

**ALPINE TESTING
SOLUTIONS**

**Standard Setting Report for the Nebraska State
Accountability Alternate Assessments of
Mathematics (NeSA-AAM) and Reading (NeSA-
AAR)**

August 8, 2011

Susan Davis-Becker, Ph.D.
Chad W. Buckendahl, Ph.D.
Brett P. Foley, Ph.D.

Standard Setting Report Contents

Acknowledgments.....3
Purpose of Report.....4
Nebraska Alternate Assessments5
Overview of Standard Setting Workshop5
NeSA-AAM Standard Setting.....6
 NeSA-AAM Methods and Procedures 6
 NeSA-AAM Results 8
NeSA-AAR Standard Setting 12
 NeSA-AAR Methods and Procedures 12
 NeSA-AAR Results..... 13
Policy discussion of Standard Setting Results 16
Conclusions 18
References 20
Appendix A: NeSA-AAM Recommended Performance Level Descriptors 21
Appendix B: NeSA-AAM Detailed Standard Setting Results by Grade Level 29
Appendix C: NeSA-AAM Impact Tables by Grade Level..... 30
Appendix D: NeSA-AAM Evaluation Comments..... 31
Appendix E: NeSA-AAR Detailed Standard Setting Results by Grade Level 35
Appendix F: NeSA-AAR Impact Tables by Grade Level 36
Appendix G: NeSA-AAM Evaluation Comments..... 37

Statement of Confidentiality

The information provided in this report is proprietary and confidential. It is meant to be used by NDE solely for the purpose of informing the standard setting process for the Nebraska NeSA-AAM and NeSA-AAR Assessments.

Acknowledgments

We would like to thank several people who assisted us with the standard setting workshop. Panels of select educators made up the largest contingent of people whose work contributed to the outcome of the standard setting workshops. They participated in the activities that resulted in the cut score recommendations for each of the Nebraska NeSA-AAM and NeSA-AAR exams. The success of the workshops was due, in large part, to their efforts.

We also appreciate the assistance and support of Pat Roschewski, Jan Hoegh, Carla Osberg, Jon Moon, and Jackie Naber from the Nebraska Department of Education who assisted in the preparation and execution of this workshop.

Finally, we want to thank Myisha Stokes and Deirdre Lupher from the Alpine Testing Solutions team. Their assistance was critical to the successful execution of this workshop.

Purpose of Report

The purpose of this report is to document the procedures and analyses undertaken to assist the Nebraska Department of Education (NDE) in recommending performance level descriptors (PLDs) and cut scores for the NeSA-AAM and NeSA-AAR exams. The included assessments were for grades 3-8 and 11 for each subject area.

This report summarizes the procedures and the results of standard setting workshops conducted June 27 – July 1, 2011. The results for the NeSA-AAM standard setting include the recommended PLDs drafted by the standard setting panelists. These descriptors illustrate the expected knowledge, skills, and abilities of students by performance level and grade level. The second part of the NeSA-AAM results are the recommended cut scores. Because the NeSA-AAR panelists were able to use the PLDs from the 2010 standard setting, the results for this process are focused on the recommended cut scores.

Standard Setting Report for the NeSA-AAM and NeSA-AAR Assessments

Nebraska Department of Education (NDE) contracted with Alpine Testing Solutions (Alpine) to conduct a standard setting workshop for the Nebraska State Accountability Alternate Assessment of Mathematics (NeSA-AAM) and Reading (NeSA-AAR). Alpine worked closely with NDE to design and prepare for the workshops.

Nebraska Alternate Assessments

The Nebraska Alternate Assessment program encompasses the assessments for students with the most severe cognitive and physical disabilities. The grade level curriculum and test content are built to represent the progression and continual development of knowledge and skills across the successive grade levels. The results of these assessments are used to evaluate students' abilities and classify them into one of three performance levels (i.e., Below the Standard, Meets the Standard, Exceeds the Standard). The NeSA-AAR was first administered in 2010 and the first standards setting process for this assessment was conducted in June, 2010. The NeSA-AAM was first administered in 2011 and this standard setting workshop was the first effort to set a performance standard on this assessment.

Overview of Standard Setting Workshop

The standard setting workshop for the Nebraska NeSA-AAM assessments was conducted June 27-29, 2011 in Lincoln, NE. There were two goals of this workshop. The first goal was to produce a set of recommended performance level descriptors (PLDs) that summarized the expected knowledge, skills and abilities of students at each performance level. The second goal was to elicit recommended cut scores that define the expected performance for students within each performance level consistent with the performance level descriptors.

The standard setting workshop for the Nebraska NeSA-AAR assessments was conducted June 30 – July 1, 2011 in Lincoln, NE. The purpose of conducting a second standard setting workshop (following the 2010 meeting) was to fulfill a request of the Nebraska Board of Education to revisit the previously set cut scores. Therefore, the panelists in this workshop focused on maintaining the same conceptual expectations that the 2010 panelists had set (i.e., PLDs) and engaged in standard setting activities to recommend cut scores for the 2011 NeSA-AAR that were consistent with these conceptual expectations.

The subsequent sections of this report describe the procedures used to accomplish each of these goals. Also included in this report is a full summary of the results produced from the standard setting workshops. These results have been presented by NDE to the State Board of Education who is responsible for approving all cut scores.

NeSA-AAM Standard Setting

NeSA-AAM Methods and Procedures

Prior to the workshop, NDE recruited panelists to participate in grade span panels. Each panel included 8-11 content experts from across the state (Jaeger, 1991; Raymond & Reid, 2001). Each panel represented substantial experience and included SPED teachers, General Education teachers, SPED coordinators, and administrators. The experience and qualifications of the panelists is noted in Table 1.

Table 1. Experience and qualifications of each NeSA-AAM standard setting grade span panel

Panel	Number of Panelists	Highest Degree			Average Years of Experience
		Bachelors	Masters	Ph.D.	
Elementary	8	2	6		20
Middle	11	1	10		16
High School	10	4	5	1	22

On the first day of the workshop, a general orientation was held for all panelists. Jan Hoegh from NDE and Susan Davis-Becker from Alpine welcomed the group. Davis-Becker provided an orientation that covered the purpose and goals of the workshop, and the processes that would be used to accomplish each goal. Following the orientation, panelists worked within smaller grade span panels for the remainder of the workshop (Elementary = grades 3-5, Middle = grades 6 & 7, High School = grades 8 & 11).

To begin creating the performance level descriptors, panelists were divided into grade specific groups within their grade span panels. As inputs to the PLD development process, panelists were provided (1) draft policy PLDs created by NDE, (2) the current PLDs for the NeSA-AAR assessment, and (3) the Nebraska extended indicators for Mathematics that define the current curriculum for those students with the most severe and profound disabilities in Nebraska. Each facilitator reviewed these materials with the entire panel then tasked each grade specific group with creating a list of illustrative knowledge and skills that would be expected of students at each performance level within their respective grade. These groups were then provided time to work independently on their draft PLDs.

Within the elementary and middle school grade span panels, each grade level group shared its draft PLDs so group members could compare the transition from one grade level to the next. This vertical articulation process was critical to ensure the set of PLDs represented a logical progression of skills from one grade to the next. As per feedback from the grade span panel, the PLDs were then modified as needed for each grade level.

After this initial vertical articulation process, representatives from the grade span panels met to repeat the process described in the previous paragraph for adjacent grades (e.g., grades 5 and 6, grades 7 and 8). Again, this process resulted in slight modifications of the draft PLDs.

At the beginning of the second day of the workshop, the panelists were presented with copies of the full set of draft PLDs (grades 3-8, 10) and given an opportunity to review these PLDs as well as make any final edits or revisions. These revisions were then recorded by the Alpine facilitators. After the panelists indicated their approval of the draft PLDs, they completed an evaluation of the process used to create the PLDs.

The recommended range of cut scores is based on the Impara and Plake (1997) modification of the Angoff (1971) method. In this process, panelists are presented with the assessment (in this application they were presented with the student and administrator materials) and are asked to make item-level judgments. For each item, they are asked to imagine a “target student” and make their best judgment as to whether or not they believe this student would answer the item correctly. In this application, there were two groups of target students: the student that barely *Meets the Standard* and the student that barely *Exceeds the Standard*. By focusing on the transition points between the performance levels (e.g., barely Meets the standard differentiates between *Below the Standard* and *Meets the Standard*), panelists demonstrate their expectations for students who represent the minimum level of knowledge and skills at each of the upper performance levels. These expectations are then used to represent the minimum score required for each of the upper performance levels (i.e., the cut scores).

This part of the workshop began with a practice activity whereby the panelists could become familiar with the standard setting process using a set of sample items. After becoming familiar with the standard setting process, panelists engaged in their operational standard setting ratings for each grade-level examination.

The operational standard setting was conducted as follows: Panelists made their initial ratings (Round 1) independently using their professional judgments guided by the Extended Indicators, PLDs, and the examination booklets (Administrator and Student materials). Panelists recorded these judgments on specially designed rating forms which the facilitator collected and used to compute the panel-level statistics. Rating forms were returned to panelists with their initial recommended cut scores. The facilitator also shared with the panelists the group median cut scores, the range of cut scores across the panel, the estimated impact if the median cut scores were used (i.e., which percentage of students would be classified in each performance level) and the percentage of students who answered each question correctly during the previous administration year (i.e. p-values). After explaining this feedback, the facilitator instructed the panelists to review their first round of ratings and make any modifications they felt necessary based on their reaction to the feedback (Round 2). The second round ratings were used to compute the final recommended cut scores.

The final activity for the panelists was the completion of an evaluation form designed to measure their level of confidence in the standard setting activities and their cut score recommendations.

After the evaluations were completed, each participant was provided with a certificate of participation and the workshop was concluded.

NeSA-AAM Results

The draft PLDs are included in Appendix A and are submitted to NDE as recommended descriptors. We suggest that NDE review these descriptors and make any modifications necessary to ensure that the grammar and language are consistent across grade levels.

The results of the evaluation from the PLD development activity are included in Table 2. Overall, the results indicate the panelists felt the process was successful, the amount of time allotted to the process was appropriate, and they were confident in the draft PLDs they produced. Panelists were also provided an opportunity to provide comments on the process - these are included in Appendix D.

Table 2. Median NeSA-AAM evaluation results from the PLD development process

	Elementary	Middle	High School
1. Success of Training <i>[4=Very Successful to 1= Very Unsuccessful]</i>	3.5	3	4
2. Time allotted to training on PLD development <i>[4 = More than enough time to 1=More time needed]</i>	3.5	3	3
3. Confidence in appropriateness of draft PLDs <i>[4 = Confident to 1 = Not at all Confident]</i>	3	3	3

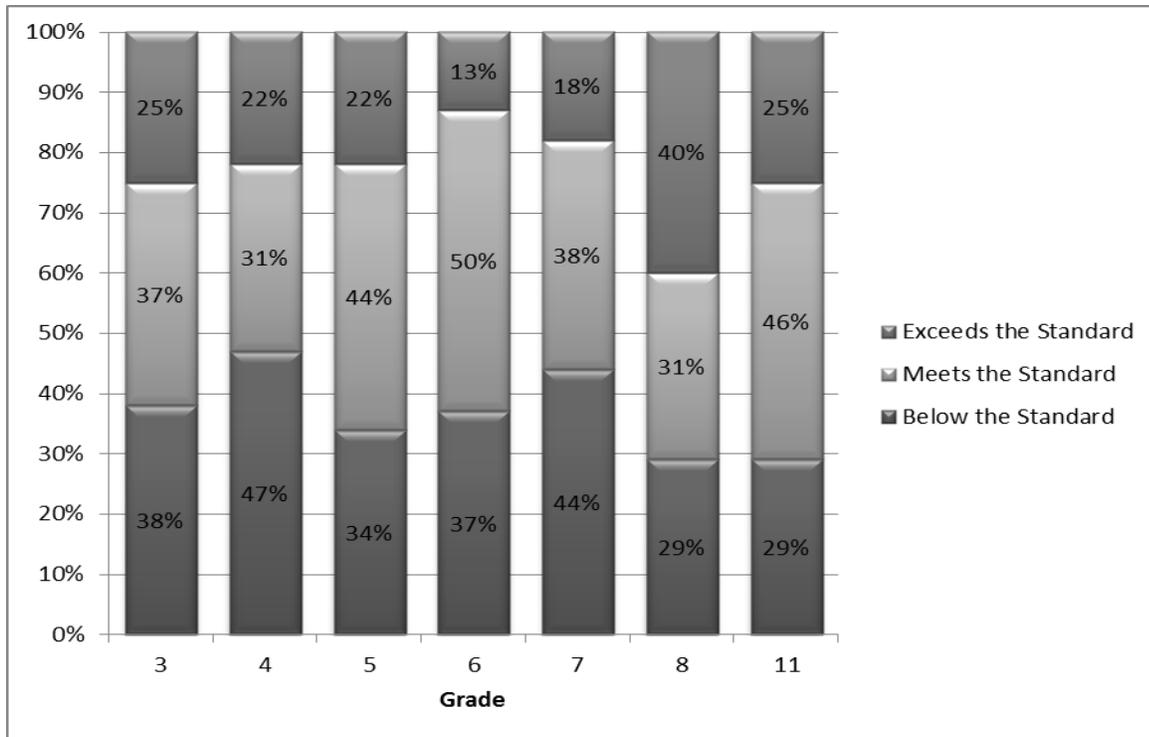
The standard setting included two rounds of judgments. The full results are included in Appendix B. The summary results for each grade level are presented in Table 3. These results represent round 2 for all grades except grades 8 and 11. Post-study analysis of the change in judgments between rounds 1 and 2 compared to the panel-level discussion suggested the panel incorrectly modified their judgments between rounds. Therefore, round 1 results are presented for these two grades. This table includes the median recommended cut score for each performance level, the impact if the median cut scores were implemented (percent of students in each performance level), and a range of cut scores defined by the median plus and minus two standard errors is included. The standard error is a measure of the variability in the recommended cut scores. Because the only plausible score points are whole numbers, the recommended cut score ranges were estimated using the standard errors and then rounded on each end to the closest score point. Therefore, some ranges are not symmetrical around the recommend cut score. Selecting a cut score within this range would be seen as reflective of the results of the process. The impact of the median cut scores are shown graphically for each grade level in Figure 1. The impact by score (percent of students who scored at a particular scale score and below) is listed in Appendix C. From this information one can estimate the impact of any set of proposed cut scores.

Table 3. Summary of Round 2 NeSA-AAM standard setting results - median, impact and recommended cut score range, by grade level.

Grade		Below the Standard	Meets the Standard	Exceeds the Standard
3	Median		14	21
	Impact	38%	37%	25%
	Median \pm 2 SE		12-15	20-22
4	Median		21	27
	Impact	47%	31%	22%
	Median \pm 2 SE		18-23	25-28
5	Median		15	24
	Impact	34%	44%	22%
	Median \pm 2 SE		14-16	22-26
6	Median		17	27
	Impact	37%	50%	13%
	Median \pm 2 SE		15-19	26-28
7	Median		18	26
	Impact	44%	38%	18%
	Median \pm 2 SE		16-19	25-27
8	Median		16	23
	Impact	29%	31%	40%
	Median \pm 2 SE		13-18	20-25
11	Median		15	23
	Impact	29%	46%	25%
	Median \pm 2 SE		12-17	21-25

* Median cut scores, impact, and recommended cut score ranges for grades 8 and HS are calculated using the panelists' Round 1 judgments

Figure 1. Impact of median NeSA-AAM recommended cut scores



Each panelist responded to a series of evaluation questions about the various components of the operational standard setting. The median response for each panel for each evaluation question is shown in Table 4. The overall results suggest that each panel felt the workshop was very successful and felt the workshop was very successful in arriving at appropriate recommended cut scores. In addition to the closed-ended questions, panelists were allowed to provide comments about the workshop. These comments are included in Appendix D.

Table 4. Median NeSA-AAM evaluation results by grade level

	Elementary	Middle	High School
Successfulness of training [4=Very Successful to 1= Very Unsuccessful]			
1a. Orientation	4	4	4
1b. Training on Yes/No method	4	4	4
1c. Overview of Feedback	4	4	4
1d. Practice with Method	4	4	4
Time allocated to training [4= Totally Adequate to 1=Totally Inadequate]			
2a. Orientation	4	4	3
2b. Training on Yes/No method	4	4	3
2c. Overview of Feedback	4	4	3
2d. Practice with Method	4	3	3.5
Round Two Yes/No Ratings			
3. Confidence in predictions [4=Confident to 1=Not at all confident]	4	3.5	4
4. Time for predictions [4=More than enough time to 1=More time needed]	4	4	3.5
Overall workshop			
5. Confidence in cut scores [4=Confident to 1=Not at all Confident]	4	3	4
6. Most useful feedback data (mode reported) [4=P-values, 3=Impact data, 2=Panel Summary]	4	4	4
7. Least useful feedback data (mode reported) [4=P-values, 3=Impact data, 2=Panel Summary]	2	3	3
8. Overall success [4=Very Successful to 1= Very Unsuccessful]	4	3	4
9. Overall organization [4=Very Organized to 1=Very Unorganized]	4	3	4

NeSA-AAR Standard Setting

NeSA-AAR Methods and Procedures

Prior to the workshop, NDE recruited panelists to participate in grade span panels. Each panel included 9-14 content experts from across the state (Jaeger, 1991; Raymond & Reid, 2001). Each panel represented substantial experience and included SPED teachers, General Education teachers, SPED coordinators, and administrators. The experience and qualifications of the panelists is noted in Table 5.

Table 5. Experience and qualifications of each NeSA-AAM standard setting grade-span panel

Panel	Number of Panelists	Highest Degree			Average Years of Experience
		Bachelors	Masters	Ph.D.	
Elementary	14	6	8	20	
Middle	9	3	6	17	
High School	9	3	6	16	

On the first day of the workshop, a general orientation was held for all panelists. Jan Hoegh from NDE and Susan Davis-Becker from Alpine welcomed the group. Davis-Becker provided an orientation that covered the purpose and goals of the workshop, and the processes that would be used to accomplish each goal. Following the orientation, panelists worked within smaller grade span panels for the remainder of the workshop (Elementary = grades 3-5, Middle = grades 6 & 7, High School = grades 8 & 11).

To begin reviewing the performance level descriptors created during the 2010 standard setting workshop, panelists were presented with a copy of these PLDs and a copy of the extended indicators and example items aligned to each indicator. In small work groups, the panelists discussed each PLD and identified example items that were targeting the skills characteristics of students at each performance level. The Alpine facilitator then led a discussion of the interpretation of the PLDs among the grade span panel.

After completing this process for the first grade in their grade-span, the panel transitioned to the operational Angoff process. As with the Mathematics process, this part of the workshop began with a practice activity whereby the panelists could become familiar with the standard setting process using a set of sample items. After becoming familiar with the standard setting process, panelists engaged in their operational standard setting ratings for each grade-level examination.

The operational standard setting was conducted as follows: Panelists made their initial ratings (Round 1) independently using their professional judgments guided by the Extended Indicators, PLDs, and the examination booklets (Administrator and Student materials). Panelists recorded these judgments on specially designed rating forms which the facilitator collected and used to

compute the panel-level statistics. Rating forms were returned to panelists with their initial recommended cut scores. The facilitator also shared with the panelists the group median cut scores, the range of cut scores across the panel, the estimated impact if the median cut scores were used (i.e., which percentage of students would be classified in each performance level) and the percentage of students who answered each question correctly during the previous administration year (i.e. p-values). After explaining this feedback, the facilitator instructed the panelists to review their first round of ratings and make any modifications they felt necessary based on their reaction to the feedback (Round 2). The second round ratings were used to compute the final recommended cut scores.

As a final activity the panelists completed an evaluation form designed to measure their level of confidence in the standard setting activities and their cut score recommendations. After the evaluations were completed, each participant was provided with a certificate of participation and the workshop was concluded.

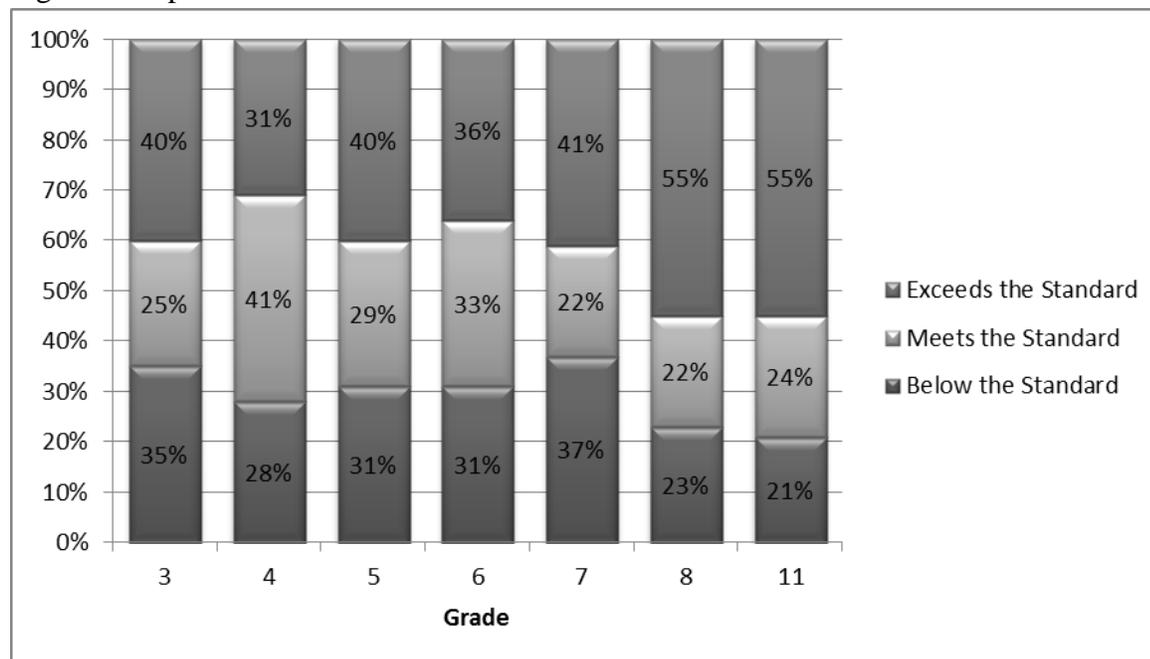
NeSA-AAR Results

The standard setting included two rounds of judgments. The full results are included in Appendix E. The summary results for each grade level are presented in Table 6. These results represent round 2 for all grades. This table includes the median recommended cut score for each performance level, the impact if the median cut scores were implemented (percent of students in each performance level), and a range of cut scores defined by the median plus and minus two standard errors is included. The standard error is a measure of the variability in the recommended cut scores. Because the only plausible score points are whole numbers, the recommended cut score ranges were estimated using the standard errors and then rounded on each end to the closest score point. Therefore, some ranges are not symmetrical around the recommend cut score. Selecting a cut score within this range would be seen as reflective of the results of the process. The impact of the median cut scores are shown graphically for each grade level in Figure 2. The impact by score (percent of students who scored at a particular scale score and below) is listed in Appendix F. From this information one can estimate the impact of any set of proposed cut scores.

Table 6. Summary of Round 2 NeSA-AAR standard setting results - median, impact and recommended cut score range, by grade level.

Grade		Below the Standard	Meets the Standard	Exceeds the Standard
3	Median		15	21
	Impact	35%	25%	40%
	Median \pm 2 SE		14-16	20-22
4	Median		14	22
	Impact	28%	41%	31%
	Median \pm 2 SE		13-15	21-23
5	Median		13	20
	Impact	31%	29%	40%
	Median \pm 2 SE		11-14	19-21
6	Median		15	22
	Impact	31%	33%	36%
	Median \pm 2 SE		14-16	21-23
7	Median		16	21
	Impact	37%	22%	41%
	Median \pm 2 SE		15-17	20-22
8	Median		13	20
	Impact	23%	22%	55%
	Median \pm 2 SE		12-14	18-22
11	Median		12	20
	Impact	21%	24%	55%
	Median \pm 2 SE		9-15	19-21

Figure 2. Impact of median NeSA-AAR recommended cut scores



Each panelist responded to a series of evaluation questions about the various components of the operational standard setting. The median response for each panel for each evaluation question is shown in Table 7. The overall results suggest that each panel felt the workshop was very successful and felt the workshop was very successful in arriving at appropriate recommended cut scores. In addition to the closed-ended questions, panelists were allowed to provide comments about the workshop. These comments are included in Appendix G.

Table 7. Median NeSA-AAR evaluation results by grade level

	Elementary	Middle	High School
Successfulness of training [4=Very Successful to 1= Very Unsuccessful]			
1a. Orientation	4	4	4
1b. Training on Yes/No method	4	4	4
1c. Explanation of Process	4	4	4
1d. Review of PLDs	4	4	4
1e. Practice with Method	4	4	4
Time allocated to training [4= Totally Adequate to 1=Totally Inadequate]			
2a. Orientation	3.5	4	3
2b. Training on Yes/No method	3	4	3
2c. Explanation of Process	3	4	3
2d. Review of PLDs	3.5	4	3
2e. Practice with Method	3	4	3
Round Two Yes/No Ratings			
3. Confidence in predictions [4=Confident to 1=Not at all confident]	4	4	4
4. Time for predictions [4=More than enough time to 1=More time needed]	4	4	3
Overall workshop			
5. Confidence in cut scores [4=Confident to 1=Not at all Confident]	4	4	4
6. Most useful feedback data (mode reported) [4=P-values, 3=Impact data, 2=Panel Summary]	4	4	4
7. Least useful feedback data (mode reported) [4=P-values, 3=Impact data, 2=Panel Summary, 1=Other]	3	1	3
8. Overall success [4=Very Successful to 1= Very Unsuccessful]	4	4	4
9. Overall organization [4=Very Organized to 1=Very Unorganized]	4	4	4

Policy discussion of Standard Setting Results

On July 1, 2011 representatives from NDE and Alpine met to discuss the results of the standard setting process. The purpose of this meeting was to debrief on the standard setting workshop, review the results of the standard setting process across the grade level, and evaluate decision rules that would smooth the results and identify a set of recommended cut scores that NDE would take to the Nebraska Board of Education for consideration.

As a result of this meeting, the final NDE- recommended cut scores were chosen in so as to (1) maximize the similarity in impact across the grade levels, (2) honor the content expertise of the Nebraska educators that served on the standard setting panels, and (3) consider the impact trend of the NeSA-AAR assessment. To meet these three goals, some cut scores were selected from the lower part of the panel-suggested range for some grade levels. At other grade levels, cut scores were selected from the higher end of the panel-selected range. The final recommended cut scores for the NeSA-AAM are shown in Table 8 along with the associated impact values. The impact values are also shown graphically in Figure 3. The final recommended cut scores for the NeSA-AAR are shown in Table 9 along with the associated impact values (graphically represented in Figure 4). On July 13, 2010 these final recommended cut scores were approved by the Nebraska Board of Education.

Table 8. NDE-recommended NeSA-AAM cut scores and associated impact values, by grade level.

Grade	2011 Proposed Cut Scores		Impact		
	Meets the Standard	Exceeds the Standard	Below the Standard	Meets the Standard	Exceeds the Standard
3	12	20	29%	39%	32%
4	18	25	34%	33%	33%
5	15	23	34%	39%	27%
6	17	26	37%	46%	17%
7	17	25	37%	38%	25%
8	18	25	35%	37%	28%
11	17	23	39%	36%	25%

Figure 3. Impact of NDE-recommended NeSA-AAM cut scores

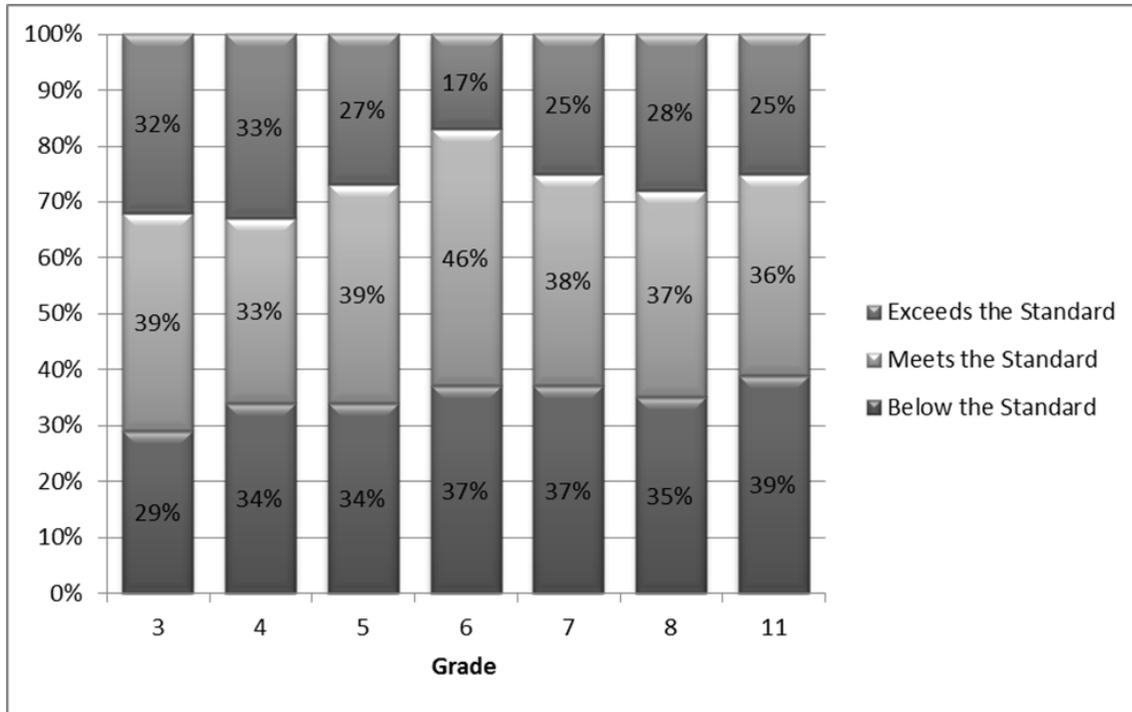
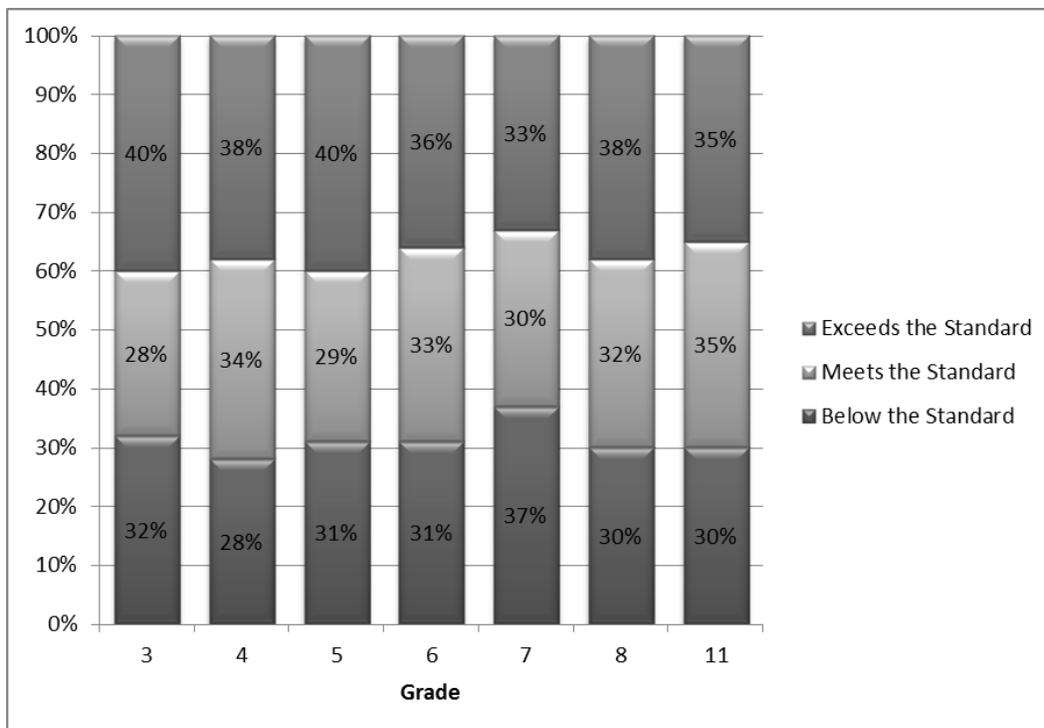


Table 9. NDE-recommended NeSA-AAR cut scores and associated impact values, by grade level.

Grade	Cut Scores		Impact		
	Meets the Standard	Exceeds the Standard	Below the Standard	Meets the Standard	Exceeds the Standard
3	14	21	32%	28%	40%
4	14	21	28%	34%	38%
5	13	20	31%	29%	40%
6	15	22	31%	33%	36%
7	15	21	37%	30%	33%
8	16	22	30%	32%	38%
11	14	21	30%	35%	35%

Figure 4. Impact of NDE-recommended NeSA-AAR cut scores



Conclusions

The panelists’ recommendations to NDE and Nebraska’s State Board of Education for the NeSA-AAM include a set of performance level descriptors for each grade and a set of cut scores that define the performance expectations for each performance level. We first recommend that NDE review and evaluate the performance level descriptors after the final cut scores are set. Second, the State Board of Education has selected a final set of cut scores for the 2011 administration of the NeSA-AAM assessments. Our recommendation is that NDE revisit the appropriateness of these cut scores for the 2012 NeSA-AAM program in light of any changes made to the assessments, the curriculum, or selection of students who are eligible to take this exam during the next school year.

The panelists’ recommendations to NDE and Nebraska’s State Board of Education for the NeSA-AAR include a set of cut scores that define the performance expectations for each performance level based on the expectations (i.e., PLDs) from the 2010 standard setting panel. The State Board of Education has selected a final set of cut scores for the 2011 administration of the NeSA-AAR assessments.

It is important to highlight the critical elements that provide validity evidence for the results of these standard settings. Kane’s (1994, 2001) framework for standard setting validity evidence

identifies three elements of validity evidence for standard settings: procedural, internal, and external. Procedural validity evidence for these studies can be documented through the careful selection of representative, qualified panelists, use of a published standard setting method, completing the study in a systematic fashion, and collecting evaluation data that indicates the panelists felt they were confident in the cut score recommendations they made. Internal validity evidence suggested that panelists had similar expectations for the performance of the target students. This type of evidence is provided by the reasonable standard errors in the recommended cut scores for the second round of the standard setting process. The final type of validity evidence, external, can be provided by triangulation with results from some other estimation of appropriate cut scores from outside the current standard setting process and consideration of other factors that can influence the final policy. For the NeSA-AAR standard setting, this comes from comparing the impact of the 2010 recommended cut scores to the impact of the 2011 recommended cut scores which was conducted during the policy discussion and overall showed similar levels of expectations. For the NeSA-AAM (and the NeSA-AAR as well), this could be accomplished is by conducting a second standard setting process such as contrasting groups from which one could triangulate the results of this standard setting process.

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.
- Impara, J. C. & Plake, B. S. (1997). Standard setting: An alternative approach. *Journal of Educational Measurement*, 34, 355-368.
- Jaeger, R. M. (1991). Selection of judges for standard setting. *Educational Measurement: Issues and Practices*, 10(2), 3-6, 10, 14.
- Kane, M. T. (1994). Validating the performance standards associated with passing scores. *Review of Educational Research*, 64, 425-461.
- Kane, M. T. (2001). So much remains the same: Conception and status of validation in setting standards. In G. J. Cizek (Ed.) *Setting Performance Standards: Concepts, Methods, and Perspectives* (pp. 53-88). Mahwah, NJ: Lawrence Erlbaum Associates.
- Raymond, M. R. & Reid, J. B. (2001). Who made thee a judge? Selecting and training participants for standard setting. In G. J. Cizek (Ed.) *Setting Performance Standards: Concepts, Methods, and Perspectives* (pp. 119-157). Mahwah, NJ: Lawrence Erlbaum & Associates, Inc.

Appendix A: NeSA-AAM Recommended Performance Level Descriptors

The recommended NeSA-AAM PLDs are presented in this appendix by grade.

Nebraska State Accountability Alternate Assessment of Mathematics (NeSA-AAM)
Performance Level Descriptor, Grade 3

Below the Standards

Using their primary mode of communication, appropriate supports, and accommodations, the student demonstrates a basic level of understanding of extended grade-level mathematics skills and concepts. Inaccuracies may interfere with conceptual understanding. The student may require frequent prompting in order to complete a task. Using only one strategy, the student may be able to:

- Identify whole numbers 0-9.
- Represent up to 6 objects in equal-sized groups.
- Identify a circle
- Identify one basic tool for measuring time.
- Identify simple non-numeric patterns.
- Match addition problems with pictures using whole numbers 0-5.
- Identify a bar graph.

Meets the Standards

Using their primary mode of communication, appropriate supports, and accommodations, the student demonstrates a consistent understanding of extended grade-level mathematics skills and concepts. The student may require minimal prompting in order to complete a task. Inaccuracies that do not interfere with conceptual understanding may be present. Using a variety of strategies, the student can:

- Compare and order whole numbers 0-9.
- Represent up to 10 objects in equal-sized groups.
- Identify a square.
- Identify at two or more basic tools for measuring time.
- Compare and order two objects by length.
- Extend simple non-numeric (a/b) patterns.
- Match subtraction problems with pictures using whole numbers 0-5.
- Solve simple single-digit equations involving addition and subtraction with sums and differences 0-5.
- Represent and interpret bar graphs (up to two bars).
- Identify a point on a number line.

Exceeds the Standards

Using their primary mode of communication, appropriate supports, and accommodations, the student exceeds the expectation by demonstrating independent and consistent understanding of extended grade-level mathematics skills and concepts. The student typically requires minimal or no prompting in order to complete a task. Inaccuracies that do not interfere with conceptual understanding are rarely present. Using a variety of strategies, the student can:

- Identify, compare, and order whole numbers 0-15.
- Recognize one-half as part of a whole/set.
- Represent up to 15 objects in equal-sized groups.
- Identify a triangle.
- Identify the time using one measuring tool.
- Compare and order three objects by length.
- Extend non-numeric (a/b/c) patterns.
- Match addition and subtraction problems with pictures using whole numbers 0-9.
- Solve simple single-digit equations involving addition and subtraction with sums and differences 0-9.
- Represent and interpret bar graphs (three or more bars).
- Identify the distance between two points on a number line

**Nebraska State Accountability Alternate Assessment of Mathematics (NeSA-AAM)
Performance Level Descriptor, Grade 4**

<u>Below the Standards</u>	<u>Meets the Standards</u>	<u>Exceeds the Standards</u>
<p>Using their primary mode of communication, appropriate supports, and accommodations, the student demonstrates a basic level of understanding of extended grade-level mathematics skills and concepts. Inaccuracies may interfere with conceptual understanding. The student may require frequent prompting in order to complete a task. Using only one strategy, the student may be able to:</p> <ul style="list-style-type: none"> • Identify which group is more or less (0-10) without symbols • Recognize halves of a whole. • Represent up to 10 objects in equal groups. • Solve single-digit addition problems with 0-9. • Choose appropriate symbol (addition or subtraction) for a given illustration. • Identify a triangle and rectangle. • Identify a point on a number line (0-20). • Identify time from at least one measuring tool. • Select the appropriate tool for measuring length and compare/order two or more objects by length. • Match a bar graph to given data. 	<p>Using their primary mode of communication, appropriate supports, and accommodations, the student demonstrates a consistent understanding of extended grade-level mathematics skills and concepts. The student may require minimal prompting in order to complete a task. Inaccuracies that do not interfere with conceptual understanding may be present. Using a variety of strategies, the student can:</p> <ul style="list-style-type: none"> • Identify and order whole numbers 0-20. • Recognize models of equivalent fractions $\frac{1}{2}$, whole. • Represent up to 20 objects in equal groups. • Choose appropriate number sentence (using illustrations) and solve addition and subtraction problems with sums and differences 0-9. • Identify the number of angles/corners in a triangle and rectangle. • Recognize lines that meet and do not meet (vocabulary of parallel and intersecting not required) • Identify the distance between two points on a number line when all points are given (0-20). • Tell time to the hour using an analog clock. • Measure the length of an object using non-standard units. • Compare data on bar graphs. 	<p>Using their primary mode of communication, appropriate supports, and accommodations, the student exceeds the expectation by demonstrating independent and consistent understanding of extended grade-level mathematics skills and concepts. The student typically requires minimal or no prompting in order to complete a task. Inaccuracies that do not interfere with conceptual understanding are rarely present. Using a variety of strategies, the student can:</p> <ul style="list-style-type: none"> • Compare whole numbers 0-20. • Recognize models of equivalent fractions $\frac{1}{2}$, whole regardless of orientation. • Represent and add numbers up to 20 in equal-sized groups to explain multiplication and division. • Solve double-digit plus single-digit addition problems without regrouping. • Choose appropriate number sentence for a word problem with no illustrations. • Identify the number of angles/corners/sides in a triangle and rectangle. • Identify the distance between two points on a number line when all points are <u>not</u> given (0-20). • Tell time to the nearest half hour. • Select and apply the appropriate tool for measuring length, capacity/volume and weight. • Interpret data on bar graphs.

**Nebraska State Accountability Alternate Assessment of Mathematics (NeSA-AAM)
Performance Level Descriptor, Grade 5**

Below the Standards

Using their primary mode of communication, appropriate supports, and accommodations, the student demonstrates a basic level of understanding of extended grade-level mathematics skills and concepts. Inaccuracies may interfere with conceptual understanding. The student may require frequent prompting in order to complete a task. Using only one strategy, the student may be able to:

- Compare and order whole numbers 0-20.
- Identify equivalent representations of whole single-digit numbers.
- Match models of equivalent fractions of ($\frac{1}{2}$, whole).
- Solve double-digit by single-digit addition problems without regrouping.
- Multiply single digits (0's, 1's).
- Choose appropriate number sentence for a word problem with illustrations
- Given a point on a number line, can round to the nearest tens.
- Identify attributes of triangles and rectangles.
- Identify customary tools for measuring length.
- Compare data in bar graphs.
- Identify the missing number in an addition equation using visuals.

Meets the Standards

Using their primary mode of communication, appropriate supports, and accommodations, the student demonstrates a consistent understanding of extended grade-level mathematics skills and concepts. The student may require minimal prompting in order to complete a task. Inaccuracies that do not interfere with conceptual understanding may be present. Using a variety of strategies, the student can:

- Compare and order whole numbers 0-30.
- Identify equivalent representations of whole double-digit numbers.
- Match models of equivalent fractions of ($\frac{1}{4}$, $\frac{1}{2}$, whole).
- Identify even and odd numbers to 10
- Round to the nearest tens.
- Solve double-digit by double-digit addition and subtraction problems without regrouping.
- Multiply single digits (0's, 1's, 2's, 5's).
- Select the appropriate operation (+, -) to solve a story problem.
- Identify attributes of simple polygons and circles.
- Identify customary units for measuring length.
- Interpret bar graphs
- Given the value of a variable, solve a simple addition equation.

Exceeds the Standards

Using their primary mode of communication, appropriate supports, and accommodations, the student exceeds the expectation by demonstrating independent and consistent understanding of extended grade-level mathematics skills and concepts. The student typically requires minimal or no prompting in order to complete a task. Inaccuracies that do not interfere with conceptual understanding are rarely present. Using a variety of strategies, the student can:

- Compare and order whole numbers 0-50.
- Match models of equivalent fractions of ($\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{2}$, whole).
- Identify even and odd numbers to 20
- Solve addition and subtraction problems (including story problems) with regrouping.
- Multiply single digits (0-5) that result in whole number products.
- Apply estimation of sums to the nearest tens.
- Use tools to measure customary length.
- Interpret circle graphs.
- Given the value of a variable, solve a simple subtraction equation.

Nebraska State Accountability Alternate Assessment of Mathematics (NeSA-AAM)
Performance Level Descriptor, Grade 6

<u>Below the Standards</u>	<u>Meets the Standards</u>	<u>Exceeds the Standards</u>
<p>Using their primary mode of communication, appropriate supports, and accommodations, the student demonstrates a basic level of understanding of extended grade-level mathematics skills and concepts. Inaccuracies may interfere with conceptual understanding. The student may require frequent prompting in order to complete a task. Using only one strategy, the student may be able to:</p> <ul style="list-style-type: none"> • Add and subtract positive whole numbers. • Identify halves, thirds, and fourths from a whole using drawings or manipulatives. • Recognize coins and their values. • Recognizes a variable in an equation. • Round to the nearest 10. • Identify parenthesis and commutative property. • Identify perimeter and area of a simple polygon on a 4 x 4 grid. • Recognize bar and circle graphs. • Compare and order whole numbers up to 30. 	<p>Using their primary mode of communication, appropriate supports, and accommodations, the student demonstrates a consistent understanding of extended grade-level mathematics skills and concepts. The student may require minimal prompting in order to complete a task. Inaccuracies that do not interfere with conceptual understanding may be present. Using a variety of strategies, the student can:</p> <ul style="list-style-type: none"> • Multiply positive single-digit whole numbers. • Subtract halves, thirds, and fourths from a whole using drawings or manipulatives. • Determine two ways to combine coins up to \$1.00. • Recognize decimal representations of money. • Select the appropriate operation (+, -, x, /) when problem solving. • Apply estimation to sums and differences to the nearest 10. • Identify the purpose of parenthesis in the order of operations. • Interpret data using a variety of visual and numerical representations (i.e., circle graphs, mode, probability) • Determine the perimeter of a simple polygon and area of a square. • Use a symbol to represent a numeric value in a simple equation. • Compare and order whole numbers up to 40 and identify factorization up to 20. 	<p>Using their primary mode of communication, appropriate supports, and accommodations, the student exceeds the expectation by demonstrating independent and consistent understanding of extended grade-level mathematics skills and concepts. The student typically requires minimal or no prompting in order to complete a task. Inaccuracies that do not interfere with conceptual understanding are rarely present. Using a variety of strategies, the student can:</p> <ul style="list-style-type: none"> • Divide positive whole numbers. • Add and subtract halves, thirds, and fourths with like denominators using drawings or manipulatives. • Add and subtract money amounts. • Solve simple equations with parenthesis or with commutative properties. • Select the appropriate operation (+, -, x) and solve a story problem. • Apply estimation to products to the nearest 10. • Interpret data using a variety of graphs. • Find the median for a set of ordered data. • Determine the area of a rectangle. • Compare and order simple percents.

**Nebraska State Accountability Alternate Assessment of Mathematics (NeSA-AAM)
Performance Level Descriptor, Grade 7**

<u>Below the Standards</u>	<u>Meets the Standards</u>	<u>Exceeds the Standards</u>
<p>Using their primary mode of communication, appropriate supports, and accommodations, the student demonstrates a basic level of understanding of extended grade-level mathematics skills and concepts. Inaccuracies may interfere with conceptual understanding. The student may require frequent prompting in order to complete a task. Using only one strategy, the student may be able to:</p> <ul style="list-style-type: none"> • Compare and order whole numbers up to 40. • Divide a group of manipulatives by a single number. • Select the appropriate operation to solve an addition story problem. • Match basic shapes. • Compare quantities using more than, less than, or equal to. • Uses manipulatives and/or tally marks to represent data. • Determine the probabilities of an impossible event. 	<p>Using their primary mode of communication, appropriate supports, and accommodations, the student demonstrates a consistent understanding of extended grade-level mathematics skills and concepts. The student may require minimal prompting in order to complete a task. Inaccuracies that do not interfere with conceptual understanding may be present. Using a variety of strategies, the student can:</p> <ul style="list-style-type: none"> • Compare and order whole numbers up to 50 and simple percents. • Apply estimation to products to the nearest 10. • Determine the area of a rectangle. • Evaluate with respect to order of operations in addition, subtraction, and multiplication expressions with parentheses. • Divide a positive two-digit number by a single digit number. • Select and apply appropriate operation to solve an addition or subtraction story problem. • Find the distance between two horizontal or two vertical points. • Identify congruent shapes. • Given the value of a variable, evaluate a simple addition or subtraction expression. • Identify a correct simple inequality. • Identify and interpret multiple types of visual representations or data sets. • Determine the probability of a given situation (always, sometimes, never). 	<p>Using their primary mode of communication, appropriate supports, and accommodations, the student exceeds the expectation by demonstrating independent and consistent understanding of extended grade-level mathematics skills and concepts. The student typically requires minimal or no prompting in order to complete a task. Inaccuracies that do not interfere with conceptual understanding are rarely present. Using a variety of strategies, the student can:</p> <ul style="list-style-type: none"> • Select and apply the appropriate operation to solve a multiplication story problem. • Match equivalent fractions and percents. • Plot the location of an ordered pair on a 4 x 4 grid. • Solve one-step addition, subtraction, and multiplication equations. • Find the median for an uneven set of numbers. • Compare theoretical probabilities.

**Nebraska State Accountability Alternate Assessment of Mathematics (NeSA-AAM)
Performance Level Descriptor, Grade 8**

Below the Standards

Using their primary mode of communication, appropriate supports, and accommodations, the student demonstrates a basic level of understanding of extended grade-level mathematics skills and concepts. Inaccuracies may interfere with conceptual understanding. The student may require frequent prompting in order to complete a task. Using only one strategy, the student may be able to:

- Compare and order integers 0 to 50
- Compute without regrouping and problem solve using addition
- Apply estimation to nearest 10 on situation involving addition
- Find lengths of horizontal and vertical sides of geometric shapes on a coordinate grid in Q1
- Match congruent shapes
- Identify relationships of number sentences
- Solve one-step equations involving addition with whole numbers
- Recognize accurate representations of data in a circle graph, 2 category circle
- Find the median of an uneven number set of data set of 3 or 5

Meets the Standards

Using their primary mode of communication, appropriate supports, and accommodations, the student demonstrates a consistent understanding of extended grade-level mathematics skills and concepts. The student may require minimal prompting in order to complete a task. Inaccuracies that do not interfere with conceptual understanding may be present. Using a variety of strategies, the student can:

- Compare and order integers -50 to 50
- Compute decimals without regrouping
- Select the appropriate operation or method when problem solving
- Use geometric properties to identify parallel lines, right angles, congruent triangles, similar shapes
- Find lengths of horizontal and vertical sides of geometric shapes on a coordinate grid
- Identify relationships using simple algebraic expressions, number sentences, and a squared number
- Solve whole number one step equations, including addition, subtraction, and multiplication
- Use sets of data to compare characteristics, find median, and recognize accurate representations of data in a circle graph

Exceeds the Standards

Using their primary mode of communication, appropriate supports, and accommodations, the student exceeds the expectation by demonstrating independent and consistent understanding of extended grade-level mathematics skills and concepts. The student typically requires minimal or no prompting in order to complete a task. Inaccuracies that do not interfere with conceptual understanding are rarely present. Using a variety of strategies, the student can:

- Compare and order integers
- Compute decimals with regrouping
- Applying estimation to nearest 10 in story problems including addition and subtraction
- Identify and compare characteristics, properties and relationships of geometric shapes
- Apply appropriate procedures to determine measurements of missing lengths in geometric shapes
- Create and use models of quantitative relationships to solve one step equations
- Compare characteristics, recognize accurate representations and find units of central tendency for a set of data
- Determine complementary events and the probability of independent events

Nebraska State Accountability Alternate Assessment of Mathematics (NeSA-AAM)
Performance Level Descriptor, Grade 11

<u>Below the Standards</u>	<u>Meets the Standards</u>	<u>Exceeds the Standards</u>
<p>Using their primary mode of communication, appropriate supports, and accommodations, the student demonstrates a basic level of understanding of extended grade-level mathematics skills and concepts. Inaccuracies may interfere with conceptual understanding. The student may require frequent prompting in order to complete a task. Using only one strategy, the student may be able to:</p> <ul style="list-style-type: none"> • Add and subtract two-digit numbers without regrouping • Apply estimation to the nearest 10 on story problems involving addition and subtraction • Apply the geometric property ($l \times w$) to find the area of a rectangle • Convert equivalent amounts of money under \$5 • Interpret values of a linear function in a table for positive, independent integers less than 5 • Identify numbers that make one variable addition or subtraction equations true • Differentiate between a dependent and independent event involving 2 different objects • Use the appropriate Counting Principle to determine the combinations for an event, 2 choices under 5 each 	<p>Using their primary mode of communication, appropriate supports, and accommodations, the student demonstrates a consistent understanding of extended grade-level mathematics skills and concepts. The student may require minimal prompting in order to complete a task. Inaccuracies that do not interfere with conceptual understanding may be present. Using a variety of strategies, the student can:</p> <ul style="list-style-type: none"> • Demonstrate number sense by adding and subtracting two-digit numbers, recognizing expanded powers, and applying estimation to nearest 10 in story problems including addition, subtraction, and multiplication • Using geometry concepts and coordinate geometry to find area of rectangle, determine the coordinates of a point and identify properties of equilateral and right triangles • Convert equivalent rates using money • Identify linear and non-linear relationships from a graph • Interpret values of a function in a table and analyze the rate of change in a table or graph • Identify numbers that make one variable addition or subtraction inequalities true • Differentiate dependent/independent and mutually exclusive events, and determine the combinations of events using the Counting Principle • Determine the range of a data set. 	<p>Using their primary mode of communication, appropriate supports, and accommodations, the student exceeds the expectation by demonstrating independent and consistent understanding of extended grade-level mathematics skills and concepts. The student typically requires minimal or no prompting in order to complete a task. Inaccuracies that do not interfere with conceptual understanding are rarely present. Using a variety of strategies, the student can:</p> <ul style="list-style-type: none"> • Compute with regrouping and problem solve using appropriate strategies • Identify and apply properties of geometric shapes • Determine the coordinates of a point on a coordinate plane • Interpret and analyze relationships using tables and graphs • Determine the rate of change in a table or graph • Solve the quantitative relationship of one variable inequalities

Appendix B: NeSA-AAM Detailed Standard Setting Results by Grade Level

Grade	Round		Below the Standard	Meets the Standard	Exceeds the Standard
3	1	Median		14	21
		Impact	33%	35%	32%
		Standard Error		0.64	0.42
	2	Median		14	21
		Impact	38%	37%	25%
		Standard Error		.56	0.44
4	1	Median		20	26
		Impact	42%	32%	26%
		Standard Error		0.8	0.49
	2	Median		21	27
		Impact	47%	31%	22%
		Standard Error		1.04	0.64
5	1	Median		20	27
		Impact	52%	39%	9%
		Standard Error		1.37	1.19
	2	Median		15	24
		Impact	34%	44%	22%
		Standard Error		0.57	0.82
6	1	Median		16	28
		Impact	32%	61%	7%
		Standard Error		1.33	0.61
	2	Median		17	27
		Impact	37%	50%	13%
		Standard Error		0.96	0.39
7	1	Median		17	26
		Impact	37%	45%	18%
		Standard Error		0.73	0.47
	2	Median		18	26
		Impact	44%	38%	18%
		Standard Error		0.66	0.34
8	1	Median		16	23
		Impact	29%	31%	40%
		Standard Error		0.98	1.11
	2	Median		11	23
		Impact	15%	45%	40%
		Standard Error		1.07	1.13
11	1	Median		15	23
		Impact	29%	46%	25%
		Standard Error		1.03	0.81
	2	Median		13	20
		Impact	22%	36%	42%
		Standard Error		0.91	0.87

Appendix C: NeSA-AAM Impact Tables by Grade Level

The table below indicates the percent of students who scored at or above each raw score, by grade level.

Score	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 11
0	100%	100%	100%	100%	100%	100%	100%
1	94%	93%	94%	94%	96%	95%	93%
2	93%	92%	93%	93%	95%	95%	91%
3	92%	92%	93%	93%	94%	95%	91%
4	91%	91%	92%	93%	93%	94%	90%
5	90%	91%	92%	93%	93%	94%	89%
6	89%	91%	91%	93%	92%	93%	89%
7	87%	90%	90%	92%	92%	92%	88%
8	86%	90%	88%	92%	90%	91%	88%
9	82%	89%	87%	92%	90%	90%	87%
10	79%	88%	85%	90%	89%	88%	87%
11	74%	86%	83%	88%	88%	85%	85%
12	71%	83%	80%	85%	85%	85%	82%
13	67%	82%	75%	82%	81%	82%	78%
14	62%	79%	69%	77%	78%	80%	75%
15	56%	76%	66%	71%	73%	74%	71%
16	52%	73%	60%	68%	70%	71%	68%
17	46%	70%	57%	63%	63%	68%	61%
18	39%	66%	52%	59%	56%	65%	55%
19	34%	63%	48%	52%	53%	60%	48%
20	32%	58%	44%	48%	47%	55%	42%
21	25%	53%	41%	44%	43%	51%	36%
22	17%	47%	34%	39%	38%	45%	30%
23	12%	42%	27%	31%	32%	40%	25%
24	5%	39%	22%	28%	29%	33%	20%
25	2%	33%	16%	21%	25%	28%	15%
26		26%	9%	17%	18%	20%	10%
27		22%	5%	13%	11%	12%	8%
28		16%	2%	7%	9%	7%	5%
29		10%	0%	3%	5%	4%	1%
30		3%	0%	1%	1%	1%	1%

Appendix D: NeSA-AAM Evaluation Comments

Elementary Panel Evaluation Comments

PLD Evaluation

- It was hard to limit it to 10 PLDs when skills were totally different. Big gaps seemed apparent between grade levels esp elem to middle levels
- Elem & Middle School seemed to be given conflicting directions which made collaboration slow down & become more confusing than need be.

Standard Setting Evaluation

- I did feel a little uneasy making judgments for the alternative assessment when I am a regular Ed teacher. I was able to put my best thoughts into it, but it was a little difficult for me because I am not always working around Sped kids.
- This was an interesting process to be a part of. I enjoyed my time and learned a lot!
- I thoroughly enjoyed this process and would feel privileged to be invited back to evaluate curriculum & assessments. I gained a wealth of knowledge!
- I enjoyed being a part of this process. It helps me to better understand the selection of test items and how decisions are made regarding cut scores.
- Susan did a very nice job facilitating our 3-5 group. She was knowledgeable and helpful. I have very much enjoyed being a part of this experience. Thank you Nebraska Department of Education.
- I felt the workshop was very informative and very organized. My only suggestion would be maybe providing an outline as to what is expected of new comers.
- I'm glad p-values weren't given to us until our discussion after round 1.
- The hardest piece I feel in the workshop was the PLD development. I think maybe more time/discussion/input from more participants was needed before going into a document for ALL (alternate) teachers in NE to refer to.

Middle Panel Evaluation Results

PLD Evaluation

- Groups were given different set of directions, but in the end it worked out
- It seems that students who take the alternative assessment may not be at a level to achieve success according to the state standards for their age group.
- I don't believe this "Alternate Assessment" is a reflection of how student's that are suggested to take the assessment are learning
- I'm confident that they describe one group of students taking the alternate assessment. I'm not confident that it describes students who used to take the "life skills" assessment. It appears unrealistic for those students.
- General information was adequate, but specifics were lacking and it lead to different groups completing the task using different processes. We were given one set of directions, then the directions changed. It would have been much more helpful to have clear directions from the start. I'm also concerned that the PLDs are just another technical document without any real usefulness to educators.
- The group that takes the alternate assessment is a very broad group. I am confident that this PLD describes the higher functioning students in this group, but I feel we fail to think about & represent the very low functioning students. I feel the alternate assessment & the PLDs for this need to be developed into 2 groups. The current alternate assessment & PLDs fit & work well for our higher functioning students who take the alternate assessment. I feel there then needs to be another alternate assessment & PLDs that addresses the very low life skills based students. I feel these 2 categories are very different & it is unfair to both groups of students to expect them to respond to the same questions & fit within the same PLDs. I appreciate you listening to my thoughts! :)
- Expectations need to be clarified specifically. "Draft" forms need to accurately reflect extended indicators.
- Directions needed to be specific right at the beginning so we didn't have to start our process over.

Standard Setting Evaluation

- Very educational process for me.
- I would really like to see the development of a second alternate assessment. I feel there are 2 groups (very different groups) that we are trying to assess using one assessment. I feel that in testing these students with one assessment we are discounting growth of one of these 2 groups. I feel the current alternate assessment is a good evaluation for the group that is too low for the regular assessment, but not in a life skills, functional program. I feel we need to develop a second alternate assessment that focusing on assessing the true life skills, functional based students.

- When we worked on the PLDs, we were asked to compress them; that not all bullet statements were important. But when I was referring to the PLDs while I was rating the assessment items, some standards were no longer addressed so I still had to go back to the extended indicators to see what the standards considered appropriate at each grade level.
- Very well organized.

High School Panel Evaluation Results

PLD Evaluation

- I think Question #2, I would always use more time if given. Probably isn't necessary.

Standard Setting Evaluation

- I enjoyed having this opportunity. It is hard thinking outside of your box of knowledge to help set recommendations. Glad to see people from regular ed and special ed.
- All was very organized & efficient!
- Excellent job, Presenters are so knowledgeable and patient with us. I felt very welcomed and informed. Loved being a part of this opportunity. Chad was great.

Appendix E: NeSA-AAR Detailed Standard Setting Results by Grade Level

Grade	Round		Below the Standard	Meets the Standard	Exceeds the Standard
3	1	Median		15	21
		Impact	35%	20%	45%
		Standard Error		0.81	0.57
	2	Median		15	21
		Impact	35%	25%	40%
		Standard Error		0.5	0.35
4	1	Median		14	21
		Impact	28%	34%	38%
		Standard Error		0.55	0.5
	2	Median		14	22
		Impact	28%	41%	31%
		Standard Error		0.46	0.37
5	1	Median		14	21
		Impact	37%	30%	33%
		Standard Error		0.77	0.43
	2	Median		13	20
		Impact	31%	29%	40%
		Standard Error		0.57	0.51
6	1	Median		14	21
		Impact	27%	30%	43%
		Standard Error		1.08	0.67
	2	Median		15	22
		Impact	31%	33%	36%
		Standard Error		0.53	0.38
7	1	Median		17	21
		Impact	42%	25%	33%
		Standard Error		0.57	0.31
	2	Median		16	21
		Impact	37%	22%	41%
		Standard Error		0.22	0.4
8	1	Median		14	20
		Impact	26%	19%	55%
		Standard Error		0.69	0.65
	2	Median		13	20
		Impact	23%	22%	55%
		Standard Error		0.39	0.63
11	1	Median		14	21
		Impact	30%	35%	35%
		Standard Error		1.22	0.77
	2	Median		12	20
		Impact	21%	24%	55%
		Standard Error		1.14	0.53

Appendix F: NeSA-AAR Impact Tables by Grade Level

The table below indicates the percent of students who scored at or above each raw score, by grade level.

Score	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 11
0	100%	100%	100%	100%	100%	100%	100%
1	95%	94%	95%	96%	95%	96%	94%
2	93%	92%	94%	95%	95%	96%	93%
3	93%	91%	93%	94%	93%	95%	91%
4	92%	91%	92%	94%	93%	95%	90%
5	92%	90%	92%	93%	92%	94%	89%
6	91%	90%	91%	93%	91%	94%	89%
7	88%	90%	89%	92%	90%	92%	88%
8	86%	88%	86%	89%	88%	89%	87%
9	84%	85%	83%	85%	87%	87%	85%
10	81%	84%	79%	83%	84%	84%	83%
11	77%	80%	76%	81%	82%	82%	80%
12	74%	77%	73%	77%	77%	79%	75%
13	71%	74%	69%	75%	73%	77%	72%
14	68%	72%	63%	73%	68%	74%	70%
15	65%	68%	59%	69%	63%	72%	67%
16	61%	65%	57%	64%	60%	70%	65%
17	57%	59%	54%	61%	58%	67%	61%
18	53%	53%	51%	56%	52%	63%	56%
19	48%	48%	44%	52%	49%	57%	51%
20	45%	45%	40%	47%	41%	55%	44%
21	40%	38%	33%	43%	33%	48%	35%
22	35%	31%	24%	36%	24%	39%	29%
23	27%	24%	17%	29%	12%	28%	22%
24	17%	15%	9%	17%	4%	14%	13%
25	6%	8%	2%	5%	0%	5%	5%

Appendix G: NeSA-AAM Evaluation Comments

Elementary Panel Evaluation Comments

- This was a very valuable experience that clarifies to teachers when they ask, "How do they get those questions?!!" Thank you for the experience
- I really enjoyed myself. It was a comfortable atmosphere that was well organized. I feel that I better understand the NeSA Alternate test which I have to administer. I would participate again if you are in need of any assistances with the NeSA standard. The more knowledge I have about the test the better off my students are.
- Really enjoyed the workshop. It was very organized as usual.
- This has been a very informative, well organized training/experience. I am happy to have had this experience!
- Enjoyed a panel of all areas--reg., ed, sped, supervisor/director for input. Gives us a view from all areas.
- Well organized knowledgeable presenters, Everyone was friendly & hard working.
- Q7 I felt all the data presented was useful in some way
- Excellent workshop & professional experience!
- Great leadership and collaboration--don't change a thing! Thanks!
- Time was spent well. The workshop and leaders were very organized.
- I felt this was an excellent experience and my peers were very dedicated to making the scores as accurate as possible. This workshop has helped me better understand the testing/test making/test scoring process. Thanks for the opportunity!

Middle Panel Evaluation Results

- The standard setting workshop was very well planned and organized. Enjoyed working again this summer. Very beneficial for our students in Nebraska.
- I did this last year. I feel that I could have come in, done a quick refresher, then started and been done in one day. We were done on day one @ 2:30 and it only took one hour to finish on day two. If we had just stayed 1 hour later on day one it would have been more convenient for me.
- Alpine continues to be a very professional company. They conduct themselves with the utmost professionalism while being friendly. Myisha was particularly helpful with questions I asked. Thank you for the opportunity to participate in this process. It has been useful and great experience for a teacher outside the walls of the classroom. It is clear that there was extensive planning and organizing in preparation for this workshop.
- I feel that this process is very well organized. I enjoy helping with the process! It is quite interesting. :)
- Actually all data useful Comments: Thank you for being so complete with this process! You made this an enjoyable experience!
- Further explanation to the impact of what we were trying to accomplish. Reality of test scores were different than panel expectations.
- Awesome Job! Great use of our time together!
- I am very appreciative of the invitation to participate in this process. The Learning opportunity is something that I enjoy taking back to my school to support the NeSA process. I do feel like the training/workshop could have been accomplished in 1 day rather than having participants return the second half day session. I'm sure there are other logistics involved in this process that I am not informed of, so maybe there are things that need to be done in the designed time. Money & time could have been saved if not.

High School Panel Evaluation Results

- You did a nice job of soliciting answers so that all voices were heard.
- I would let participants see a few examples of test items before doing much of anything else. Until I saw those, I was pretty fuzzy about what we were attempting to do. But, once I saw the items, the process made sense. That might be more important for regular ed teachers who have no background with anything like this.
- The feedback was very helpful--going through samples and discussing was interesting and done in an extremely positive way. I really cannot think of anything to change.
- This helped me get to know the standards more & understand the PLDs & know whats on the test. Thank you for letting me get involved!
- This was a great process. Very well facilitated. Thank you!!!
- Thank you for allowing us to be a part of this great task. It has caused me to think and remember to stay on task so the kids and learn and then demonstrate that learning. In that case everyone wins. Thanks!
- I really learned a lot about the process--very informative for me! Thank you!