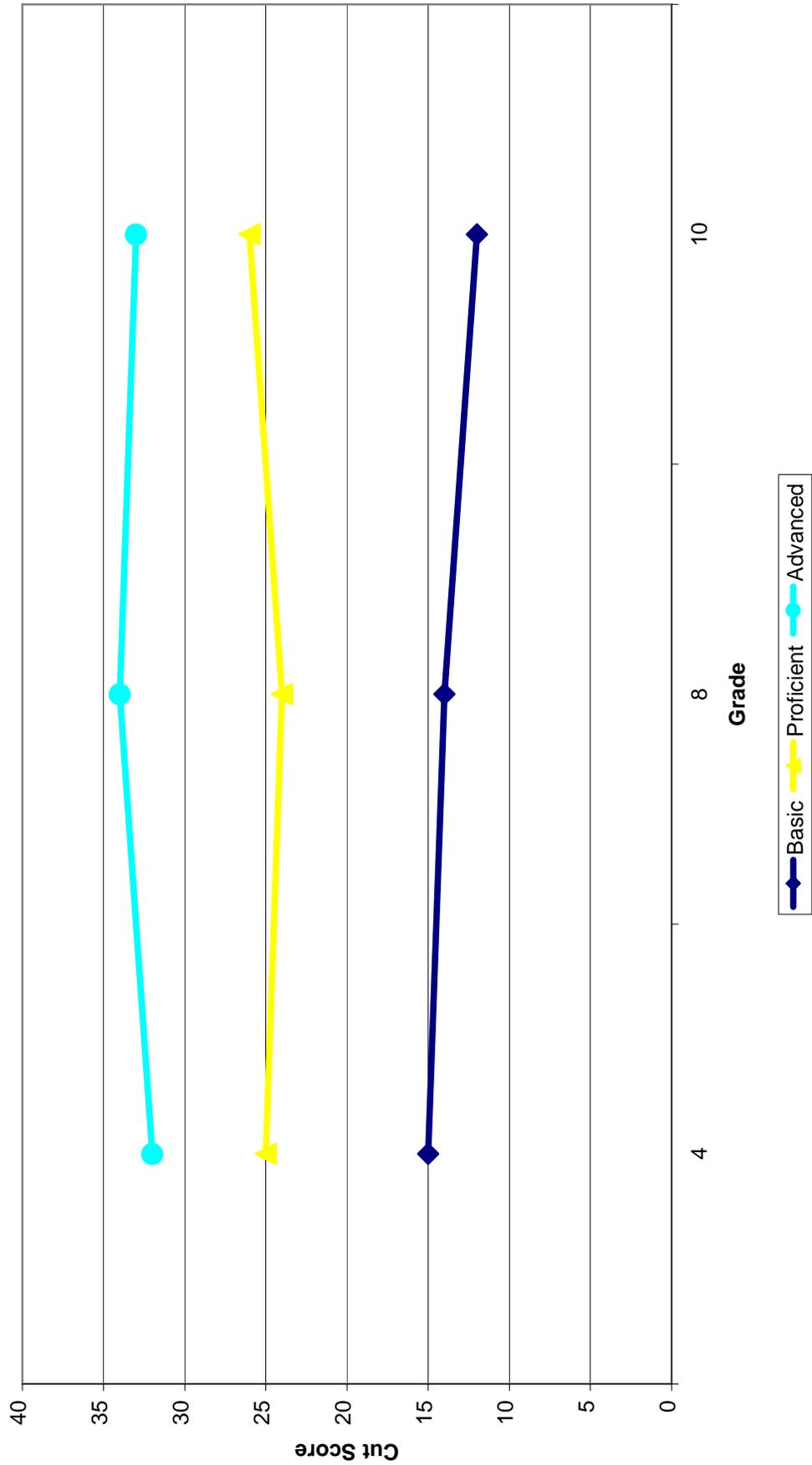
Science**Approved Results****Based on Total Population Data**

Percentage of students in each achievement level

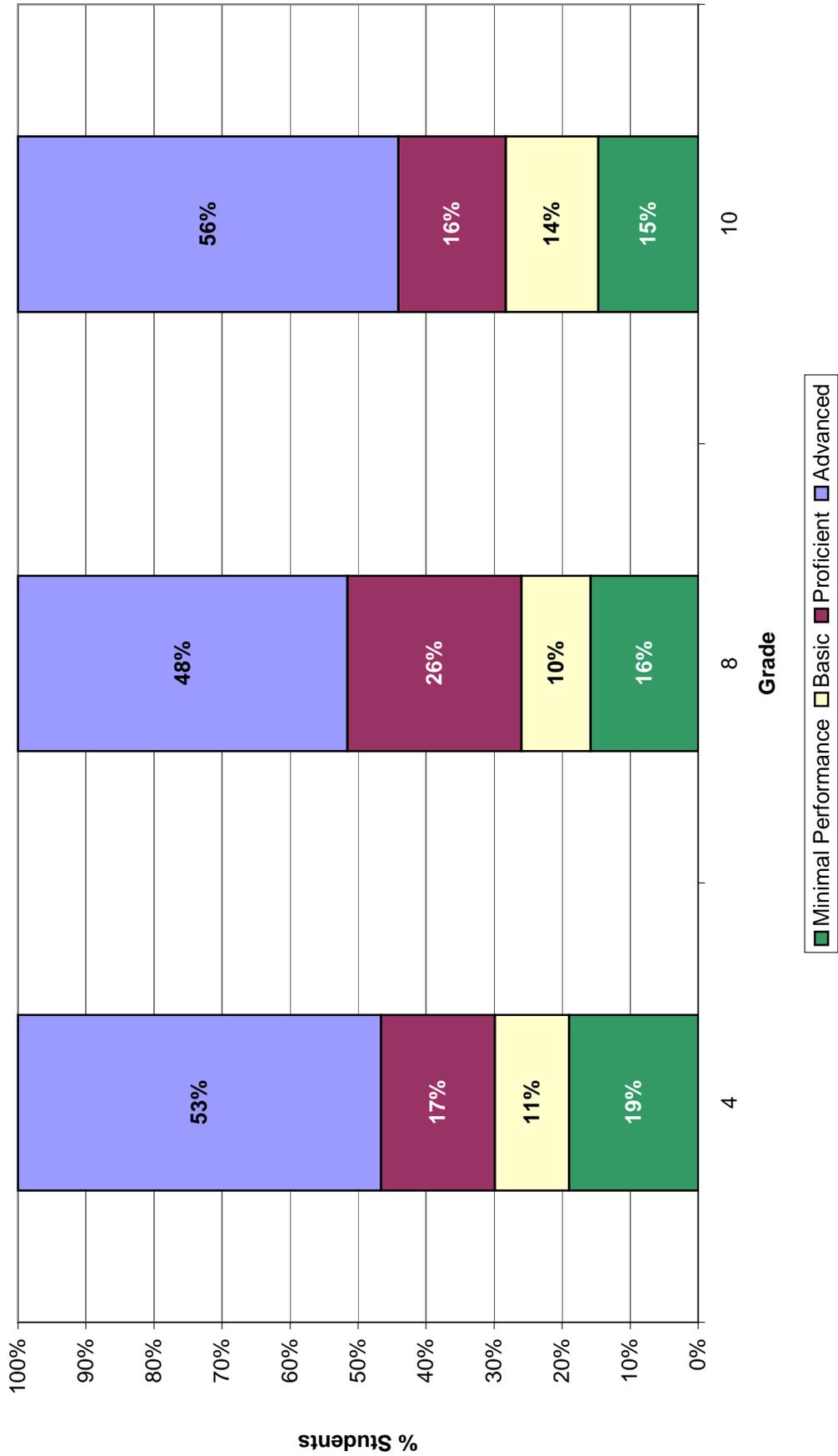
	4	8	10	Impact
Minimal Performance	19%	16%	15%	
Basic	11%	10%	14%	
Proficient	17%	26%	16%	
Advanced	53%	48%	56%	
Proficient & Above	70%	74%	72%	
	15	14	12	Cut Scores
Basic	25	24	26	
Proficient	32	34	33	
Advanced				
Max Score	37	39	39	

The number of participants for profile sorting can be found in Section B Table 2.

**Wisconsin Alternate Assessment for Students with Disabilities
Approved Science Cut Scores by Achievement Level
Total Population**



**Wisconsin Alternate Assessment for Students with Disabilities
Percent of Students by Achievement Level based on Approved Science Cut Scores
Total Population**



SECTION G

Results of the Participant Evaluation for the Profile Sorting Workshop

**Wisconsin Alternate Assessment for Students with Disabilities
Profile Sorting Standard Setting Evaluation April 2008**

Key: SD=Strongly Disagree D=Disagree N=Neutral A=Agree SA=Strongly Agree	SA	A	N	D	SD
1. I am confident that the Profile Sorting standard setting produced valid standards.	<input type="radio"/>				
2. I considered the achievement descriptors when I sorted the profiles.	<input type="radio"/>				
3. I felt that this procedure was fair.	<input type="radio"/>				
4. I had enough time to sort the profiles.	<input type="radio"/>				
5. I understood how to sort the profiles.	<input type="radio"/>				
6. Overall, I believe that my opinions were considered and valued by my group.	<input type="radio"/>				
7. Overall, I valued the workshop as a professional development experience.	<input type="radio"/>				
8. Overall, I was satisfied with my group's final recommendations.	<input type="radio"/>				
9. Overall, my table's discussions were open and honest.	<input type="radio"/>				
10. Participating in the standard setting increased my understanding of the test.	<input type="radio"/>				
11. Reviewing the achievement descriptors helped me rate the profiles.	<input type="radio"/>				
12. The workshop was well organized.	<input type="radio"/>				
13. The goals for the profile sorting procedure were clear.	<input type="radio"/>				
14. The presentation of impact data was helpful to me.	<input type="radio"/>				
15. The profile sorting procedure was well described.	<input type="radio"/>				
16. The training on rating profiles made the task clear to me.	<input type="radio"/>				
17. I would defend the <i>Basic</i> cut scores against criticism that they are too high.	<input type="radio"/>				
18. I would defend the <i>Basic</i> cut scores against criticism that they are too low.	<input type="radio"/>				
19. I would defend the <i>Proficient</i> cut scores against criticism that they are too high.	<input type="radio"/>				
20. I would defend the <i>Proficient</i> cut scores against criticism that they are too low.	<input type="radio"/>				
21. I would defend the <i>Advanced</i> cut scores against criticism that they are too high.	<input type="radio"/>				
22. I would defend the <i>Advanced</i> cut scores against criticism that they are too low.	<input type="radio"/>				

23. What is your occupation?

- Teacher
 Administrator
 Other: _____

24. How many years in your current profession?

- 1-5
 6-10
 11-15
 16-20
 21+

25. What is your primary role at this standard setting?

- Educator
 Parent
 Community Member
 Business Member

26. What is your highest education level?

- HSD or GED
 Bachelor's
 Master's
 Doctorate

28. What is your race/ethnicity?

- Asian/Pacific Islander
 Hispanic/Latino
 African-American
 American Indian
 White
 Other

27. What is your gender?

- Male
 Female

29. Have you taught Special Education?

- Yes
 No

30. Have you taught ESL/ELD?

- Yes
 No

31. Have you taught Vocational Education?

- Yes
 No

32. Have you taught Alternative Education?

- Yes
 No

33. Have you taught Adult Education?

- Yes
 No

34. Which grade (or grade band) did you work on during this standard setting?

- 3/4
 4
 5/6
 7/8
 8
 10

35. Which content area did you work on during this standard setting?

- Mathematics
 Reading
 Science

Please add your comments on the back of this evaluation. Thank you!

**Wisconsin Alternate Assessment for Students with Disabilities
Profile Sorting Standard Setting April 2008
Evaluation Results**

About these results

Each question is shown, along with its answer choices and associated response percentages. For Likert-type questions, there are five possible responses: "Strongly Disagree," "Disagree," "Neutral," "Agree," and "Strongly Agree." For each question, the number of respondents is shown in the column labeled "N."

Question 1

I am confident that the Profile Sorting standard setting produced valid standards.

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		69	0.0%	1.4%	1.4%	60.9%	36.2%	97.1%
Mathematics	3-4	6	0.0%	0.0%	16.7%	66.7%	16.7%	83.4%
	5-6	8	0.0%	0.0%	0.0%	50.0%	50.0%	100.0%
	7-8	8	0.0%	0.0%	0.0%	50.0%	50.0%	100.0%
	10	5	0.0%	0.0%	0.0%	40.0%	60.0%	100.0%
Reading	3-4	8	0.0%	12.5%	0.0%	75.0%	12.5%	87.5%
	5-6	7	0.0%	0.0%	0.0%	71.4%	28.6%	100.0%
	7-8	6	0.0%	0.0%	0.0%	66.7%	33.3%	100.0%
	10	5	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Science	4	6	0.0%	0.0%	0.0%	66.7%	33.3%	100.0%
	8	5	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
	10	5	0.0%	0.0%	0.0%	80.0%	20.0%	100.0%

Question 2

I considered the achievement descriptors when I sorted the profiles.

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		69	0.0%	0.0%	0.0%	23.2%	76.8%	100.0%
Mathematics	3-4	6	0.0%	0.0%	0.0%	33.3%	66.7%	100.0%
	5-6	8	0.0%	0.0%	0.0%	12.5%	87.5%	100.0%
	7-8	8	0.0%	0.0%	0.0%	25.0%	75.0%	100.0%
	10	5	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Reading	3-4	8	0.0%	0.0%	0.0%	37.5%	62.5%	100.0%
	5-6	7	0.0%	0.0%	0.0%	57.1%	42.9%	100.0%
	7-8	6	0.0%	0.0%	0.0%	16.7%	83.3%	100.0%
	10	5	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Science	4	6	0.0%	0.0%	0.0%	33.3%	66.7%	100.0%
	8	5	0.0%	0.0%	0.0%	20.0%	80.0%	100.0%
	10	5	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%

Question 3

I felt that this procedure was fair.

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		67	0.0%	0.0%	1.5%	61.2%	37.3%	98.5%
Mathematics	3-4	6	0.0%	0.0%	0.0%	83.3%	16.7%	100.0%
	5-6	8	0.0%	0.0%	0.0%	75.0%	25.0%	100.0%
	7-8	8	0.0%	0.0%	12.5%	50.0%	37.5%	87.5%
	10	5	0.0%	0.0%	0.0%	40.0%	60.0%	100.0%
Reading	3-4	8	0.0%	0.0%	0.0%	50.0%	50.0%	100.0%
	5-6	7	0.0%	0.0%	0.0%	85.7%	14.3%	100.0%
	7-8	6	0.0%	0.0%	0.0%	50.0%	50.0%	100.0%
	10	4	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Science	4	5	0.0%	0.0%	0.0%	40.0%	60.0%	100.0%
	8	5	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
	10	5	0.0%	0.0%	0.0%	80.0%	20.0%	100.0%

Question 4

I had enough time to sort the profiles.

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		69	0.0%	0.0%	0.0%	36.2%	63.8%	100.0%
Mathematics	3-4	6	0.0%	0.0%	0.0%	66.7%	33.3%	100.0%
	5-6	8	0.0%	0.0%	0.0%	12.5%	87.5%	100.0%
	7-8	8	0.0%	0.0%	0.0%	37.5%	62.5%	100.0%
	10	5	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Reading	3-4	8	0.0%	0.0%	0.0%	25.0%	75.0%	100.0%
	5-6	7	0.0%	0.0%	0.0%	85.7%	14.3%	100.0%
	7-8	6	0.0%	0.0%	0.0%	33.3%	66.7%	100.0%
	10	5	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Science	4	6	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
	8	5	0.0%	0.0%	0.0%	40.0%	60.0%	100.0%
	10	5	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%

Question 5

I understood how to sort the profiles.

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		69	1.4%	0.0%	1.4%	47.8%	49.3%	97.1%
Mathematics	3-4	6	0.0%	0.0%	0.0%	66.7%	33.3%	100.0%
	5-6	8	0.0%	0.0%	0.0%	37.5%	62.5%	100.0%
	7-8	8	0.0%	0.0%	0.0%	87.5%	12.5%	100.0%
	10	5	0.0%	0.0%	20.0%	0.0%	80.0%	80.0%
Reading	3-4	8	0.0%	0.0%	0.0%	50.0%	50.0%	100.0%
	5-6	7	0.0%	0.0%	0.0%	71.4%	28.6%	100.0%
	7-8	6	0.0%	0.0%	0.0%	50.0%	50.0%	100.0%
	10	5	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Science	4	6	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
	8	5	0.0%	0.0%	0.0%	80.0%	20.0%	100.0%
	10	5	20.0%	0.0%	0.0%	60.0%	20.0%	80.0%

Question 6

Overall, I believe that my opinions were considered and valued by my group.

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		69	0.0%	0.0%	1.4%	20.3%	78.3%	98.6%
Mathematics	3-4	6	0.0%	0.0%	0.0%	50.0%	50.0%	100.0%
	5-6	8	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
	7-8	8	0.0%	0.0%	12.5%	25.0%	62.5%	87.5%
	10	5	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Reading	3-4	8	0.0%	0.0%	0.0%	12.5%	87.5%	100.0%
	5-6	7	0.0%	0.0%	0.0%	57.1%	42.9%	100.0%
	7-8	6	0.0%	0.0%	0.0%	33.3%	66.7%	100.0%
	10	5	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Science	4	6	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
	8	5	0.0%	0.0%	0.0%	20.0%	80.0%	100.0%
	10	5	0.0%	0.0%	0.0%	20.0%	80.0%	100.0%

Question 7

Overall, I valued the workshop as a professional development experience.

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		69	0.0%	0.0%	0.0%	29.0%	71.0%	100.0%
Mathematics	3-4	6	0.0%	0.0%	0.0%	33.3%	66.7%	100.0%
	5-6	8	0.0%	0.0%	0.0%	12.5%	87.5%	100.0%
	7-8	8	0.0%	0.0%	0.0%	12.5%	87.5%	100.0%
	10	5	0.0%	0.0%	0.0%	40.0%	60.0%	100.0%
Reading	3-4	8	0.0%	0.0%	0.0%	37.5%	62.5%	100.0%
	5-6	7	0.0%	0.0%	0.0%	42.9%	57.1%	100.0%
	7-8	6	0.0%	0.0%	0.0%	50.0%	50.0%	100.0%
	10	5	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Science	4	6	0.0%	0.0%	0.0%	16.7%	83.3%	100.0%
	8	5	0.0%	0.0%	0.0%	40.0%	60.0%	100.0%
	10	5	0.0%	0.0%	0.0%	40.0%	60.0%	100.0%

Question 8

Overall, I was satisfied with my group's final recommendations.

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		68	0.0%	0.0%	1.5%	30.9%	67.6%	98.5%
Mathematics	3-4	6	0.0%	0.0%	0.0%	50.0%	50.0%	100.0%
	5-6	8	0.0%	0.0%	0.0%	12.5%	87.5%	100.0%
	7-8	8	0.0%	0.0%	0.0%	37.5%	62.5%	100.0%
	10	5	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Reading	3-4	7	0.0%	0.0%	0.0%	42.9%	57.1%	100.0%
	5-6	7	0.0%	0.0%	0.0%	85.7%	14.3%	100.0%
	7-8	6	0.0%	0.0%	0.0%	16.7%	83.3%	100.0%
	10	5	0.0%	0.0%	0.0%	20.0%	80.0%	100.0%
Science	4	6	0.0%	0.0%	0.0%	16.7%	83.3%	100.0%
	8	5	0.0%	0.0%	0.0%	20.0%	80.0%	100.0%
	10	5	0.0%	0.0%	20.0%	20.0%	60.0%	80.0%

Question 9

Overall, my table's discussions were open and honest.

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		69	0.0%	1.4%	0.0%	11.6%	87.0%	98.6%
Mathematics	3-4	6	0.0%	0.0%	0.0%	33.3%	66.7%	100.0%
	5-6	8	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
	7-8	8	0.0%	12.5%	0.0%	12.5%	75.0%	87.5%
	10	5	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Reading	3-4	8	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
	5-6	7	0.0%	0.0%	0.0%	57.1%	42.9%	100.0%
	7-8	6	0.0%	0.0%	0.0%	16.7%	83.3%	100.0%
	10	5	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Science	4	6	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
	8	5	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
	10	5	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%

Question 10

Participating in the standard setting increased my understanding of the test.

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		69	0.0%	0.0%	0.0%	21.7%	78.3%	100.0%
Mathematics	3-4	6	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
	5-6	8	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
	7-8	8	0.0%	0.0%	0.0%	12.5%	87.5%	100.0%
	10	5	0.0%	0.0%	0.0%	20.0%	80.0%	100.0%
Reading	3-4	8	0.0%	0.0%	0.0%	50.0%	50.0%	100.0%
	5-6	7	0.0%	0.0%	0.0%	42.9%	57.1%	100.0%
	7-8	6	0.0%	0.0%	0.0%	16.7%	83.3%	100.0%
	10	5	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Science	4	6	0.0%	0.0%	0.0%	33.3%	66.7%	100.0%
	8	5	0.0%	0.0%	0.0%	20.0%	80.0%	100.0%
	10	5	0.0%	0.0%	0.0%	40.0%	60.0%	100.0%

Question 11

Reviewing the achievement descriptors helped me rate the profiles.

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		69	0.0%	1.4%	1.4%	39.1%	58.0%	97.1%
Mathematics	3-4	6	0.0%	0.0%	0.0%	16.7%	83.3%	100.0%
	5-6	8	0.0%	0.0%	0.0%	25.0%	75.0%	100.0%
	7-8	8	0.0%	0.0%	0.0%	25.0%	75.0%	100.0%
	10	5	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
Reading	3-4	8	0.0%	12.5%	12.5%	50.0%	25.0%	75.0%
	5-6	7	0.0%	0.0%	0.0%	57.1%	42.9%	100.0%
	7-8	6	0.0%	0.0%	0.0%	50.0%	50.0%	100.0%
	10	5	0.0%	0.0%	0.0%	40.0%	60.0%	100.0%
Science	4	6	0.0%	0.0%	0.0%	33.3%	66.7%	100.0%
	8	5	0.0%	0.0%	0.0%	80.0%	20.0%	100.0%
	10	5	0.0%	0.0%	0.0%	60.0%	40.0%	100.0%

Question 12

The workshop was well organized.

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		69	0.0%	1.4%	8.7%	37.7%	52.2%	89.9%
Mathematics	3-4	6	0.0%	0.0%	0.0%	16.7%	83.3%	100.0%
	5-6	8	0.0%	12.5%	12.5%	37.5%	37.5%	75.0%
	7-8	8	0.0%	0.0%	25.0%	37.5%	37.5%	75.0%
	10	5	0.0%	0.0%	20.0%	0.0%	80.0%	80.0%
Reading	3-4	8	0.0%	0.0%	12.5%	12.5%	75.0%	87.5%
	5-6	7	0.0%	0.0%	0.0%	57.1%	42.9%	100.0%
	7-8	6	0.0%	0.0%	0.0%	66.7%	33.3%	100.0%
	10	5	0.0%	0.0%	0.0%	60.0%	40.0%	100.0%
Science	4	6	0.0%	0.0%	0.0%	33.3%	66.7%	100.0%
	8	5	0.0%	0.0%	0.0%	40.0%	60.0%	100.0%
	10	5	0.0%	0.0%	20.0%	60.0%	20.0%	80.0%

Question 13

The goals for the profile sorting procedure were clear.

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		69	1.4%	2.9%	1.4%	47.8%	46.4%	94.2%
Mathematics	3-4	6	0.0%	0.0%	0.0%	33.3%	66.7%	100.0%
	5-6	8	0.0%	0.0%	0.0%	50.0%	50.0%	100.0%
	7-8	8	0.0%	12.5%	0.0%	75.0%	12.5%	87.5%
	10	5	0.0%	20.0%	0.0%	20.0%	60.0%	80.0%
Reading	3-4	8	0.0%	0.0%	12.5%	12.5%	75.0%	87.5%
	5-6	7	0.0%	0.0%	0.0%	71.4%	28.6%	100.0%
	7-8	6	0.0%	0.0%	0.0%	66.7%	33.3%	100.0%
	10	5	0.0%	0.0%	0.0%	60.0%	40.0%	100.0%
Science	4	6	0.0%	0.0%	0.0%	16.7%	83.3%	100.0%
	8	5	0.0%	0.0%	0.0%	40.0%	60.0%	100.0%
	10	5	20.0%	0.0%	0.0%	80.0%	0.0%	80.0%

Question 14

The presentation of impact data was helpful to me.

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		69	0.0%	2.9%	1.4%	58.0%	37.7%	95.7%
Mathematics	3-4	6	0.0%	0.0%	0.0%	50.0%	50.0%	100.0%
	5-6	8	0.0%	0.0%	0.0%	50.0%	50.0%	100.0%
	7-8	8	0.0%	12.5%	0.0%	75.0%	12.5%	87.5%
	10	5	0.0%	0.0%	0.0%	60.0%	40.0%	100.0%
Reading	3-4	8	0.0%	0.0%	0.0%	50.0%	50.0%	100.0%
	5-6	7	0.0%	0.0%	0.0%	85.7%	14.3%	100.0%
	7-8	6	0.0%	0.0%	0.0%	50.0%	50.0%	100.0%
	10	5	0.0%	0.0%	0.0%	40.0%	60.0%	100.0%
Science	4	6	0.0%	0.0%	0.0%	33.3%	66.7%	100.0%
	8	5	0.0%	0.0%	0.0%	80.0%	20.0%	100.0%
	10	5	0.0%	20.0%	20.0%	60.0%	0.0%	60.0%

Question 15

The profile sorting procedure was well described.

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		68	0.0%	7.4%	4.4%	48.5%	39.7%	88.2%
Mathematics	3-4	6	0.0%	0.0%	16.7%	33.3%	50.0%	83.3%
	5-6	8	0.0%	0.0%	0.0%	62.5%	37.5%	100.0%
	7-8	8	0.0%	37.5%	12.5%	37.5%	12.5%	50.0%
	10	4	0.0%	25.0%	0.0%	50.0%	25.0%	75.0%
Reading	3-4	8	0.0%	0.0%	12.5%	25.0%	62.5%	87.5%
	5-6	7	0.0%	0.0%	0.0%	85.7%	14.3%	100.0%
	7-8	6	0.0%	0.0%	0.0%	50.0%	50.0%	100.0%
	10	5	0.0%	0.0%	0.0%	40.0%	60.0%	100.0%
Science	4	6	0.0%	0.0%	0.0%	0.0%	100.0%	100.0%
	8	5	0.0%	0.0%	0.0%	80.0%	20.0%	100.0%
	10	5	0.0%	20.0%	0.0%	80.0%	0.0%	80.0%

Question 16

The training on rating profiles made the task clear to me.

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		69	0.0%	5.8%	10.1%	47.8%	36.2%	84.0%
Mathematics	3-4	6	0.0%	0.0%	16.7%	66.7%	16.7%	83.4%
	5-6	8	0.0%	0.0%	12.5%	37.5%	50.0%	87.5%
	7-8	8	0.0%	25.0%	25.0%	50.0%	0.0%	50.0%
	10	5	0.0%	20.0%	0.0%	40.0%	40.0%	80.0%
Reading	3-4	8	0.0%	0.0%	25.0%	12.5%	62.5%	75.0%
	5-6	7	0.0%	0.0%	14.3%	71.4%	14.3%	85.7%
	7-8	6	0.0%	0.0%	0.0%	50.0%	50.0%	100.0%
	10	5	0.0%	0.0%	0.0%	40.0%	60.0%	100.0%
Science	4	6	0.0%	0.0%	0.0%	33.3%	66.7%	100.0%
	8	5	0.0%	0.0%	0.0%	60.0%	40.0%	100.0%
	10	5	0.0%	20.0%	0.0%	80.0%	0.0%	80.0%

Question 17

I would defend the *Basic* cut scores against criticism that they are too high.

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		68	1.5%	1.5%	8.8%	51.5%	36.8%	88.3%
Mathematics	3-4	6	0.0%	0.0%	16.7%	50.0%	33.3%	83.3%
	5-6	8	0.0%	0.0%	0.0%	12.5%	87.5%	100.0%
	7-8	8	12.5%	12.5%	12.5%	25.0%	37.5%	62.5%
	10	5	0.0%	0.0%	0.0%	40.0%	60.0%	100.0%
Reading	3-4	8	0.0%	0.0%	25.0%	75.0%	0.0%	75.0%
	5-6	6	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
	7-8	6	0.0%	0.0%	33.3%	33.3%	33.3%	66.6%
	10	5	0.0%	0.0%	0.0%	60.0%	40.0%	100.0%
Science	4	6	0.0%	0.0%	0.0%	33.3%	66.7%	100.0%
	8	5	0.0%	0.0%	0.0%	60.0%	40.0%	100.0%
	10	5	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%

Question 18

I would defend the *Basic* cut scores against criticism that they are too low.

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		69	0.0%	5.8%	4.3%	53.6%	36.2%	89.8%
Mathematics	3-4	6	0.0%	0.0%	16.7%	66.7%	16.7%	83.4%
	5-6	8	0.0%	0.0%	0.0%	12.5%	87.5%	100.0%
	7-8	8	0.0%	25.0%	0.0%	25.0%	50.0%	75.0%
	10	5	0.0%	20.0%	0.0%	40.0%	40.0%	80.0%
Reading	3-4	8	0.0%	12.5%	0.0%	75.0%	12.5%	87.5%
	5-6	7	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
	7-8	6	0.0%	0.0%	33.3%	33.3%	33.3%	66.6%
	10	5	0.0%	0.0%	0.0%	60.0%	40.0%	100.0%
Science	4	6	0.0%	0.0%	0.0%	33.3%	66.7%	100.0%
	8	5	0.0%	0.0%	0.0%	60.0%	40.0%	100.0%
	10	5	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%

Question 19

I would defend the *Proficient* cut scores against criticism that they are too high.

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		69	1.4%	1.4%	10.1%	46.4%	40.6%	87.0%
Mathematics	3-4	6	0.0%	0.0%	16.7%	50.0%	33.3%	83.3%
	5-6	8	0.0%	0.0%	0.0%	12.5%	87.5%	100.0%
	7-8	8	12.5%	12.5%	12.5%	25.0%	37.5%	62.5%
	10	5	0.0%	0.0%	0.0%	40.0%	60.0%	100.0%
Reading	3-4	8	0.0%	0.0%	25.0%	50.0%	25.0%	75.0%
	5-6	7	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
	7-8	6	0.0%	0.0%	33.3%	33.3%	33.3%	66.6%
	10	5	0.0%	0.0%	0.0%	40.0%	60.0%	100.0%
Science	4	6	0.0%	0.0%	16.7%	16.7%	66.7%	83.4%
	8	5	0.0%	0.0%	0.0%	60.0%	40.0%	100.0%
	10	5	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%

Question 20

I would defend the *Proficient* cut scores against criticism that they are too low.

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		69	0.0%	7.2%	7.2%	46.4%	39.1%	85.5%
Mathematics	3-4	6	0.0%	0.0%	16.7%	66.7%	16.7%	83.4%
	5-6	8	0.0%	0.0%	0.0%	12.5%	87.5%	100.0%
	7-8	8	0.0%	25.0%	12.5%	12.5%	50.0%	62.5%
	10	5	0.0%	20.0%	0.0%	40.0%	40.0%	80.0%
Reading	3-4	8	0.0%	25.0%	0.0%	50.0%	25.0%	75.0%
	5-6	7	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
	7-8	6	0.0%	0.0%	33.3%	33.3%	33.3%	66.6%
	10	5	0.0%	0.0%	0.0%	40.0%	60.0%	100.0%
Science	4	6	0.0%	0.0%	16.7%	16.7%	66.7%	83.4%
	8	5	0.0%	0.0%	0.0%	60.0%	40.0%	100.0%
	10	5	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%

Question 21

I would defend the *Advanced* cut scores against criticism that they are too high.

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		68	1.5%	7.4%	8.8%	47.1%	35.3%	82.4%
Mathematics	3-4	6	0.0%	0.0%	16.7%	50.0%	33.3%	83.3%
	5-6	8	0.0%	0.0%	0.0%	25.0%	75.0%	100.0%
	7-8	8	12.5%	25.0%	0.0%	37.5%	25.0%	62.5%
	10	4	0.0%	0.0%	0.0%	50.0%	50.0%	100.0%
Reading	3-4	8	0.0%	12.5%	37.5%	37.5%	12.5%	50.0%
	5-6	7	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
	7-8	6	0.0%	0.0%	33.3%	33.3%	33.3%	66.6%
	10	5	0.0%	0.0%	0.0%	40.0%	60.0%	100.0%
Science	4	6	0.0%	16.7%	0.0%	16.7%	66.7%	83.4%
	8	5	0.0%	20.0%	0.0%	40.0%	40.0%	80.0%
	10	5	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%

Question 22

I would defend the *Advanced* cut scores against criticism that they are too low.

Content Area	Grade	N	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Agree + Strongly Agree
Overall		68	0.0%	1.5%	7.4%	50.0%	41.2%	91.2%
Mathematics	3-4	6	0.0%	0.0%	16.7%	66.7%	16.7%	83.4%
	5-6	8	0.0%	0.0%	0.0%	12.5%	87.5%	100.0%
	7-8	8	0.0%	12.5%	0.0%	37.5%	50.0%	87.5%
	10	4	0.0%	0.0%	0.0%	50.0%	50.0%	100.0%
Reading	3-4	8	0.0%	0.0%	12.5%	50.0%	37.5%	87.5%
	5-6	7	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%
	7-8	6	0.0%	0.0%	33.3%	33.3%	33.3%	66.6%
	10	5	0.0%	0.0%	0.0%	40.0%	60.0%	100.0%
Science	4	6	0.0%	0.0%	16.7%	16.7%	66.7%	83.4%
	8	5	0.0%	0.0%	0.0%	60.0%	40.0%	100.0%
	10	5	0.0%	0.0%	0.0%	100.0%	0.0%	100.0%

Question 23

What is your occupation?

Content Area	Grade	N	Teacher	Administrator	Other
Overall		69	91.3%	2.9%	5.8%
Mathematics	3-4	6	100.0%	0.0%	0.0%
	5-6	8	100.0%	0.0%	0.0%
	7-8	8	87.5%	0.0%	12.5%
	10	5	100.0%	0.0%	0.0%
Reading	3-4	8	87.5%	0.0%	12.5%
	5-6	7	85.7%	14.3%	0.0%
	7-8	6	83.3%	0.0%	16.7%
	10	5	80.0%	20.0%	0.0%
Science	4	6	83.3%	0.0%	16.7%
	8	5	100.0%	0.0%	0.0%
	10	5	100.0%	0.0%	0.0%

Question 24

How many years in your current profession?

Content Area	Grade	N	1-5	6-10	11-15	16-20	21+
Overall		68	16.2%	26.5%	19.1%	16.2%	22.1%
Mathematics	3-4	6	50.0%	16.7%	16.7%	16.7%	0.0%
	5-6	8	0.0%	50.0%	12.5%	12.5%	25.0%
	7-8	8	0.0%	25.0%	25.0%	25.0%	25.0%
	10	5	20.0%	40.0%	0.0%	20.0%	20.0%
Reading	3-4	8	12.5%	0.0%	25.0%	25.0%	37.5%
	5-6	7	28.6%	57.1%	14.3%	0.0%	0.0%
	7-8	6	16.7%	0.0%	0.0%	33.3%	50.0%
	10	5	20.0%	40.0%	40.0%	0.0%	0.0%
Science	4	5	0.0%	0.0%	20.0%	40.0%	40.0%
	8	5	20.0%	20.0%	40.0%	0.0%	20.0%
	10	5	20.0%	40.0%	20.0%	0.0%	20.0%

Question 25

What is your primary role at this standard setting?

Content Area	Grade	N	Educator	Parent	Community Member	Business Member
Overall		69	98.6%	0.0%	1.4%	0.0%
Mathematics	3-4	6	100.0%	0.0%	0.0%	0.0%
	5-6	8	100.0%	0.0%	0.0%	0.0%
	7-8	8	100.0%	0.0%	0.0%	0.0%
	10	5	100.0%	0.0%	0.0%	0.0%
Reading	3-4	8	100.0%	0.0%	0.0%	0.0%
	5-6	7	85.7%	0.0%	14.3%	0.0%
	7-8	6	100.0%	0.0%	0.0%	0.0%
	10	5	100.0%	0.0%	0.0%	0.0%
Science	4	6	100.0%	0.0%	0.0%	0.0%
	8	5	100.0%	0.0%	0.0%	0.0%
	10	5	100.0%	0.0%	0.0%	0.0%

Question 26

What is your highest education level?

Content Area	Grade	N	HSD or GED	Bachelor's	Master's	Doctorate
Overall		69	0.0%	29.0%	71.0%	0.0%
Mathematics	3-4	6	0.0%	50.0%	50.0%	0.0%
	5-6	8	0.0%	25.0%	75.0%	0.0%
	7-8	8	0.0%	25.0%	75.0%	0.0%
	10	5	0.0%	40.0%	60.0%	0.0%
Reading	3-4	8	0.0%	12.5%	87.5%	0.0%
	5-6	7	0.0%	42.9%	57.1%	0.0%
	7-8	6	0.0%	0.0%	100.0%	0.0%
	10	5	0.0%	40.0%	60.0%	0.0%
Science	4	6	0.0%	0.0%	100.0%	0.0%
	8	5	0.0%	60.0%	40.0%	0.0%
	10	5	0.0%	40.0%	60.0%	0.0%

Question 27

What is your gender?

Content Area	Grade	N	Male	Female
Overall		69	4.3%	95.7%
Mathematics	3-4	6	0.0%	100.0%
	5-6	8	0.0%	100.0%
	7-8	8	12.5%	87.5%
	10	5	20.0%	80.0%
Reading	3-4	8	0.0%	100.0%
	5-6	7	0.0%	100.0%
	7-8	6	16.7%	83.3%
	10	5	0.0%	100.0%
Science	4	6	0.0%	100.0%
	8	5	0.0%	100.0%
	10	5	0.0%	100.0%

Question 28

What is your race/ethnicity?

Content Area	Grade	N	Asian/ Pacific Islander	Hispanic	Black/ African- American	American Indian	White	Other
Overall		69	0.0%	4.3%	4.3%	0.0%	91.3%	0.0%
Mathematics	3-4	6	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
	5-6	8	0.0%	12.5%	0.0%	0.0%	87.5%	0.0%
	7-8	8	0.0%	0.0%	12.5%	0.0%	87.5%	0.0%
	10	5	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
Reading	3-4	8	0.0%	12.5%	0.0%	0.0%	87.5%	0.0%
	5-6	7	0.0%	14.3%	0.0%	0.0%	85.7%	0.0%
	7-8	6	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
	10	5	0.0%	0.0%	20.0%	0.0%	80.0%	0.0%
Science	4	6	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
	8	5	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%
	10	5	0.0%	0.0%	20.0%	0.0%	80.0%	0.0%

Question 29

Have you taught Special Education?

Content Area	Grade	N	Yes	No
Overall		68	67.6%	32.4%
Mathematics	3-4	6	66.7%	33.3%
	5-6	8	87.5%	12.5%
	7-8	8	62.5%	37.5%
	10	5	60.0%	40.0%
Reading	3-4	8	50.0%	50.0%
	5-6	7	85.7%	14.3%
	7-8	6	83.3%	16.7%
	10	5	60.0%	40.0%
Science	4	5	60.0%	40.0%
	8	5	40.0%	60.0%
	10	5	80.0%	20.0%

Question 30

Have you taught ESL/ELD?

Content Area	Grade	N	Yes	No
Overall		68	22.1%	77.9%
Mathematics	3-4	6	50.0%	50.0%
	5-6	8	12.5%	87.5%
	7-8	8	25.0%	75.0%
	10	5	0.0%	100.0%
Reading	3-4	8	50.0%	50.0%
	5-6	7	57.1%	42.9%
	7-8	6	0.0%	100.0%
	10	5	0.0%	100.0%
Science	4	5	0.0%	100.0%
	8	5	0.0%	100.0%
	10	5	20.0%	80.0%

Question 31

Have you taught Vocational Education?

Content Area	Grade	N	Yes	No
Overall		69	20.3%	79.7%
Mathematics	3-4	6	16.7%	83.3%
	5-6	8	12.5%	87.5%
	7-8	8	12.5%	87.5%
	10	5	20.0%	80.0%
Reading	3-4	8	0.0%	100.0%
	5-6	7	42.9%	57.1%
	7-8	6	16.7%	83.3%
	10	5	20.0%	80.0%
Science	4	6	0.0%	100.0%
	8	5	20.0%	80.0%
	10	5	80.0%	20.0%

Question 32

Have you taught Alternative Education?

Content Area	Grade	N	Yes	No
Overall		69	15.9%	84.1%
Mathematics	3-4	6	0.0%	100.0%
	5-6	8	12.5%	87.5%
	7-8	8	12.5%	87.5%
	10	5	0.0%	100.0%
Reading	3-4	8	12.5%	87.5%
	5-6	7	28.6%	71.4%
	7-8	6	0.0%	100.0%
	10	5	20.0%	80.0%
Science	4	6	0.0%	100.0%
	8	5	20.0%	80.0%
	10	5	80.0%	20.0%

Question 33

Have you taught Adult Education?

Content Area	Grade	N	Yes	No
Overall		69	18.8%	81.2%
Mathematics	3-4	6	0.0%	100.0%
	5-6	8	25.0%	75.0%
	7-8	8	25.0%	75.0%
	10	5	20.0%	80.0%
Reading	3-4	8	12.5%	87.5%
	5-6	7	42.9%	57.1%
	7-8	6	0.0%	100.0%
	10	5	40.0%	60.0%
Science	4	6	16.7%	83.3%
	8	5	0.0%	100.0%
	10	5	20.0%	80.0%

Question 34

Which grade (or grade band) did you work on during this standard setting?

Content Area	N	3/4	4	5/6	7/8	8	10
Overall	69	20.3%	8.7%	21.7%	20.3%	7.2%	21.7%
Mathematics	27	6	-	8	8	-	5
Reading	26	8	-	7	6	-	5
Science	16	-	6	-	-	5	5

Question 35

Which content area did you work on during this standard setting?

Content Area	N	Mathematics	Reading	Science
Overall	69	39.1%	37.7%	23.2%
3/4	14	6	8	-
4	6	-	-	6
5/6	15	8	7	-
7/8	14	8	6	-
8	5	-	-	5
10	15	5	5	5

SECTION H

Contrasting Groups Survey

Modified Contrasting Groups Survey

A Contrasting Groups (Livingston & Zieky, 1982) study was conducted using a modified analysis technique. The Contrasting Groups method (Livingston & Zieky, 1982) is one of the most-used of the student-centered standard setting methods. Educators with students tested by the WAA-SwD were asked to rate their students into the four achievement levels via back cover of the student answer document, as shown in Figure 1. The instructions for completing the survey are shown in Figure 2. Participants were given information about the study in the test administrator's manual and were asked to submit their survey responses on each student's answer document.

Participants. All educators assessing students with the WAA-SwD were invited to participate in the modified Contrasting Groups study. The Contrasting Groups survey was termed the Performance Level survey in all materials for participants (e.g., the answer documents, in the manuals, etc.)

Achievement Descriptors. After reading about the method, participants were asked to consider the WAA-SwD achievement descriptors, as part of the Wisconsin Extended Grade Band Standards. The descriptors summarized the knowledge, skills, and abilities required of students in each grade and content area.

The WAA-SwD achievement descriptors provided to participants are included in Section E. Participants were asked to study the achievement descriptors prior to making any ratings in the modified Contrasting Groups study.

Rating Students. Participants were asked to consider each of their students tested by the WAA-SwD. Participants then considered which achievement level best fit each student, as described by the achievement descriptors. Contrasting Groups participants indicated each student's achievement level for Mathematics, Reading, and Science, as appropriate. Participants made these ratings directly on the student answer documents used for the WAA-SwD.

Two sets of Contrasting Groups results were calculated. One set was based on the students sampled as part of the uniform distribution, described in Section B of this report: this set of results, presented at the time of the standard setting, corresponds with the student profiles used for the profile sorting. The second set was based on the total population of students tested by the WAA-SwD: all students whose teachers rated them into a WAA-SwD performance level during the Contrasting Groups survey are included in this set of results.

Table 1 shows the number of students who received ratings in the modified Contrasting Groups study, by grade and content area, for students sampled as part of the uniform distribution. As noted previously in this report, a sample of students with a uniform distribution of test scores was sampled for the purposes of standard setting: Table 1 only counts those students in the uniform distribution for whom Contrasting Groups judgments were made. Table 2 shows the number of students who received Contrasting Groups ratings, by grade and content area, for the total population of students, not only those in the uniform distribution.

Figure 1. Back cover of the student answer document where educators completed the survey.

Wisconsin Alternate Assessment for Students with Disabilities (WAA-SwD)

Place a student label without a barcode here or write student's name on the line.			
Student Performance Level Survey			
<p>Note: Read the Student Performance Level Survey packet before completing this section. Directions: Based on the Performance Level Descriptors and the test administrator's judgment, this student's Performance Level rating is estimated to be (please mark one rating for each content area tested on the WAA-SwD):</p>			
	Reading	Mathematics	Science
WAA-SwD Minimal Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
WAA-SwD Basic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
WAA-SwD Proficient	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
WAA-SwD Advanced	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
WAA-SwD Assessment Accommodations			
<p>Directions: Complete this section for students who participated in WAA-SwD with one or more of the following accommodations. Mark all that apply.</p>			
Type of Accommodation	Reading	Mathematics	Science
Used translation		<input type="radio"/>	<input type="radio"/>
Signed test questions and content to student		<input type="radio"/>	<input type="radio"/>
Used Braille	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Used assistive device (e.g., text-talker, adaptive keyboard, picture symbols)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Used objects or manipulatives	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Used another DPI-approved accommodation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Used a non-allowed accommodation, resulting in the invalidation of test results. No scores will be reported.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Alternate Assessment Results for Social Studies, Language Arts, and Writing			
<p>Directions: Complete this section for all students with disabilities who participated in the alternate assessment for Social Studies, Language Arts, and/or Writing. Results must be based upon DPI Administration Guide and Rating Scales.</p>			
	Social Studies	Language Arts	Writing
WAA-SwD Minimal Performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
WAA-SwD Basic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
WAA-SwD Proficient	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
WAA-SwD Advanced	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Figure 2. Instructions for completing the survey.

The Student Performance Level Survey

Your participation in this Student Performance Level Survey will provide valuable information to help develop cut scores for WAA-SwD, in Reading and Math (Gr. 3/4, 5/6, 7/8, 10) and Science (Gr. 4, 8, 10). The cut scores will be developed at a standard setting to be held in April 2008. The new cut scores will separate students into four Performance Levels (WAA-SwD Minimal Performance, WAA-SwD Basic, WAA-SwD Proficient, and WAA-SwD Advanced) based on their performance on the WAA-SwD.

The Wisconsin Department of Public Instruction (DPI) offers its appreciation in advance for the time required to complete the Student Performance Level Survey located on each student's answer document. One set of survey responses will be needed for each of your students who participated in the WAA-SwD, and your assistance is vital to the success of developing new cut scores.

The results of this survey are completely confidential. The names associated with all ratings will be removed once data analyses are complete.

Using the Contrasting Groups method for examining the Student Performance Levels, you will classify your students into one of four Performance Levels (WAA-SwD Minimal Performance, WAA-SwD Basic, WAA-SwD Proficient, and WAA-SwD Advanced) based on their performance on the WAA-SwD. To do this, you will consider the student's performance on the WAA-SwD and the descriptors of the Performance Levels developed by the DPI and included in the test materials for each student. Before moving on to the survey, please take the time to review the Performance Levels before you begin. It will also be helpful to have these handy as you complete the survey. You should have received a copy of the Performance Level descriptors in your packet along with the student test materials. Please consider these descriptors carefully as you rate each student.

Please note that your ratings will only be used to provide information for the standard setting. Your ratings will **not** affect your students' test scores.

Thank you very much for your time and participation in the Student Performance Level Survey. If you have any questions or concerns, please contact

Richard Mercado
 E-mail: richard_mercado@ctb.com
 Phone: 831.393.7290

Table 1. Number of students who received ratings in the modified Contrasting Groups study for students sampled as part of the uniform distribution.

Content Area	Grade						
	3	4	5	6	7	8	10
Mathematics	126	129	131	126	135	134	131
Reading	115	113	121	116	122	115	111
Science	—	133	—	—	—	135	132

Table 2. Number of students who received ratings in the modified Contrasting Groups study for the total population of students.

Content Area	Grade						
	3	4	5	6	7	8	10
Mathematics	791	753	772	780	804	854	764
Reading	899	890	860	855	835	864	778
Science	—	622	—	—	—	774	736

Calculating Cut Scores. The percentage of students classified in each achievement level was first calculated for each grade and content area. For example, the percentage of students classified as *Minimal Performance* in Grade 3 Mathematics was calculated. The percentage of students in each achievement level is known as *impact data*. The impact data are shown in Table 3 for the students sampled as part of the uniform distribution, and in Table 4 for the total population of students.

Table 3. Percent of students classified in each achievement level by the participants in the WAA-SwD modified Contrasting Groups study for students sampled as part of the uniform distribution*.

	Grade						
	3	4	5	6	7	8	10
Mathematics							
<i>Minimal Performance</i>	47%	40%	43%	45%	50%	41%	44%
<i>Basic</i>	26%	24%	24%	30%	24%	36%	27%
<i>Proficient</i>	17%	23%	27%	16%	19%	17%	21%
<i>Advanced</i>	10%	12%	7%	9%	7%	6%	9%
Reading							
<i>Minimal Performance</i>	48%	43%	50%	53%	42%	36%	46%
<i>Basic</i>	32%	33%	32%	23%	34%	34%	22%
<i>Proficient</i>	15%	19%	16%	19%	20%	20%	23%
<i>Advanced</i>	5%	5%	2%	5%	5%	10%	10%
Science							
<i>Minimal Performance</i>	—	49%	—	—	—	48%	45%
<i>Basic</i>	—	32%	—	—	—	29%	31%
<i>Proficient</i>	—	15%	—	—	—	14%	16%
<i>Advanced</i>	—	4%	—	—	—	9%	8%

* The number of students who received ratings in the modified Contrasting Groups study and sampled as part of the uniform distribution can be found in Table 1 of Section H.

Table 4. Percent of students classified in each achievement level by the participants in the WAA-SwD modified Contrasting Groups study for the total population of students*.

	Grade						
Mathematics	3	4	5	6	7	8	10
<i>Minimal Performance</i>	28%	23%	24%	23%	30%	30%	34%
<i>Basic</i>	27%	24%	28%	28%	26%	27%	28%
<i>Proficient</i>	29%	28%	33%	30%	29%	25%	26%
<i>Advanced</i>	17%	24%	15%	20%	15%	19%	12%
Reading	3	4	5	6	7	8	10
<i>Minimal Performance</i>	24%	20%	24%	25%	26%	25%	27%
<i>Basic</i>	27%	22%	27%	25%	28%	28%	25%
<i>Proficient</i>	31%	31%	32%	30%	29%	26%	27%
<i>Advanced</i>	18%	27%	17%	20%	17%	21%	20%
Science	3	4	5	6	7	8	10
<i>Minimal Performance</i>	—	28%	—	—	—	27%	24%
<i>Basic</i>	—	27%	—	—	—	26%	24%
<i>Proficient</i>	—	29%	—	—	—	23%	31%
<i>Advanced</i>	—	16%	—	—	—	25%	22%

* The number of students in the total population who received ratings in the modified Contrasting Groups study can be found in Table 2 of Section H.

The cut scores which most closely yielded the impact data in Tables 3 and 4 were then found using a frequency distribution of student scores. In most cases, an exact match to the Contrasting Groups impact data could not be found, so the impact data associated with the newly-identified cut scores was then calculated.

For both sets of Contrasting Groups results, this procedure was performed twice: once using the frequency distribution of student scores for the total population of students tested by the WAA-SwD; and the other using the frequency distribution of student scores for the stratified, randomly-sampled group of students with a uniform distribution of test scores.

Tables 5 and 6 show the cut scores and associated impact data with the first set of Contrasting Groups results, taken from the students sampled as part of the uniform distribution. Table 5 shows the cut scores and associated impact data calculated when the frequency distribution for the total population is used. Table 6 shows the cut scores and associated impact data calculated with the frequency distribution when the uniform distribution is used.

Tables 7 and 8 show the cut scores and associated impact data with the second set of Contrasting Groups results, taken from the total population of students. Table 7 shows the cut scores and associated impact data calculated when the frequency distribution for the total population is used. Table 8 shows the cut scores and associated impact data calculated with the frequency distribution when the uniform distribution is used.

Table 5. Cut scores and associated impact data from the WAA-SwD modified Contrasting Groups study, as taken from the students sampled as part of the uniform distribution, when calculated using the frequency distribution of student scores for the total population of students*.

Content Area	Grade	Cut Scores			Associated Impact Data Total Population			
		<i>Basic</i>	<i>Proficient</i>	<i>Advanced</i>	<i>Minimal Performance.</i>	<i>Basic</i>	<i>Proficient</i>	<i>Advanced</i>
Mathematics	3	25	30	33	46%	24%	20%	10%
	4	24	30	33	40%	23%	24%	13%
	5	24	30	34	42%	22%	30%	5%
	6	25	32	33	45%	33%	10%	12%
	7	27	32	34	49%	29%	18%	4%
	8	21	32	34	40%	39%	14%	6%
	10	19	27	31	42%	29%	18%	10%
Reading	3	24	29	30	47%	35%	10%	7%
	4	26	30	31	43%	38%	19%	0%
	5	26	30	31	47%	41%	12%	0%
	6	26	29	30	52%	25%	14%	9%
	7	23	29	31	43%	32%	17%	8%
	8	18	27	30	34%	35%	23%	7%
	10	22	27	29	47%	23%	17%	14%
Science	4	33	37	38	51%	33%	16%	0%
	8	33	38	39	48%	29%	10%	13%
	10	33	38	39	44%	36%	13%	7%

* The number of students who received ratings in the modified Contrasting Groups study and sampled as part of the uniform distribution can be found in Table 1 of Section H.

Table 6. Cut scores and associated impact data from the WAA-SwD modified Contrasting Groups study, as taken from the students sampled as part of the uniform distribution, when calculated using the frequency distribution for the uniform distribution*.

Content Area	Grade	Cut Scores			Associated Impact Data Uniform Distribution			
		<i>Basic</i>	<i>Proficient</i>	<i>Advanced</i>	<i>Minimal Performance.</i>	<i>Basic</i>	<i>Proficient</i>	<i>Advanced</i>
Mathematics	3	16	26	32	46%	29%	17%	8%
	4	15	23	31	41%	24%	24%	12%
	5	15	23	33	43%	23%	29%	6%
	6	16	26	32	45%	29%	17%	9%
	7	18	26	33	51%	23%	20%	6%
	8	14	27	33	40%	37%	17%	6%
	10	15	25	32	42%	29%	20%	9%
Reading	3	15	25	29	48%	32%	13%	6%
	4	14	24	29	44%	33%	17%	6%
	5	15	25	30	48%	32%	16%	3%
	6	16	23	29	52%	23%	19%	6%
	7	14	24	30	42%	32%	19%	6%
	8	11	22	28	35%	36%	20%	10%
	10	15	21	28	46%	20%	24%	10%
Science	4	20	31	37	49%	31%	17%	3%
	8	21	32	37	47%	31%	14%	8%
	10	21	31	37	46%	29%	17%	9%

* The number of students who received ratings in the modified Contrasting Groups study and sampled as part of the uniform distribution can be found in Table 1 of Section H.

Table 7. Cut scores and associated impact data from the WAA-SwD modified Contrasting Groups study, as taken from the total population of students, when calculated using the frequency distribution of student scores for the total population of students*.

Content Area	Grade	Cut Scores			Associated Impact Data Total Population			
		<i>Basic</i>	<i>Proficient</i>	<i>Advanced</i>	<i>Minimal Performance.</i>	<i>Basic</i>	<i>Proficient</i>	<i>Advanced</i>
Mathematics	3	18	27	32	28%	26%	31%	15%
	4	17	26	32	23%	23%	33%	22%
	5	17	27	33	25%	27%	35%	13%
	6	16	26	32	23%	26%	30%	22%
	7	19	28	33	30%	24%	33%	13%
	8	16	28	32	28%	30%	22%	20%
	10	16	25	31	33%	29%	28%	10%
Reading	3	17	25	29	24%	28%	30%	17%
	4	17	26	29	20%	23%	25%	32%
	5	18	26	30	25%	23%	41%	12%
	6	18	26	29	26%	26%	25%	23%
	7	17	26	30	27%	26%	29%	18%
	8	14	24	28	26%	27%	23%	25%
	10	16	24	28	27%	27%	24%	23%
Science	4	23	34	37	28%	28%	28%	16%
	8	24	34	38	26%	26%	25%	23%
	10	21	34	38	23%	24%	33%	20%

* The number of students in the total population who received ratings in the modified Contrasting Groups study can be found in Table 2 of Section H.

Table 8. Cut scores and associated impact data from the WAA-SwD modified Contrasting Groups study, as taken from the total population of students, when calculated using the frequency distribution for the uniform distribution*.

Content Area	Grade	Cut Scores			Associated Impact Data Uniform Distribution			
		<i>Basic</i>	<i>Proficient</i>	<i>Advanced</i>	<i>Minimal Performance.</i>	<i>Basic</i>	<i>Proficient</i>	<i>Advanced</i>
Math- ematics	3	10	19	29	29%	26%	29%	17%
	4	9	17	27	24%	24%	29%	24%
	5	8	18	30	23%	29%	34%	14%
	6	8	18	28	22%	29%	29%	20%
	7	11	20	30	31%	26%	29%	14%
	8	10	20	28	29%	29%	23%	20%
	10	12	22	31	34%	29%	26%	11%
Reading	3	7	16	25	23%	29%	29%	19%
	4	6	13	23	19%	22%	33%	26%
	5	7	16	26	23%	29%	32%	16%
	6	8	16	25	26%	26%	29%	19%
	7	9	18	27	26%	29%	29%	16%
	8	8	17	25	25%	29%	26%	20%
	10	9	17	25	26%	27%	27%	20%
Science	4	12	22	32	27%	27%	28%	17%
	8	14	23	31	27%	25%	22%	25%
	10	12	22	32	23%	26%	29%	23%

*The number of students in the total population who received ratings in the modified Contrasting Groups study can be found in Table 2 of Section H.

References

Livingston, S. A., & Zieky, M. J., (1982). *Passing scores*. Princeton, NJ: Educational Testing Service.

Contrasting Groups Survey Results Taken from:
Students Sampled as Part of the *Uniform Distribution*

Cut Scores and Impact Data Calculated Using:
Uniform Frequency Distribution

Mathematics

Results of the Contrasting Groups Survey based on Uniform Distribution Data

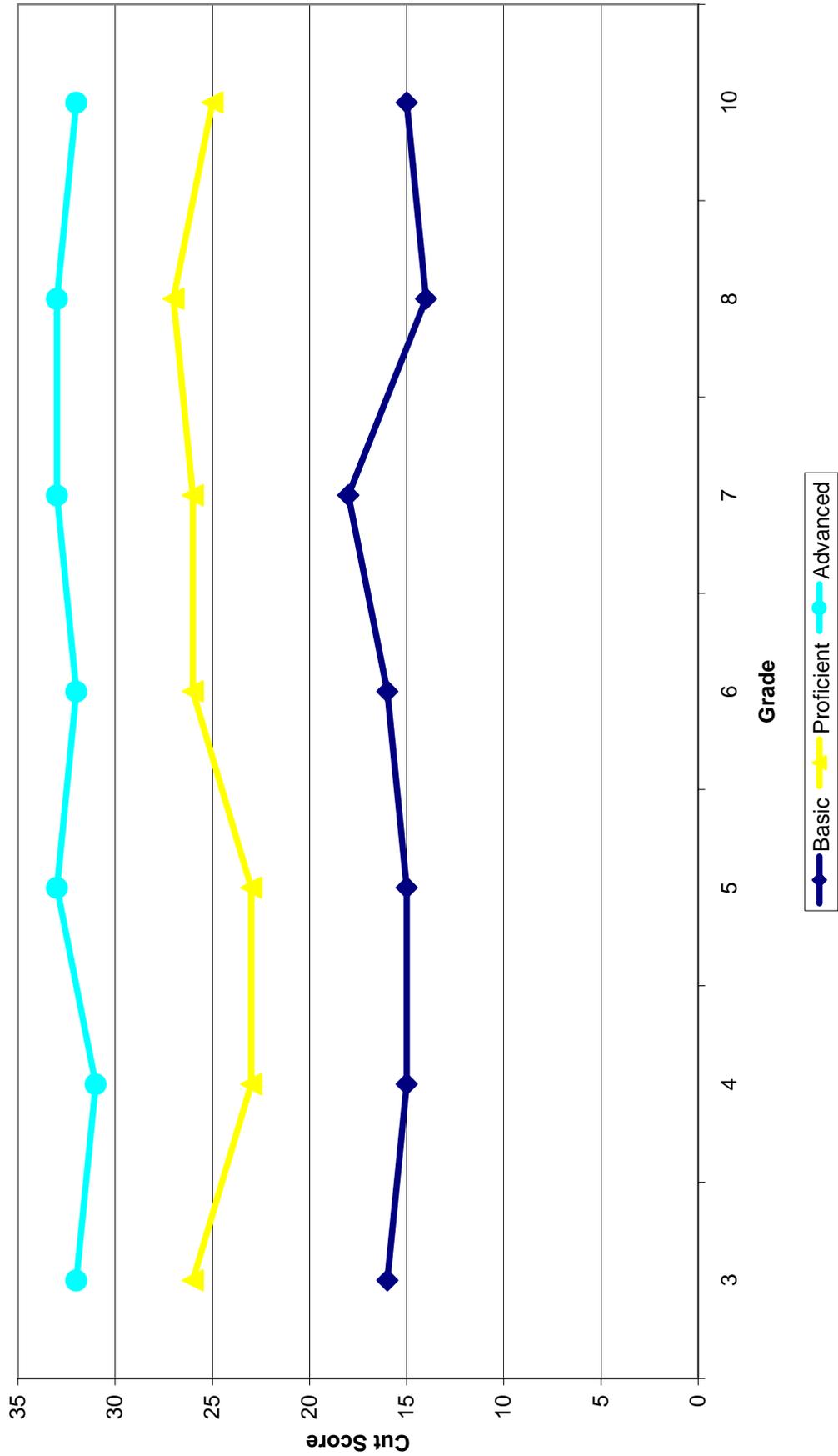
Percentage of students in each achievement level

	3	4	5	6	7	8	10	Impact
Minimal Performance	47%	40%	43%	45%	50%	41%	44%	
Basic	26%	24%	24%	30%	24%	36%	27%	
Proficient	17%	23%	27%	16%	19%	17%	21%	
Advanced	10%	12%	7%	9%	7%	6%	9%	
Proficient & Above	27%	36%	34%	25%	25%	23%	30%	

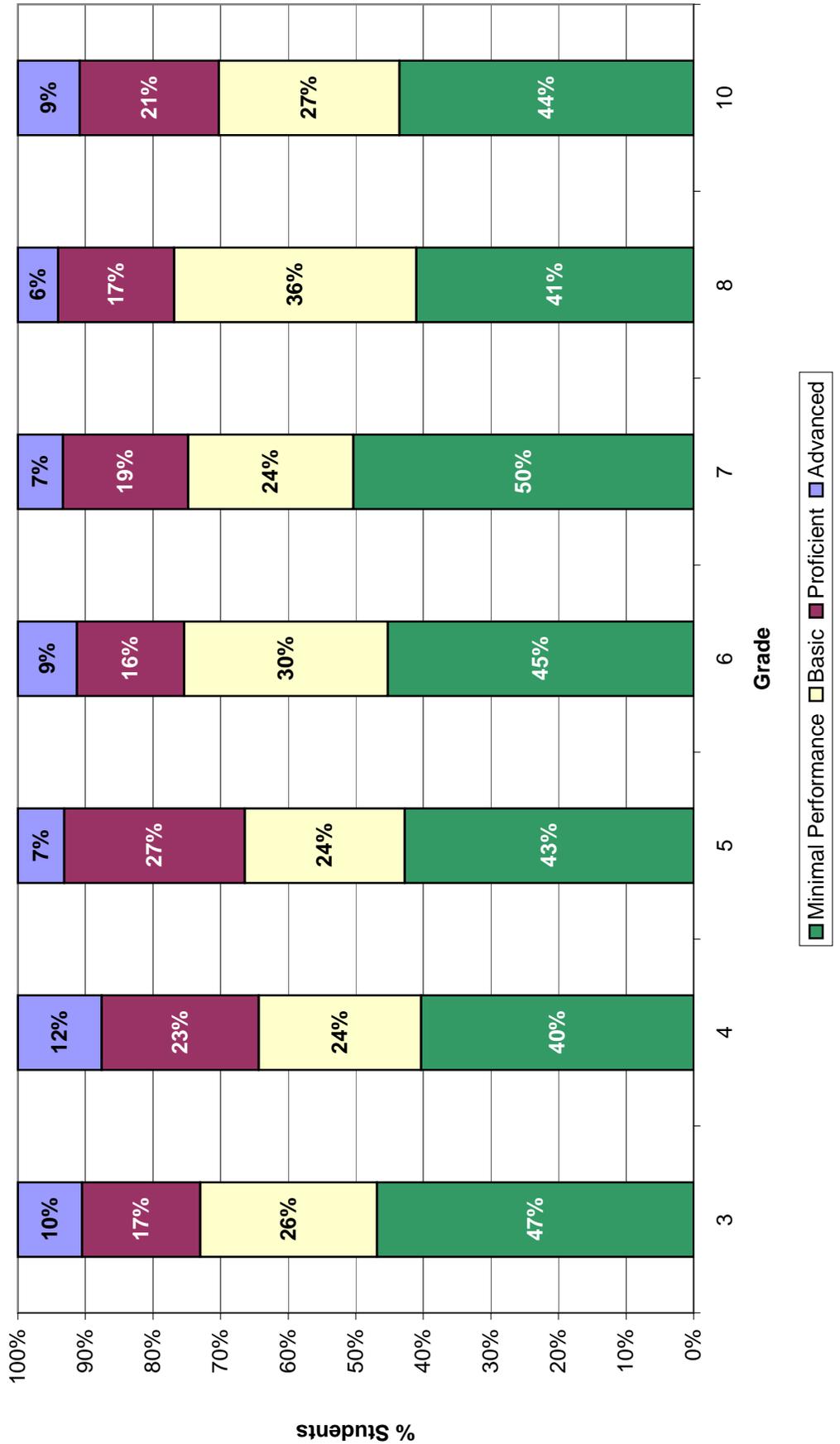
	Cut Scores						
Basic	16	15	15	16	18	14	15
Proficient	26	23	23	26	26	27	25
Advanced	32	31	33	32	33	33	32

The number of students who received ratings in the modified Contrasting Groups study and sampled as part of the uniform distribution can be found in Table 1 of Section H.

**Wisconsin Alternate Assessment for Students with Disabilities
 Mathematics Contrasting Groups, Uniform Distribution
 Cut Scores by Achievement Level**



**Wisconsin Alternate Assessment for Students with Disabilities
 Mathematics Contrasting Groups, Uniform Distribution
 Percent of Students by Achievement Level**



Reading

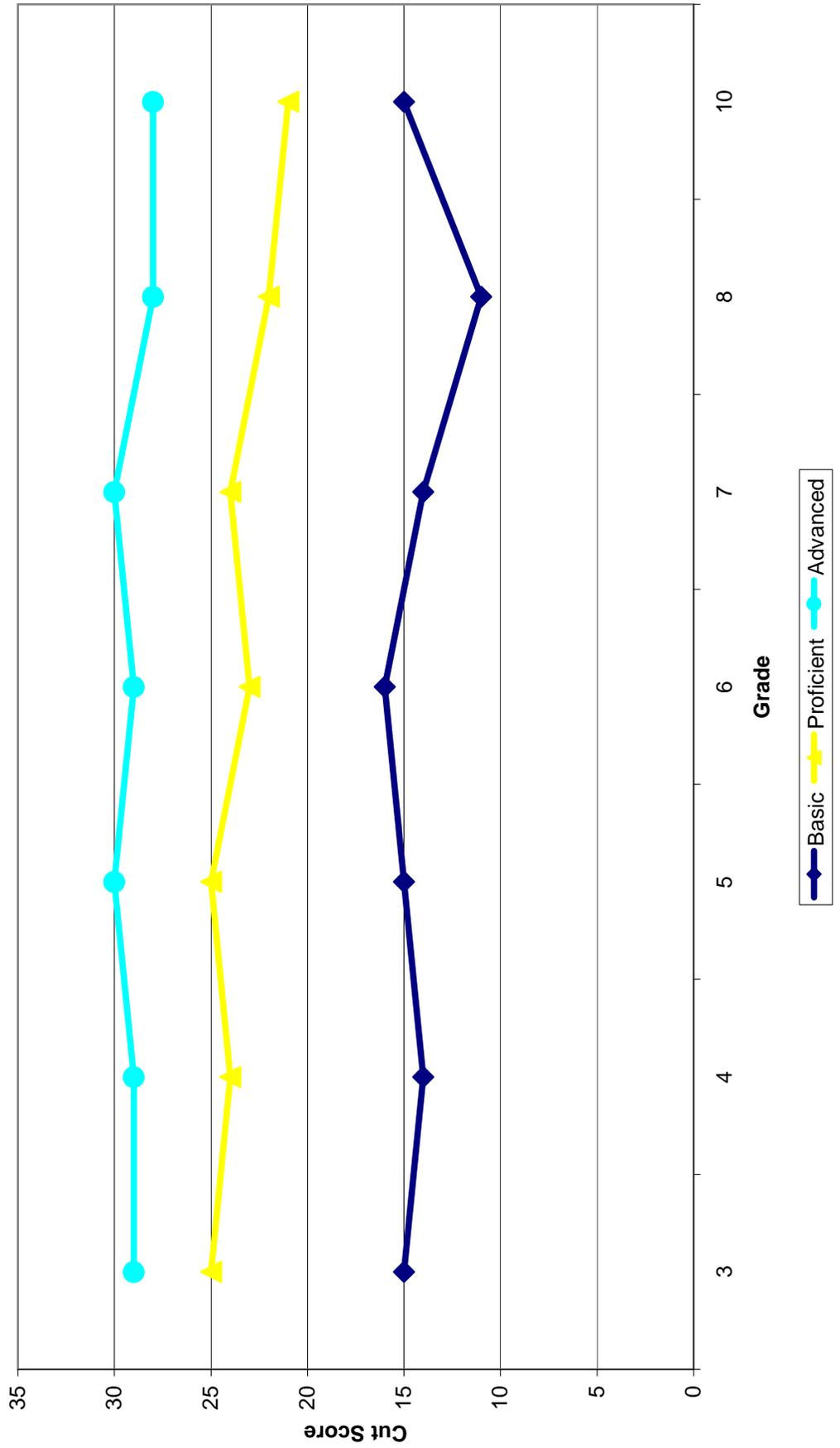
Results of the Contrasting Groups Survey based on Uniform Distribution Data

Percentage of students in each achievement level

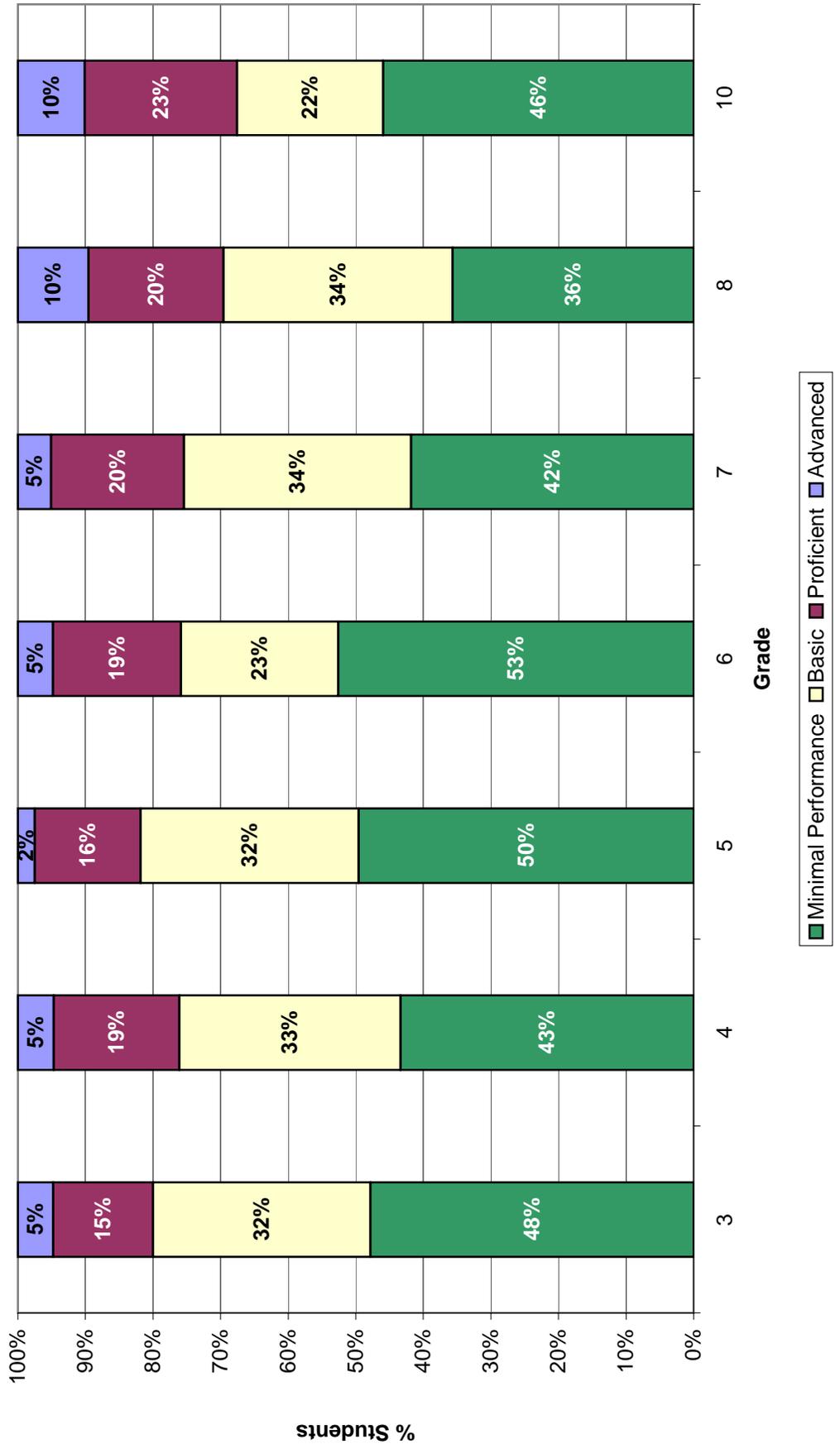
	3	4	5	6	7	8	10	Impact
Minimal Performance								
Basic	48%	43%	50%	53%	42%	36%	46%	
Proficient	32%	33%	32%	23%	34%	34%	22%	
Advanced	15%	19%	16%	19%	20%	20%	23%	
Proficient & Above	5%	5%	2%	5%	5%	10%	10%	
	20%	24%	18%	24%	25%	30%	32%	
Basic	15	14	15	16	14	11	15	
Proficient	25	24	25	23	24	22	21	
Advanced	29	29	30	29	30	28	28	
								Cut Scores

The number of students who received ratings in the modified Contrasting Groups study and sampled as part of the uniform distribution can be found in Table 1 of Section H.

**Wisconsin Alternate Assessment for Students with Disabilities
 Reading Contrasting Groups, Uniform Distribution
 Cut Scores by Achievement Level**



**Wisconsin Alternate Assessment for Students with Disabilities
Reading Contrasting Groups, Uniform Distribution
Percent of Students by Achievement Level**



Science

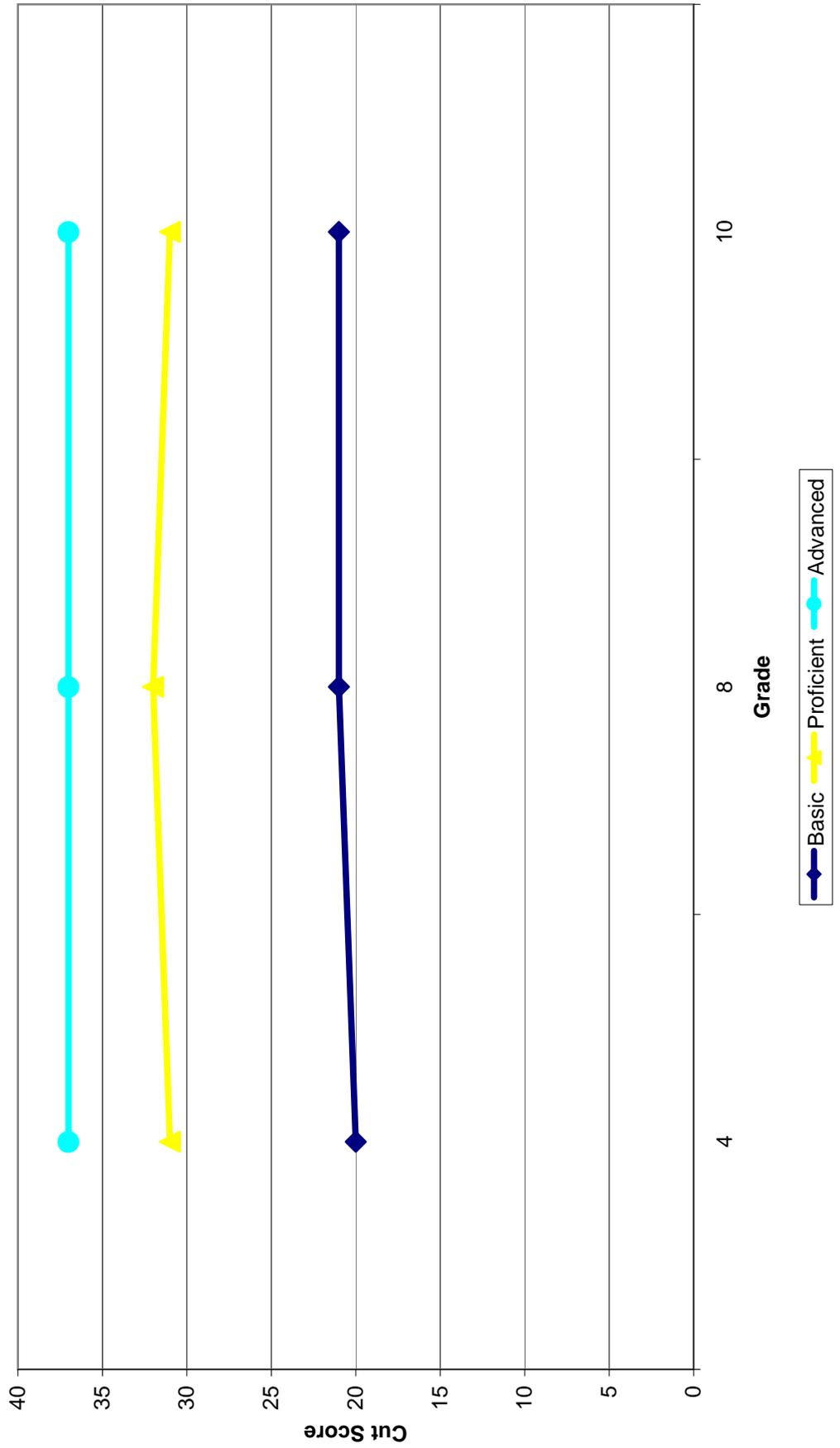
Results of the Contrasting Groups Survey based on Uniform Distribution Data

Percentage of students in each achievement level

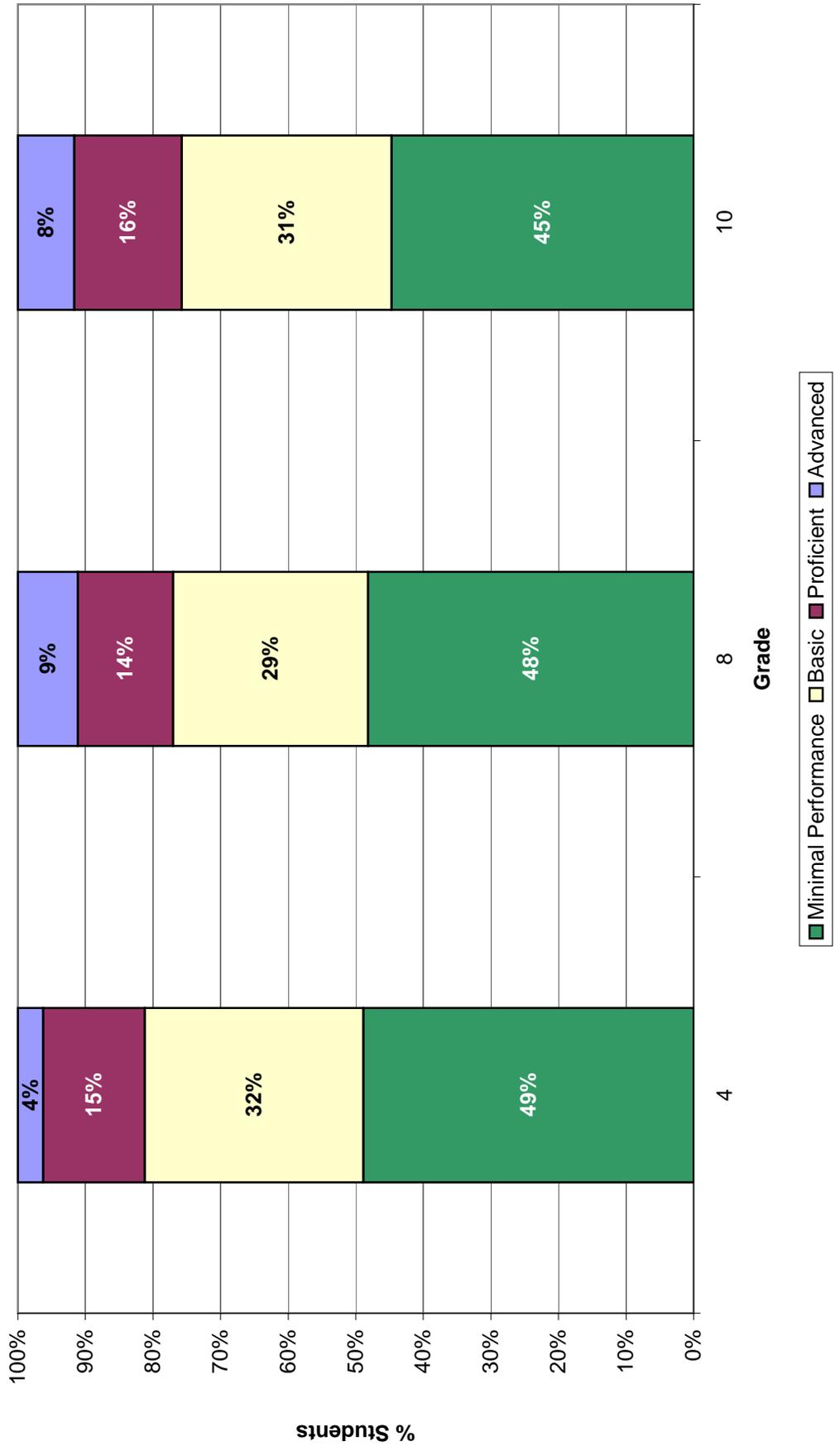
	4	8	10	Impact
Minimal Performance				
Basic	49%	48%	45%	
Proficient	32%	29%	31%	
Advanced	15%	14%	16%	
Proficient & Above	4%	9%	8%	
	19%	23%	24%	
Basic	20	21	21	Cut Scores
Proficient	31	32	31	
Advanced	37	37	37	

The number of students who received ratings in the modified Contrasting Groups study and sampled as part of the uniform distribution can be found in Table 1 of Section H.

**Wisconsin Alternate Assessment for Students with Disabilities
 Science Contrasting Groups, Uniform Distribution
 Cut Scores by Achievement Level**



**Wisconsin Alternate Assessment for Students with Disabilities
 Science Contrasting Groups, Uniform Distribution
 Percent of Students by Achievement Level**



Contrasting Groups Survey Results Taken from:
Students Sampled as Part of the *Uniform Distribution*

Cut Scores and Impact Data Calculated Using:
Total Population Frequency Distribution

Mathematics

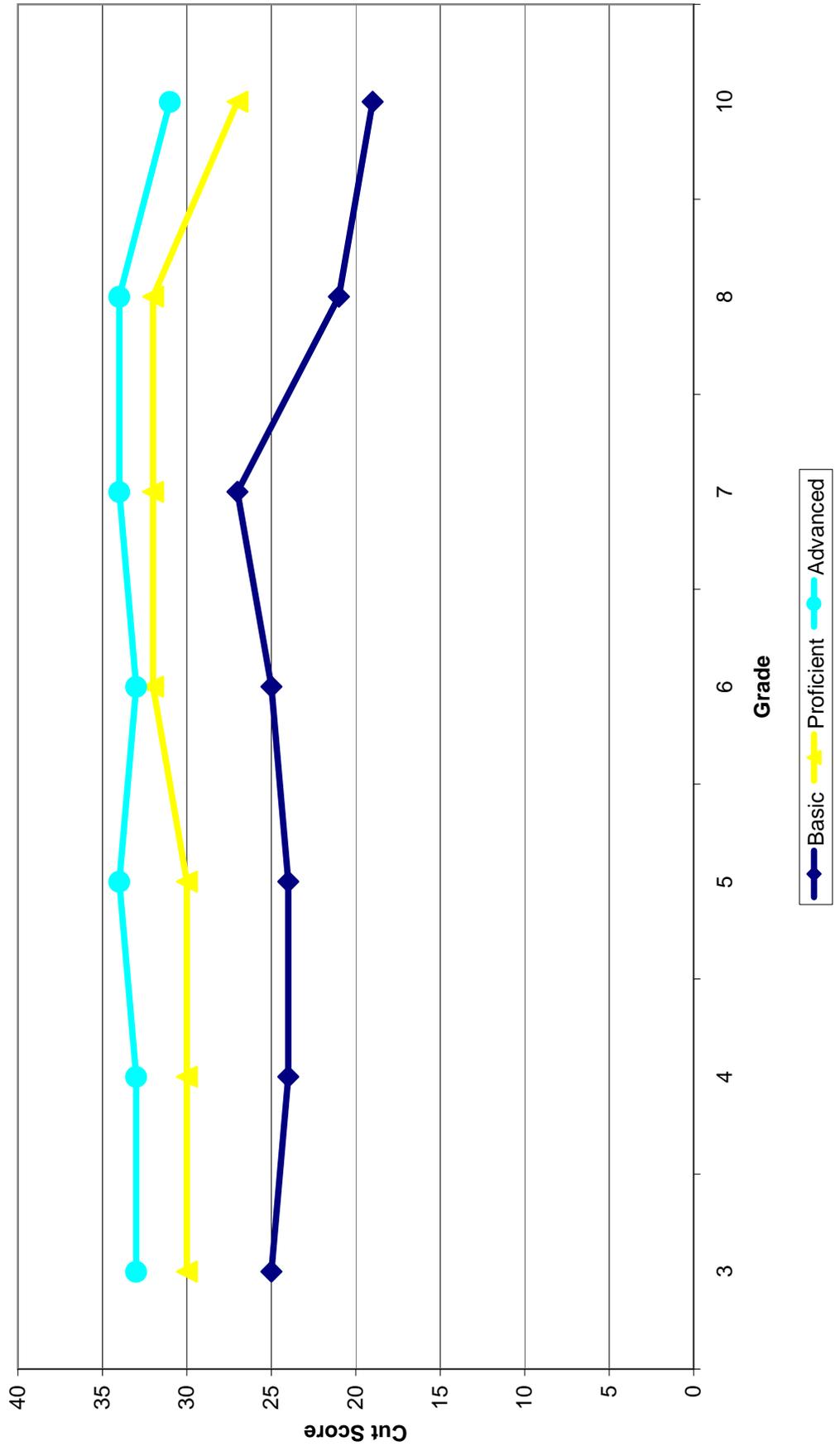
Results of the Contrasting Groups Survey based on Total Population Data

Percentage of students in each achievement level

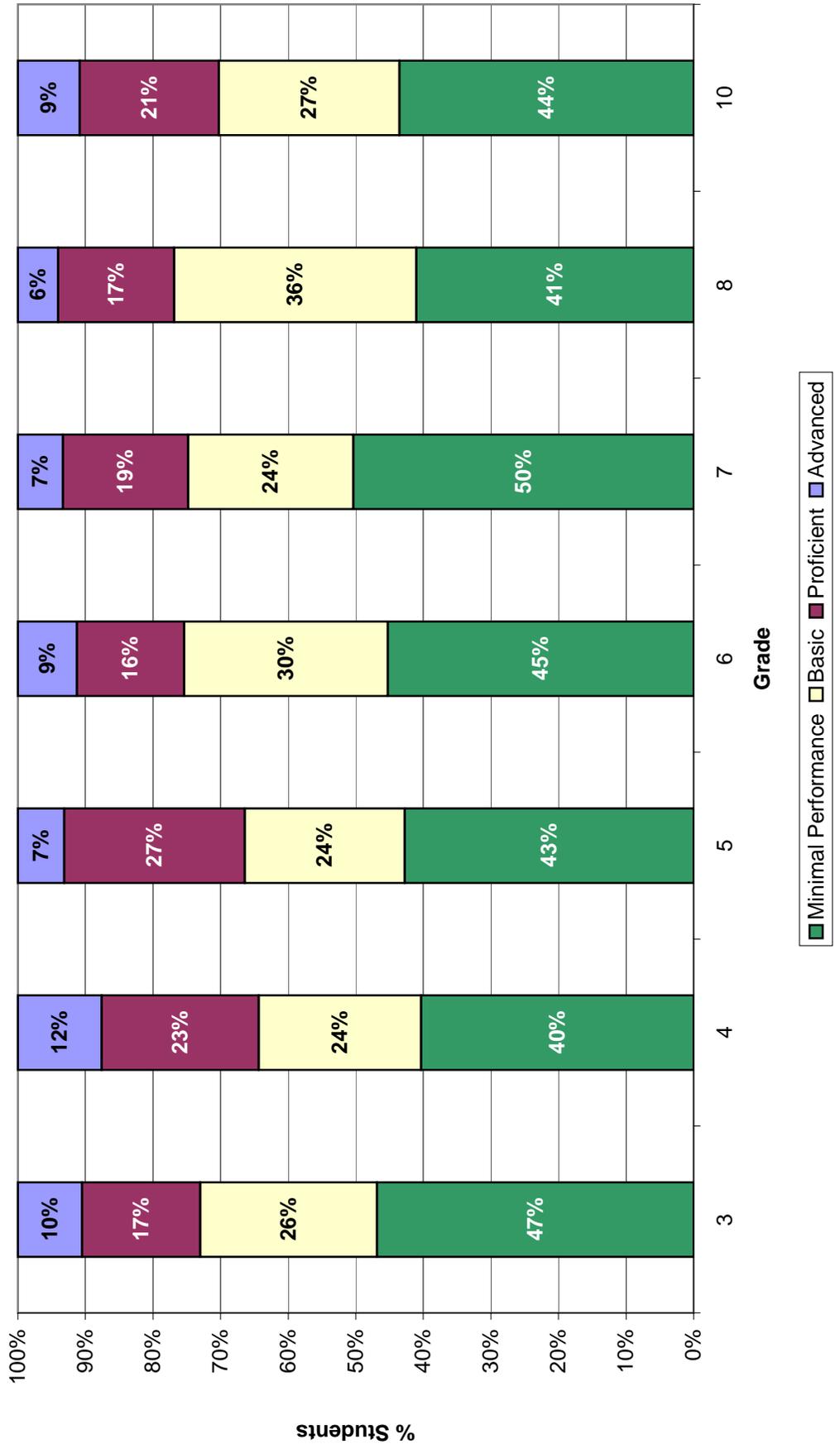
	3	4	5	6	7	8	10	Impact
Minimal Performance								
Basic	47%	40%	43%	45%	50%	41%	44%	
Proficient	26%	24%	24%	30%	24%	36%	27%	
Advanced	17%	23%	27%	16%	19%	17%	21%	
Proficient & Above	10%	12%	7%	9%	7%	6%	9%	
	27%	36%	34%	25%	25%	23%	30%	
Basic	25	24	24	25	27	21	19	
Proficient	30	30	30	32	32	32	27	
Advanced	33	33	34	33	34	34	31	

The number of students who received ratings in the modified Contrasting Groups study and sampled as part of the uniform distribution can be found in Table 1 of Section H.

**Wisconsin Alternate Assessment for Students with Disabilities
 Mathematics Contrasting Groups, Total Population
 Cut Scores by Achievement Level**



**Wisconsin Alternate Assessment for Students with Disabilities
 Mathematics Contrasting Groups, Total Population
 Percent of Students by Achievement Level**



Reading

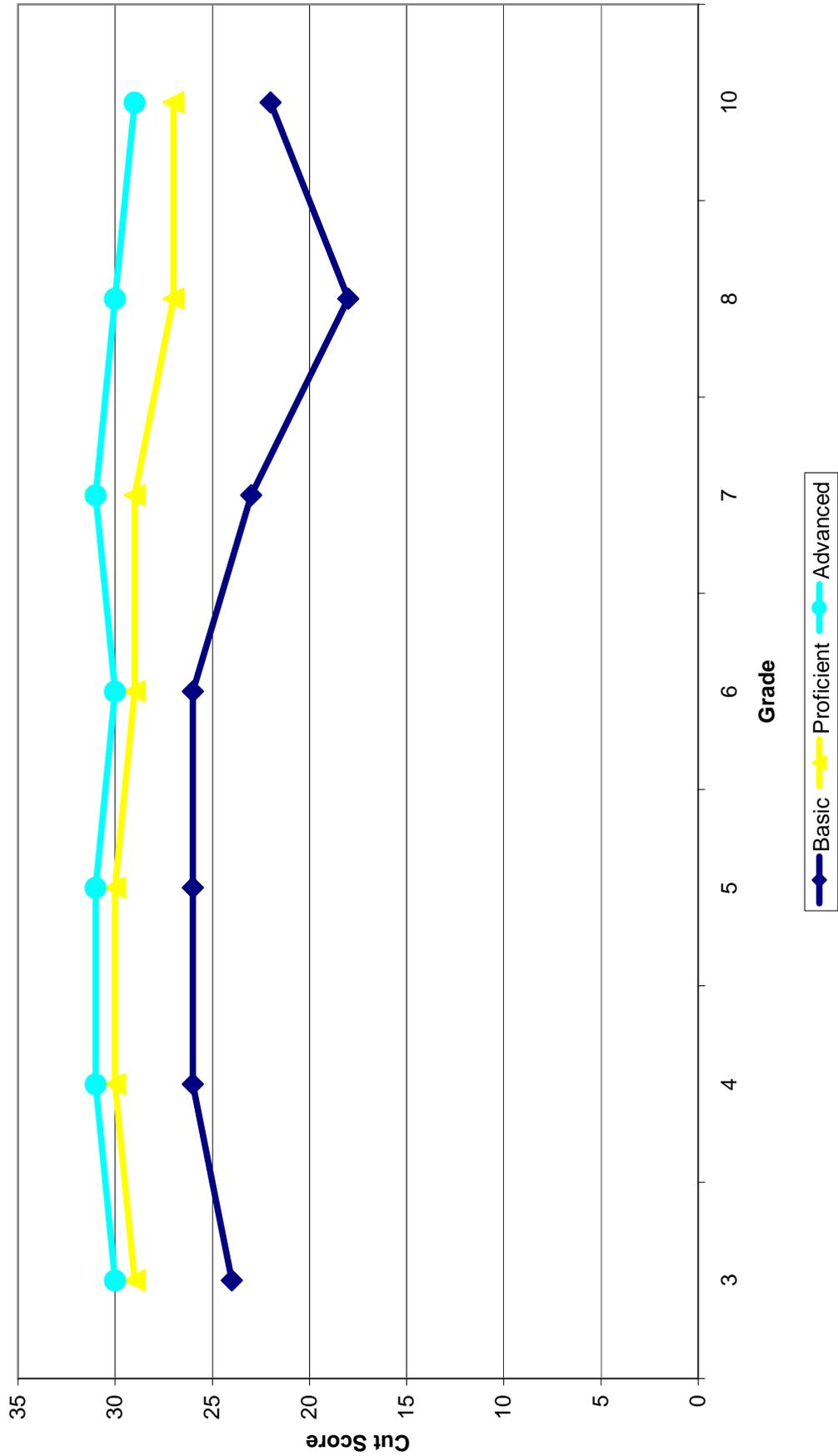
Results of the Contrasting Groups Survey based on Total Population Data

Percentage of students in each achievement level

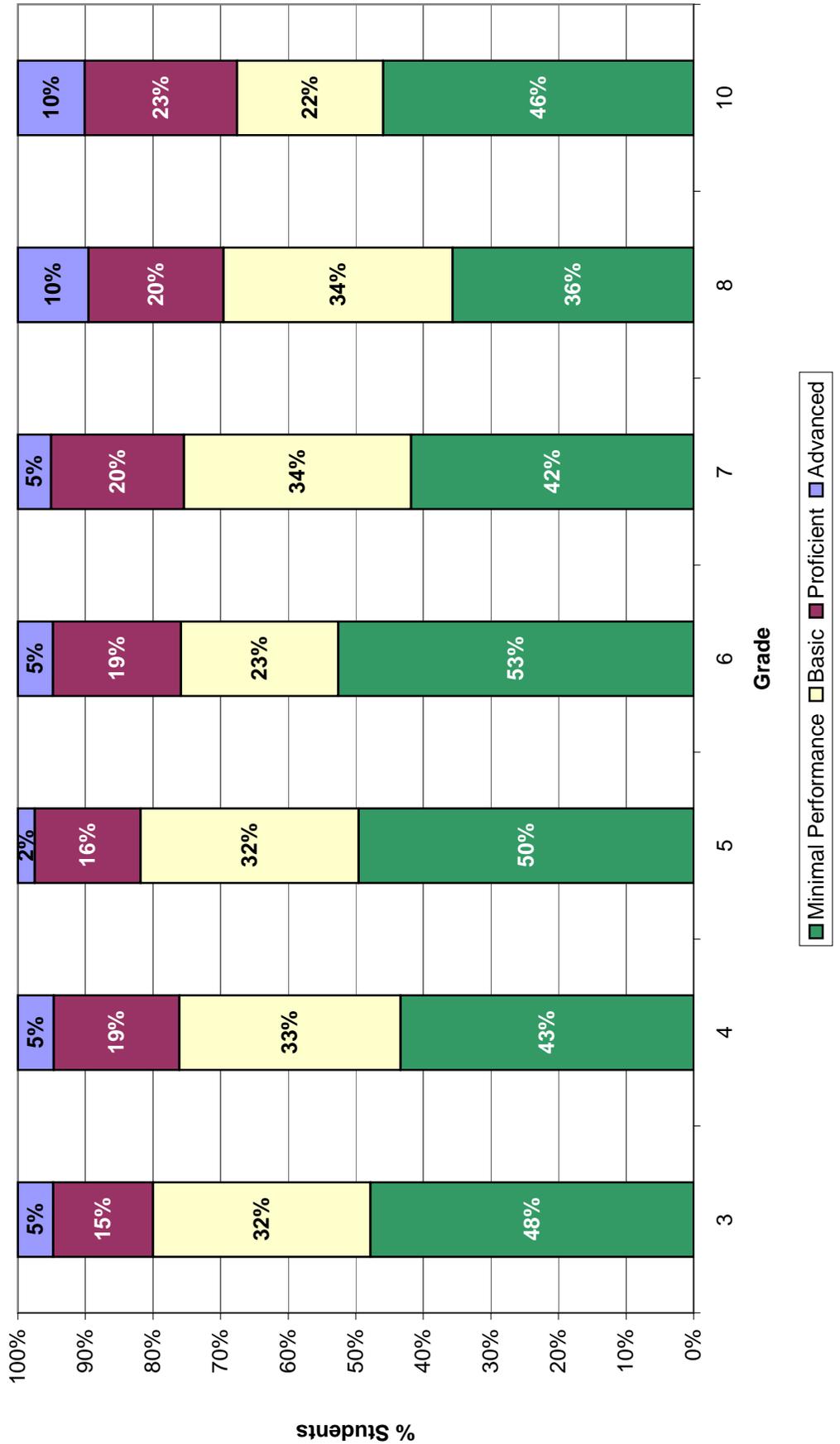
	3	4	5	6	7	8	10	Impact
Minimal Performance								
Basic	48%	43%	50%	53%	42%	36%	46%	
Proficient	32%	33%	32%	23%	34%	34%	22%	
Advanced	15%	19%	16%	19%	20%	20%	23%	
Proficient & Above	5%	5%	2%	5%	5%	10%	10%	
	20%	24%	18%	24%	25%	30%	32%	
Basic	24	26	26	26	23	18	22	Cut Scores
Proficient	29	30	30	29	29	27	27	
Advanced	30	31	31	30	31	30	29	

The number of students who received ratings in the modified Contrasting Groups study and sampled as part of the uniform distribution can be found in Table 1 of Section H.

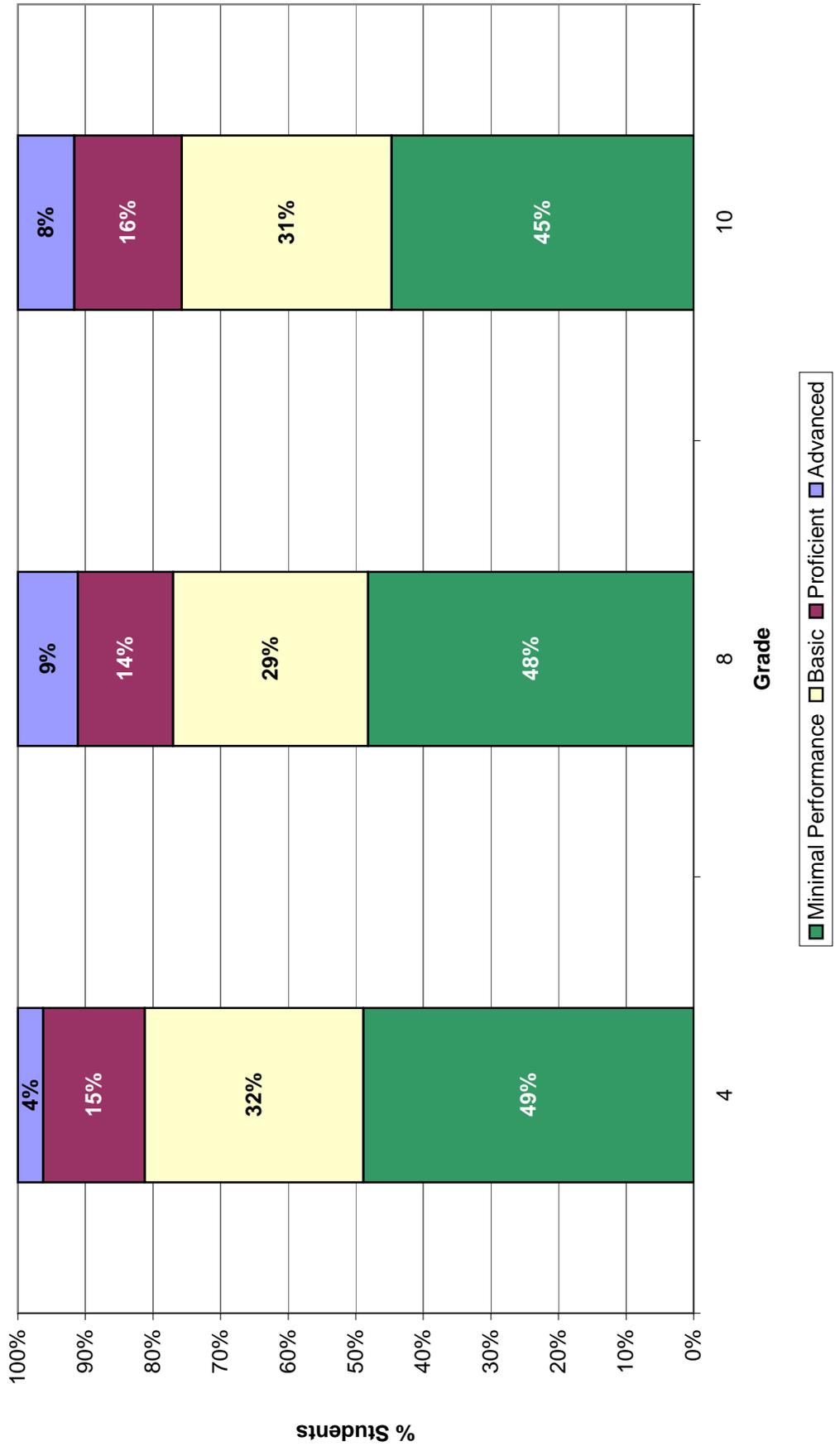
Wisconsin Alternate Assessment for Students with Disabilities
 Reading Contrasting Groups, Total Population
 Cut Scores by Achievement Level



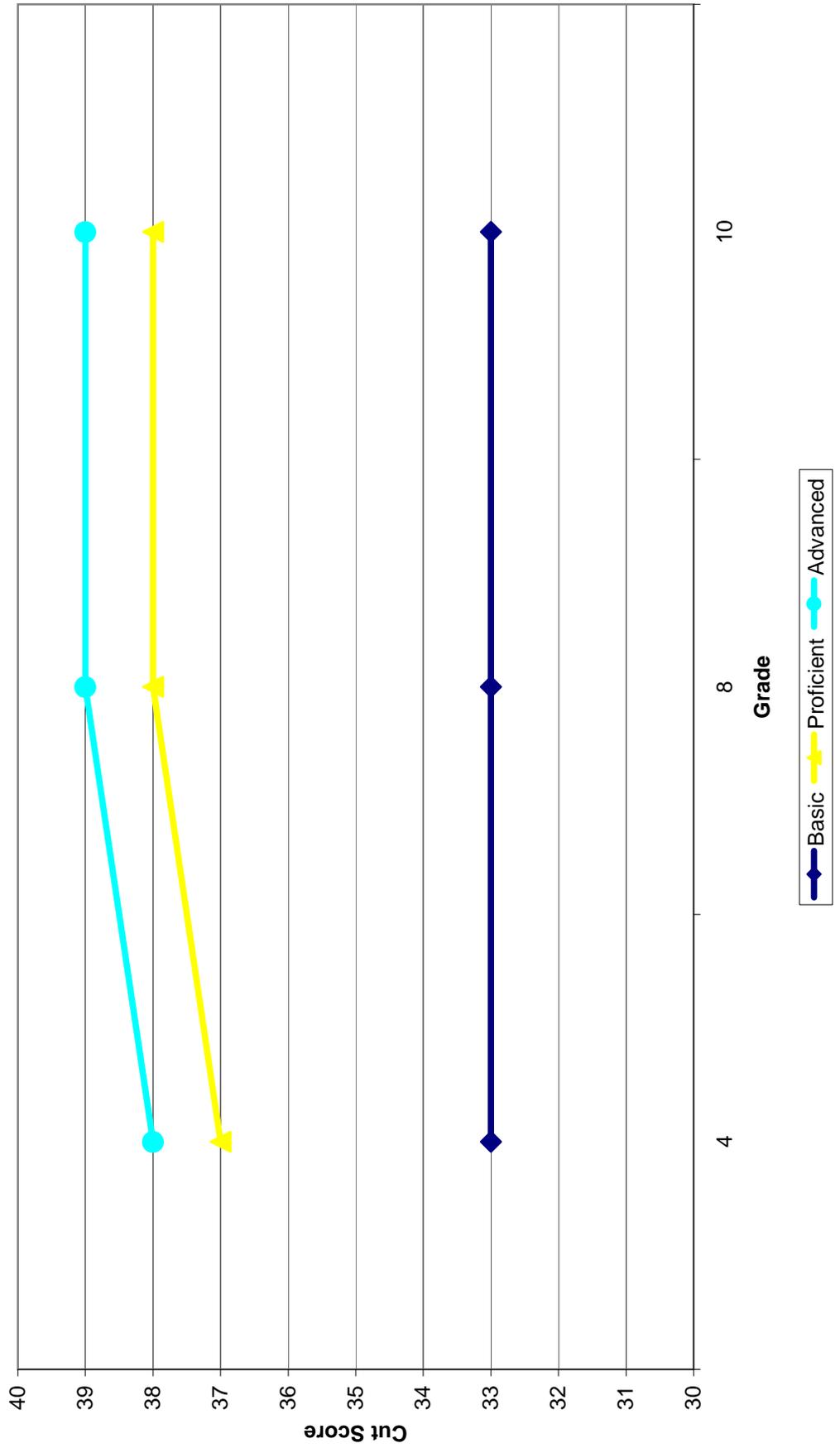
**Wisconsin Alternate Assessment for Students with Disabilities
Reading Contrasting Groups, Total Population
Percent of Students by Achievement Level**



**Wisconsin Alternate Assessment for Students with Disabilities
 Science Contrasting Groups, Total Population
 Percent of Students by Achievement Level**



**Wisconsin Alternate Assessment for Students with Disabilities
 Science Contrasting Groups, Total Population
 Cut Scores by Achievement Level**



Contrasting Groups Survey Results Taken from:
Total Population of Students

Cut Scores and Impact Data Calculated Using:
Uniform Frequency Distribution

Mathematics

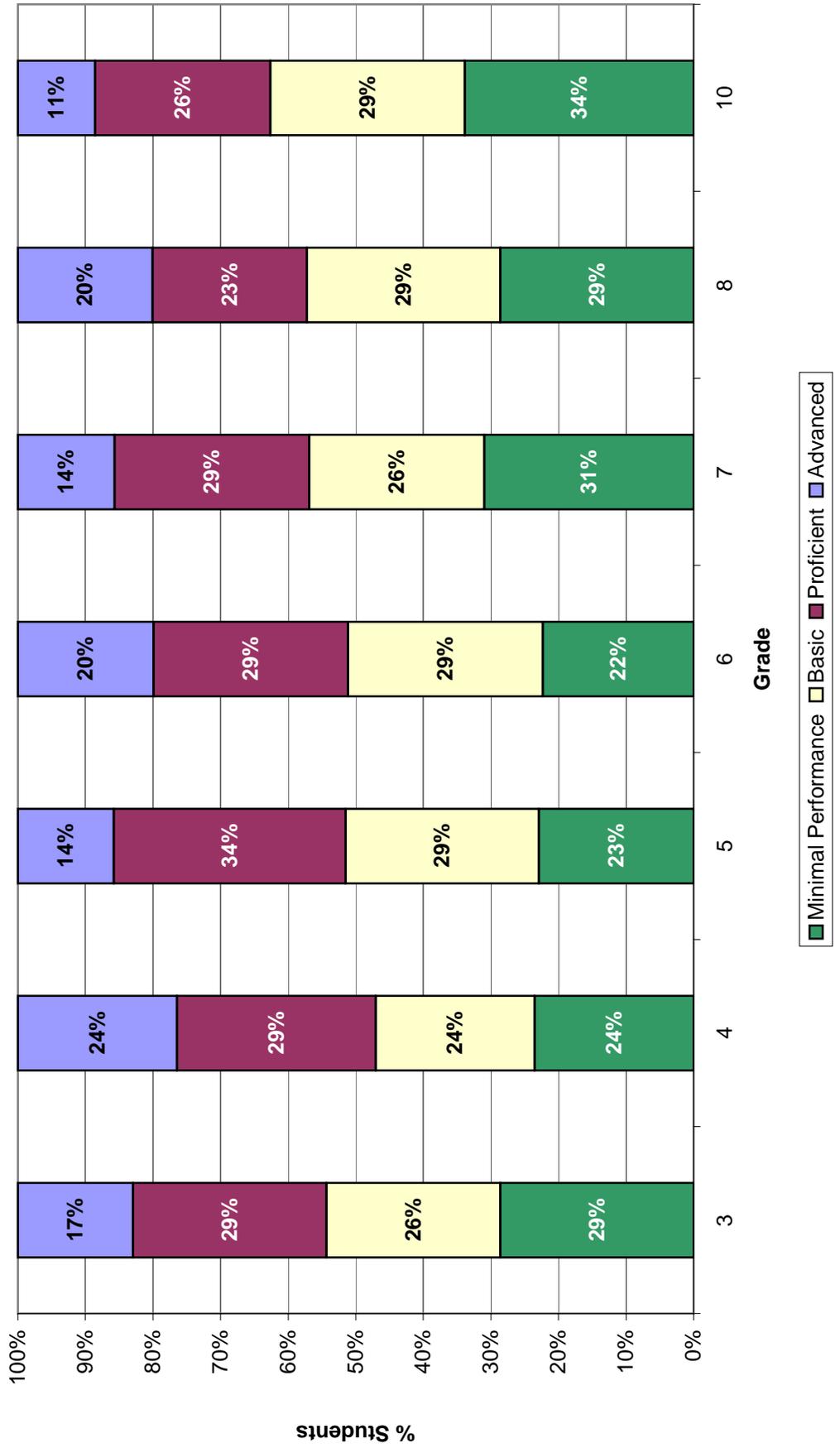
Results of the Contrasting Groups Survey for Total Population based on Uniform Distribution Data

Percentage of students in each achievement level

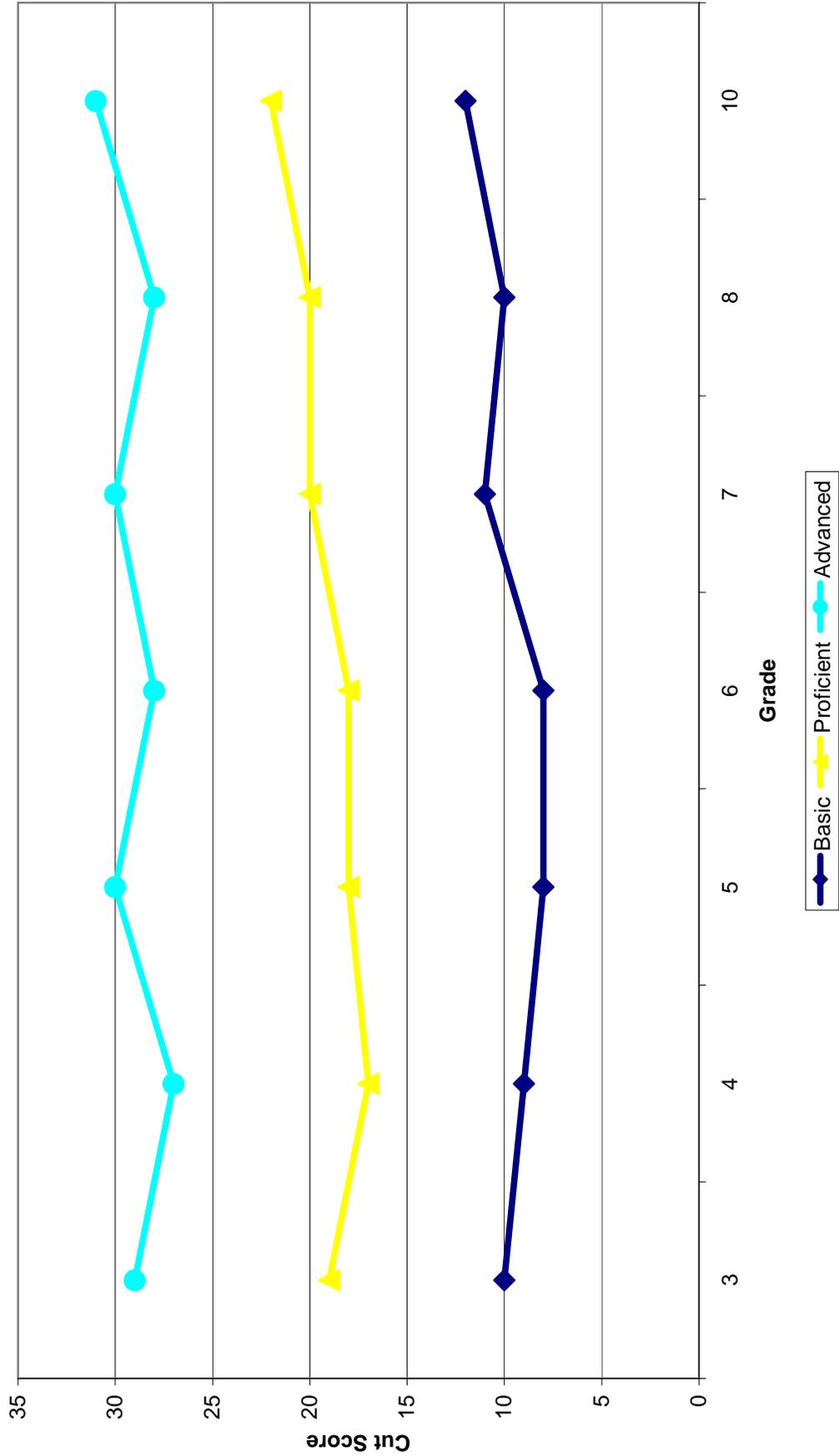
	3	4	5	6	7	8	10	Impact
Minimal Performance	29%	24%	23%	22%	31%	29%	34%	
Basic	26%	24%	29%	29%	26%	29%	29%	
Proficient	29%	29%	34%	29%	29%	23%	26%	
Advanced	17%	24%	14%	20%	14%	20%	11%	
Proficient & Above	46%	53%	49%	49%	43%	43%	37%	
Basic	10	9	8	8	11	10	12	
Proficient	19	17	18	18	20	20	22	
Advanced	29	27	30	28	30	28	31	

The number of students in the total population who received ratings in the modified Contrasting Groups study can be found in Table 2 of Section H.

**Wisconsin Alternate Assessment for Students with Disabilities
 Mathematics Contrasting Groups for Total Population, Uniform Distribution
 Percent of Students by Achievement Level**



**Wisconsin Alternate Assessment for Students with Disabilities
 Mathematics Contrasting Groups for Total Population, Uniform Distribution
 Cut Scores by Achievement Level**



Reading

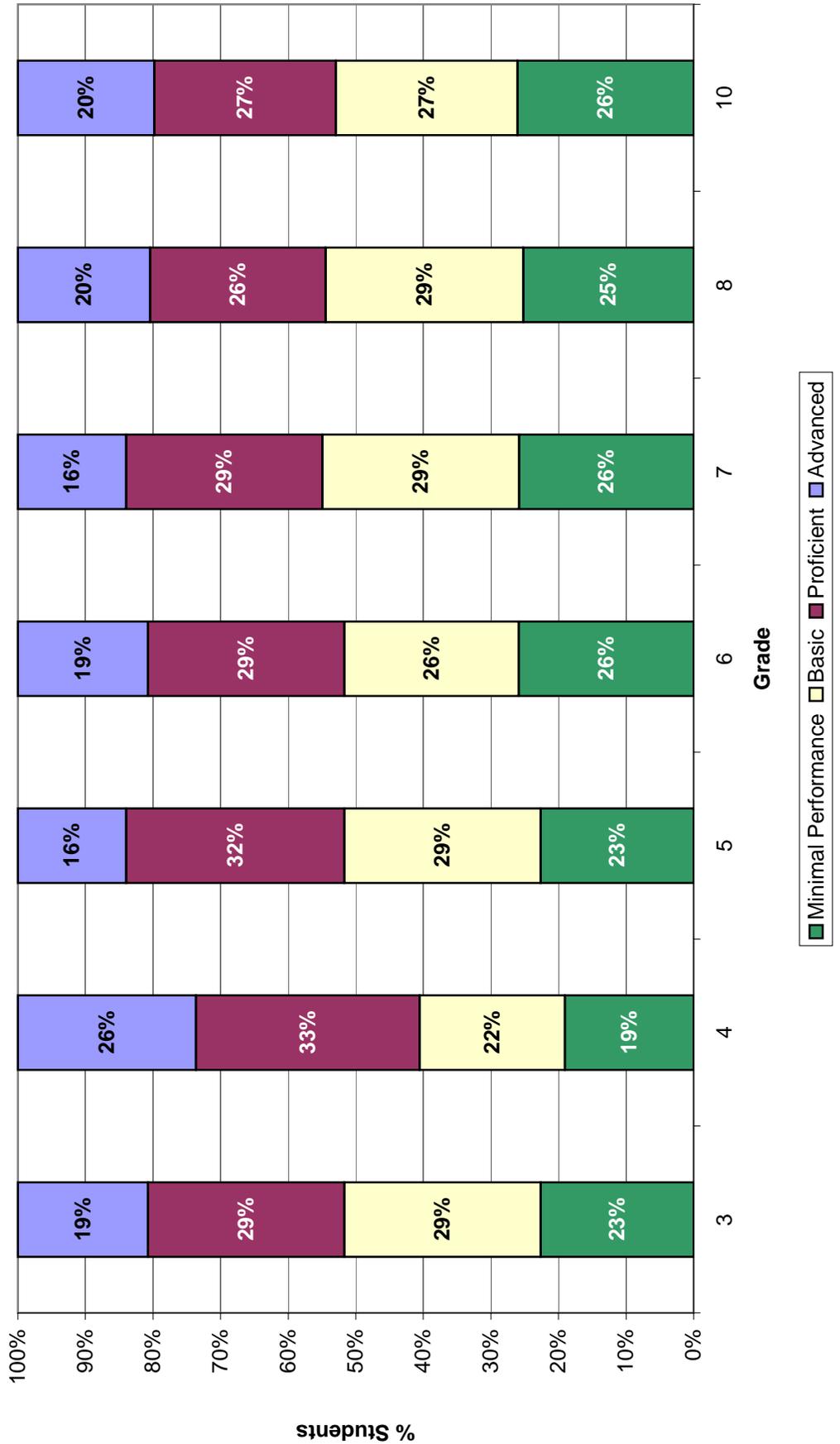
Results of the Contrasting Groups Survey for Total Population based on Uniform Distribution Data

Percentage of students in each achievement level

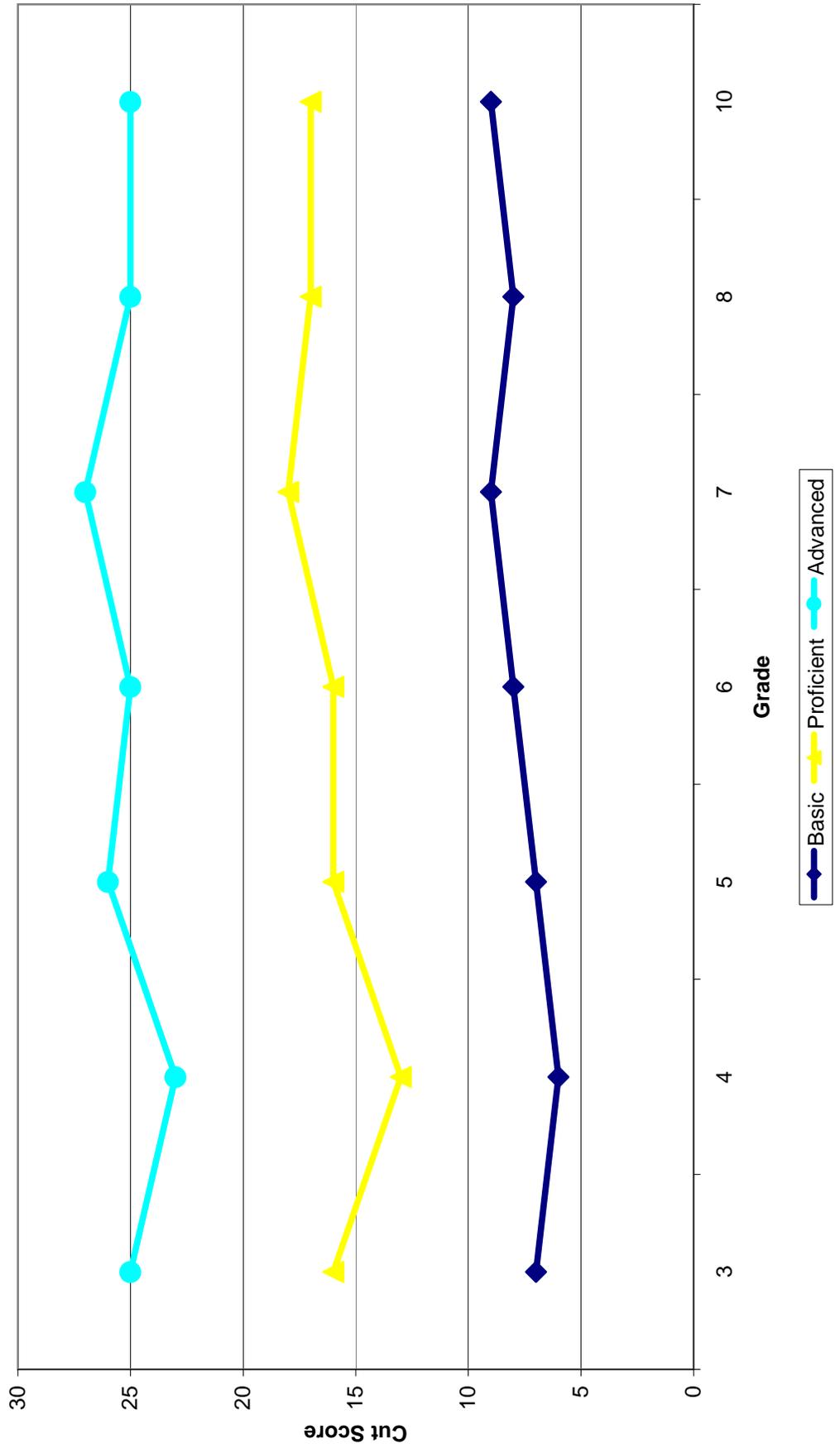
	3	4	5	6	7	8	10	Impact
Minimal Performance								
Basic	23%	19%	23%	26%	26%	25%	26%	
Proficient	29%	22%	29%	26%	29%	29%	27%	
Advanced	29%	33%	32%	29%	29%	26%	27%	
Proficient & Above	19%	26%	16%	19%	16%	20%	20%	
	48%	59%	48%	48%	45%	46%	47%	
Basic	7	6	7	8	9	8	9	
Proficient	16	13	16	16	18	17	17	
Advanced	25	23	26	25	27	25	25	
								Cut Scores

The number of students in the total population who received ratings in the modified Contrasting Groups study can be found in Table 2 of Section H.

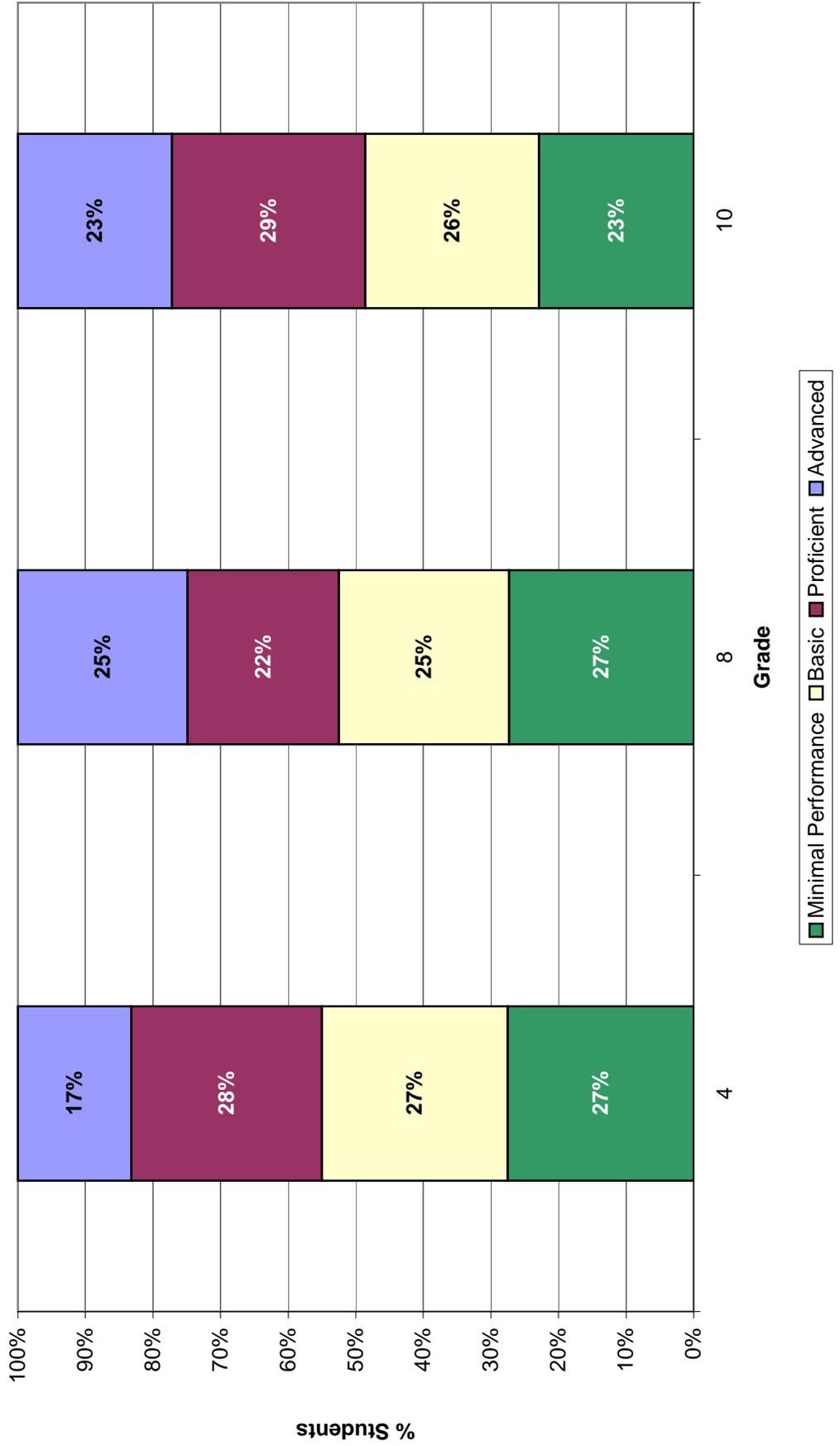
**Wisconsin Alternate Assessment for Students with Disabilities
Reading Contrasting Groups for Total Population, Uniform Distribution
Percent of Students by Achievement Level**



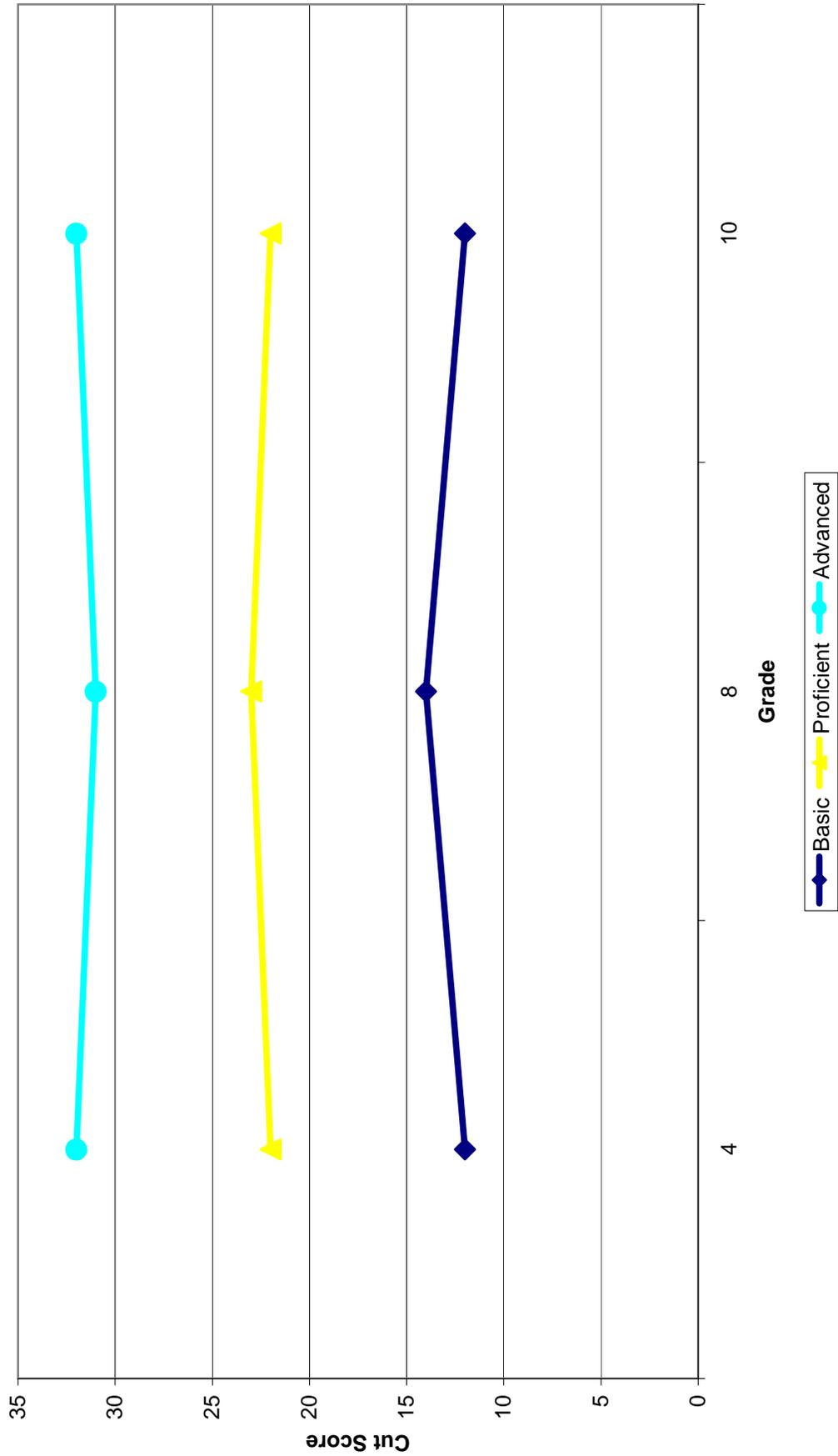
**Wisconsin Alternate Assessment for Students with Disabilities
Reading Contrasting Groups for Total Population, Uniform Distribution
Cut Scores by Achievement Level**



**Wisconsin Alternate Assessment for Students with Disabilities
 Science Contrasting Groups for Total Population, Uniform Distribution
 Percent of Students by Achievement Level**



**Wisconsin Alternate Assessment for Students with Disabilities
 Science Contrasting Groups for Total Population, Uniform Distribution
 Cut Scores by Achievement Level**



Contrasting Groups Survey Results Taken from:
Total Population of Students

Cut Scores and Impact Data Calculated Using:
Total Population Frequency Distribution

Mathematics

Results of the Contrasting Groups Survey for Total Students based on Total Population Data

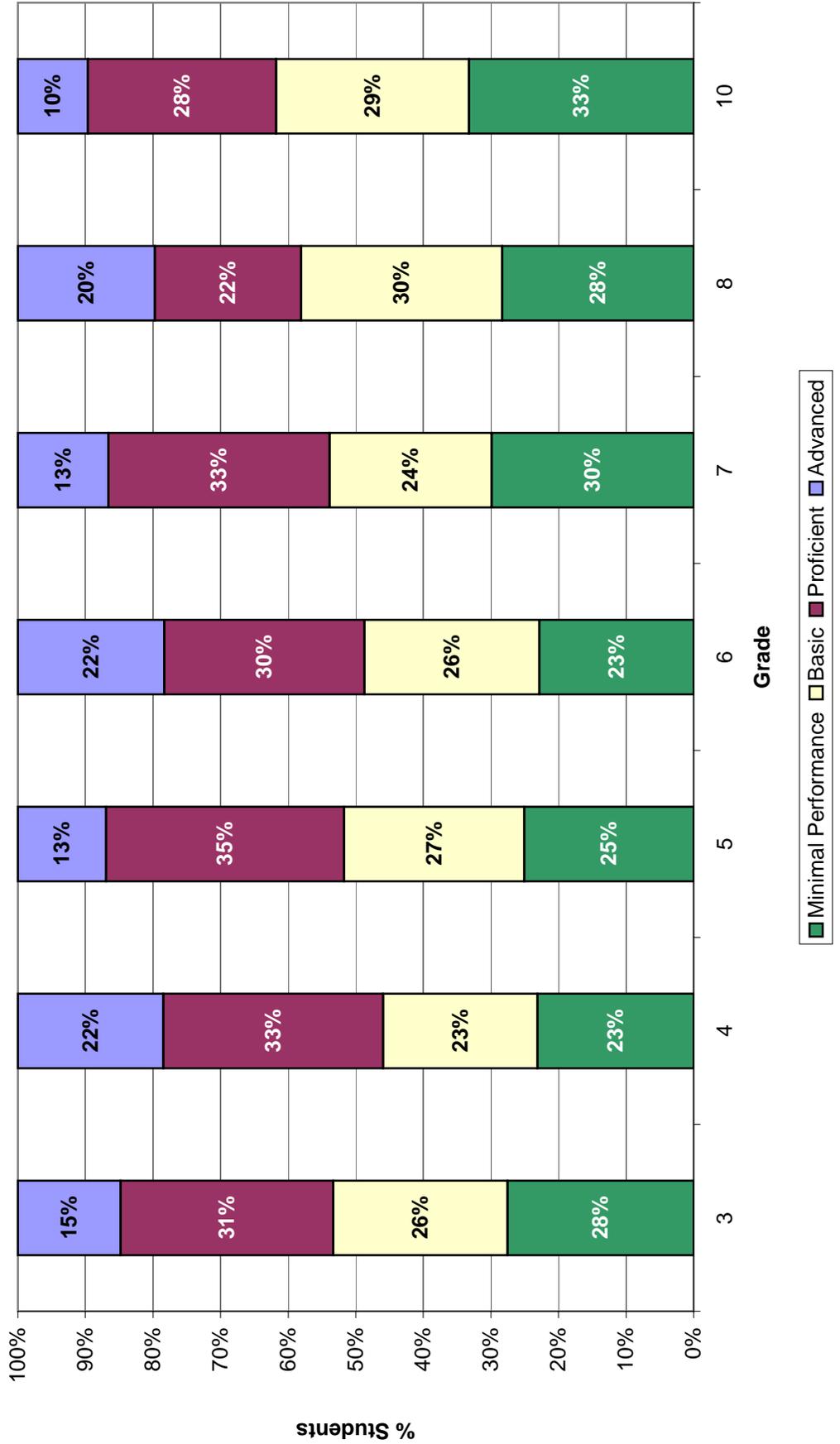
Percentage of students in each achievement level

	3	4	5	6	7	8	10	Impact
Minimal Performance	28%	23%	25%	23%	30%	28%	33%	
Basic	26%	23%	27%	26%	24%	30%	29%	
Proficient	31%	33%	35%	30%	33%	22%	28%	
Advanced	15%	22%	13%	22%	13%	20%	10%	
Proficient & Above	47%	54%	48%	51%	46%	42%	38%	

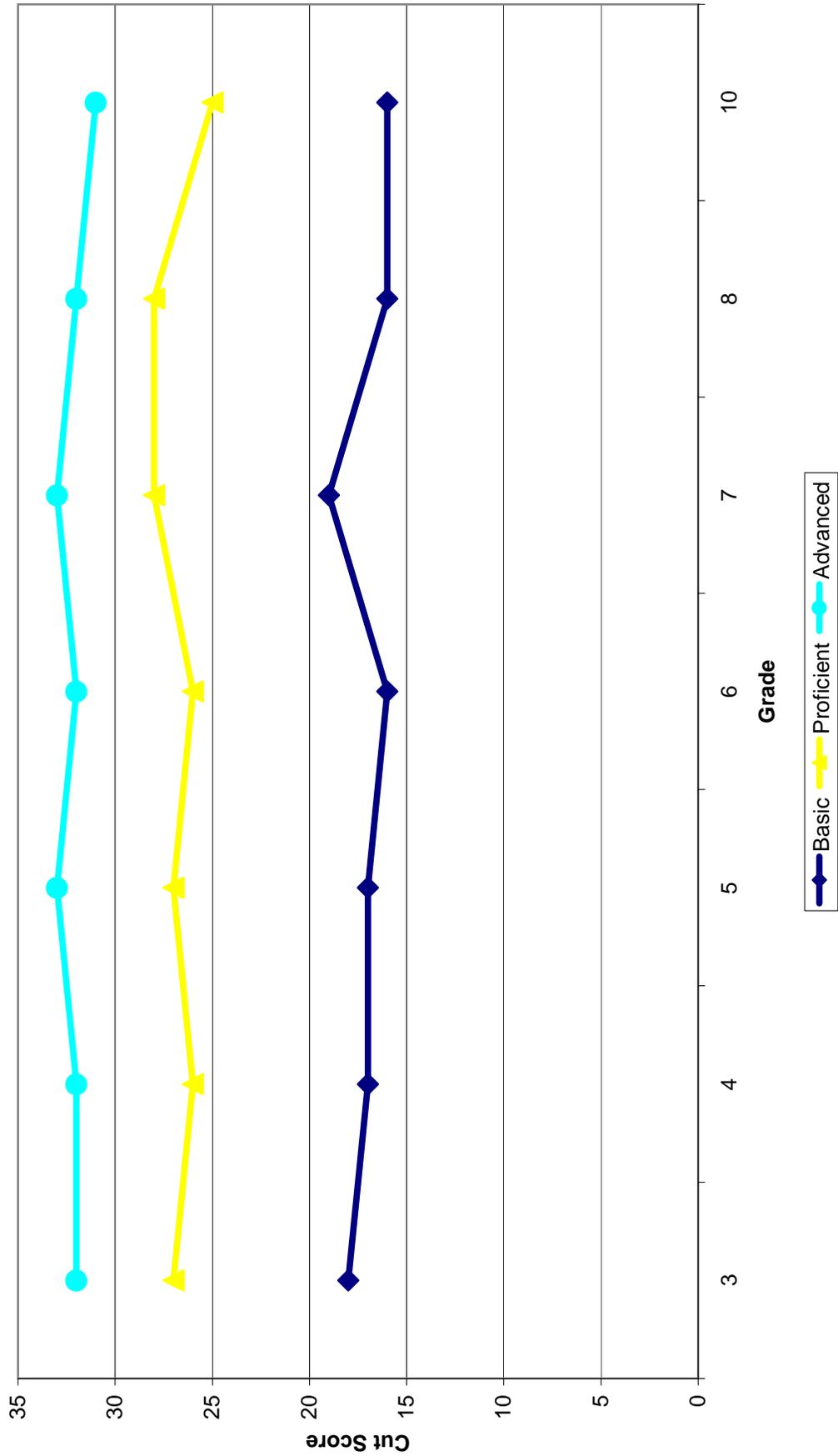
	Cut Scores						
Basic	18	17	17	16	19	16	16
Proficient	27	26	27	26	28	28	25
Advanced	32	32	33	32	33	32	31

The number of students in the total population who received ratings in the modified Contrasting Groups study can be found in Table 2 of Section H.

**Wisconsin Alternate Assessment for Students with Disabilities
 Mathematics Contrasting Groups for Total Students, Total Population
 Percent of Students by Achievement Level**



**Wisconsin Alternate Assessment for Students with Disabilities
 Mathematics Contrasting Groups for Total Students, Total Population
 Cut Scores by Achievement Level**



Reading

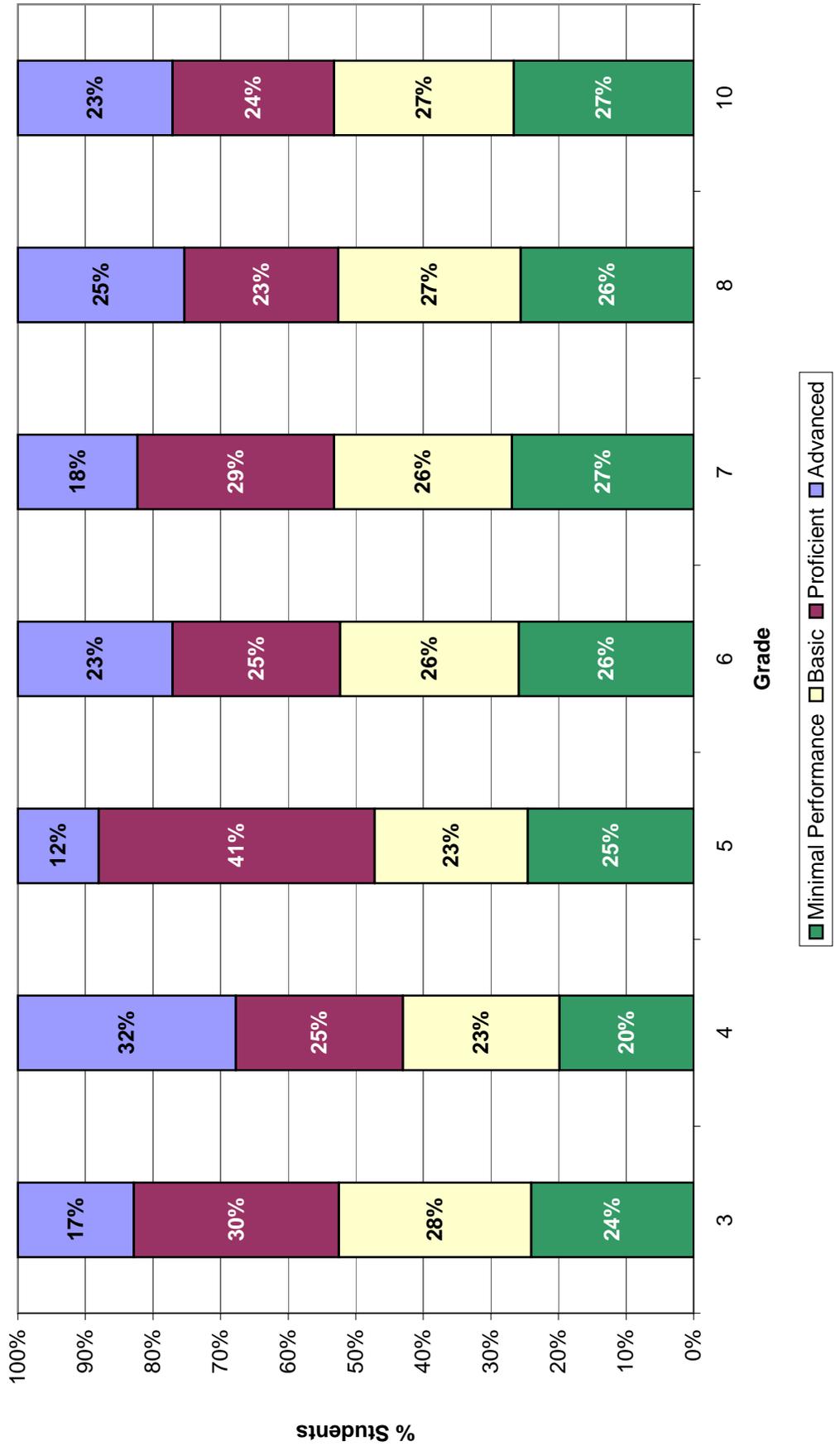
Results of the Contrasting Groups Survey for Total Students based on Total Population Data

Percentage of students in each achievement level

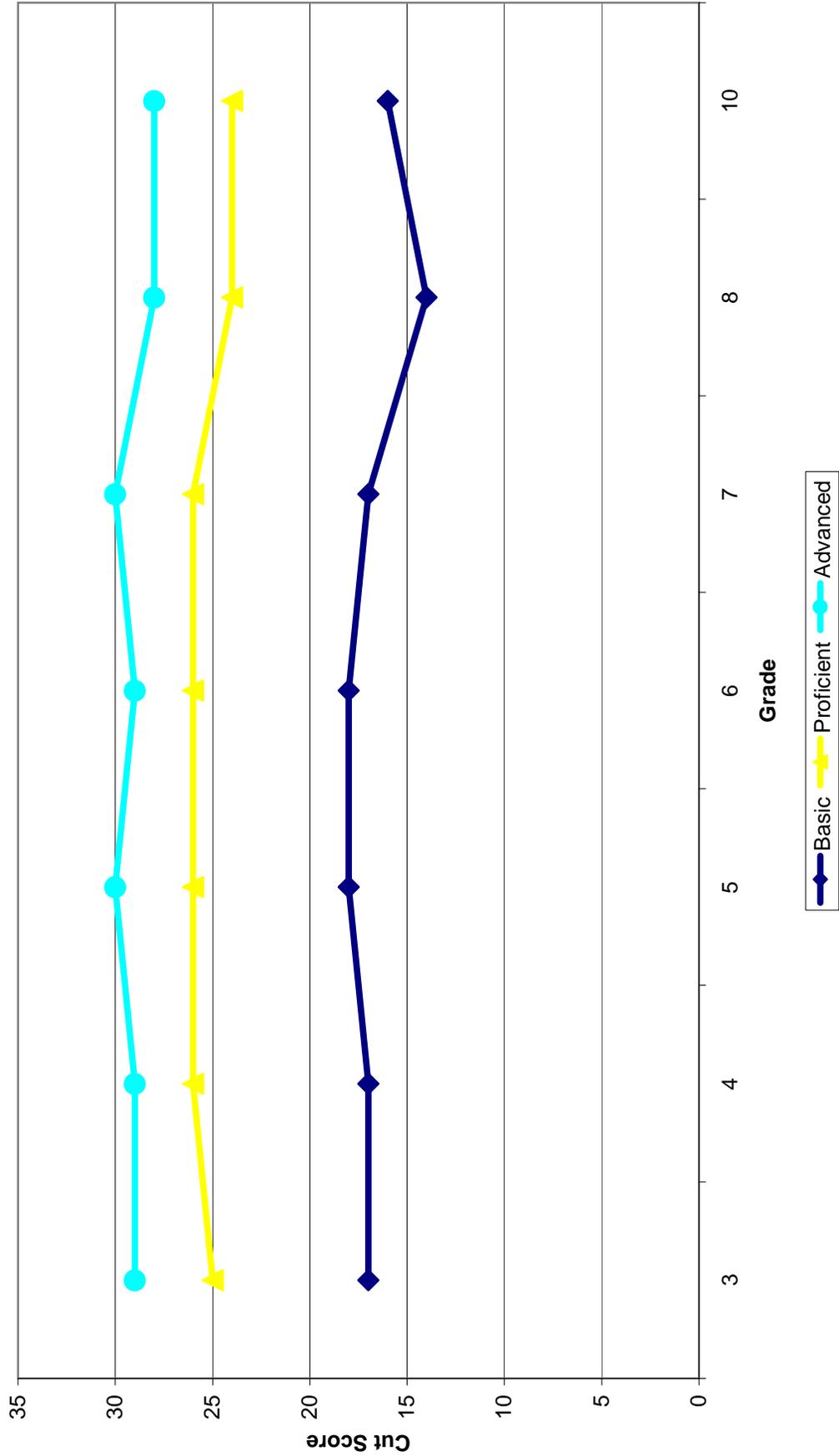
	3	4	5	6	7	8	10	Impact
Minimal Performance								
Basic	24%	20%	25%	26%	27%	26%	27%	27%
Proficient	28%	23%	23%	26%	26%	27%	27%	27%
Advanced	30%	25%	41%	25%	29%	23%	24%	24%
Proficient & Above	17%	32%	12%	23%	18%	25%	23%	23%
	48%	57%	53%	48%	47%	47%	47%	
Basic	17	17	18	18	17	14	16	
Proficient	25	26	26	26	26	24	24	
Advanced	29	29	30	29	30	28	28	
								Cut Scores

The number of students in the total population who received ratings in the modified Contrasting Groups study can be found in Table 2 of Section H.

**Wisconsin Alternate Assessment for Students with Disabilities
Reading Contrasting Groups for Total Students, Total Population
Percent of Students by Achievement Level**



**Wisconsin Alternate Assessment for Students with Disabilities
Reading Contrasting Groups for Total Students, Total Population
Cut Scores by Achievement Level**



Science

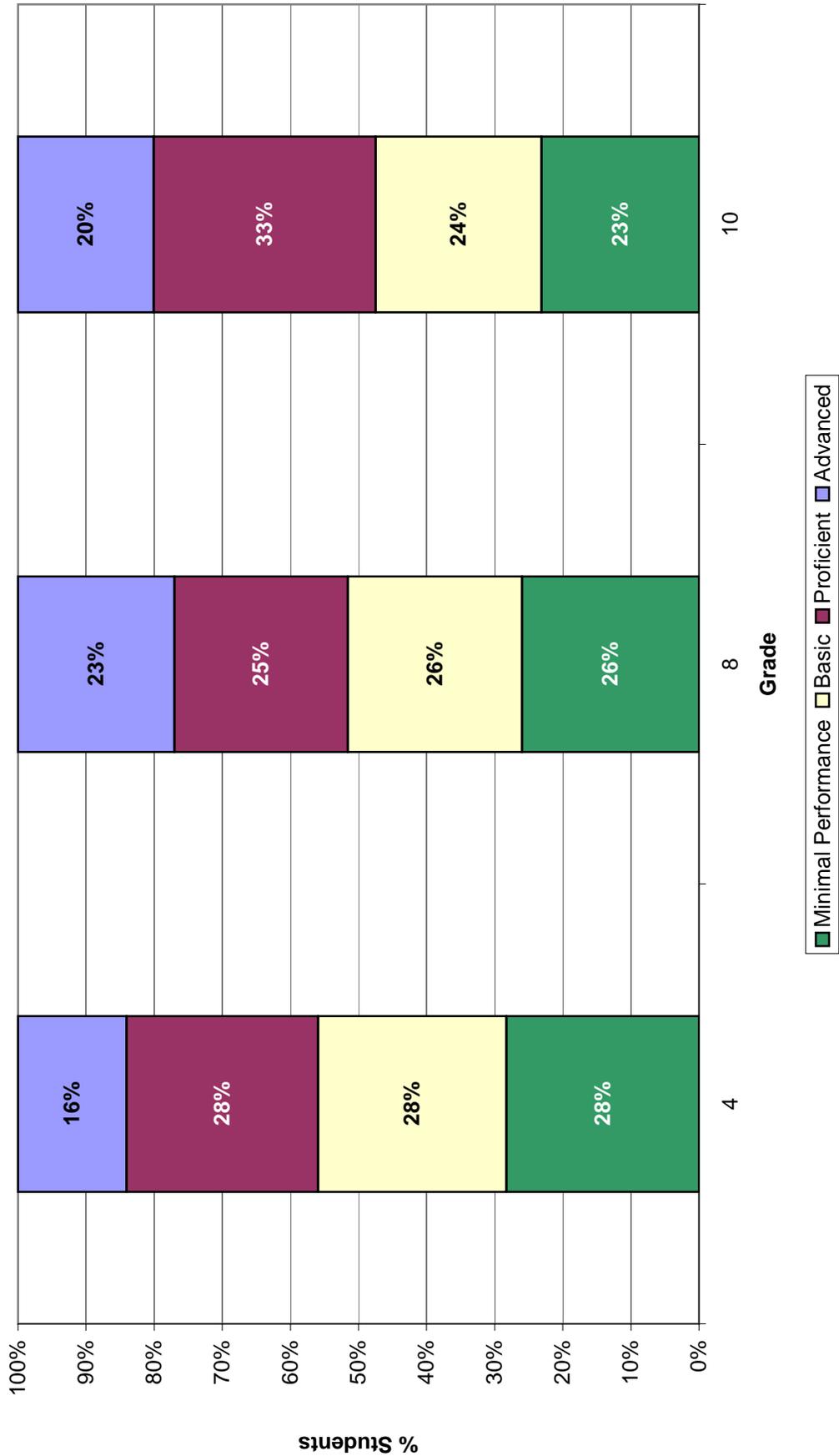
Results of the Contrasting Groups Survey for Total Students based on Total Population Data

Percentage of students in each achievement level

	4	8	10	Impact
Minimal Performance				
Basic	28%	26%	23%	
Proficient	28%	26%	24%	
Advanced	28%	25%	33%	
Proficient & Above	16%	23%	20%	
	44%	48%	53%	
Basic	23	24	21	Cut Scores
Proficient	34	34	34	
Advanced	37	38	38	

The number of students in the total population who received ratings in the modified Contrasting Groups study can be found in Table 2 of Section H.

**Wisconsin Alternate Assessment for Students with Disabilities
 Science Contrasting Groups for Total Students, Total Population
 Percent of Students by Achievement Level**



**Wisconsin Alternate Assessment for Students with Disabilities
 Science Contrasting Groups for Total Students, Total Population
 Cut Scores by Achievement Level**

