**Nebraska Technical Advisory Committee Meeting**

**Nebraska Department of Education**

**September 2, 2020**

**Virtual Meeting**

**8:30-1:00 Central Time**

**8:15 – 8:30: Login and Technology Checks**

**8:30 – 8:40: Welcome & Introductions**

**8:40:** **Approve Minutes (Chair, Chad Buckendahl, Document 1)**

**8:40 – 10:10:**  **Spring 2021 Through-Year Adaptive Proof of Concept Test Design**

During conversations with NDE in June 2020, NDE asked NWEA to investigate non-summative student testing options that would reduce testing time and move NDE more rapidly to a through-year solution. Earlier this summer, NWEA proposed a shorter, fully adaptive test option for Spring 2021. This recommended option consists of 23 operational items, seven field test items, and five MAP Growth items for the linking study. The recommendation followed simulation studies investigating several different test designs that would meet the needs of NDE and was found to have adequate reliability of scores for a composite scale score reporting approach.

NWEA will discuss the results from the simulations into this recommended solution. In creating a shorter test, adjustments were made to the blueprint. NWEA will discuss how those choices impacted the simulation results and seek feedback. Based on the simulation results, NWEA would like the TAC to provide feedback about subscore reporting options. The choice we believe NDE needs to consider is reporting out at the content area only or reporting out at only some of subscore levels.

*Document 2: Spring 2021 Proof of Concept TYA Test Design*

1. Based on the decision made to adjust the blueprint constraints:
   1. As NDE moves in the future to a, potentially longer, summative spring test, what feedback do you have in terms of maintaining constructs across time vs. rescaling?
   2. Reading passage constraints are currently set from 3–7 with 3–7 items per passage. Do you have feedback on reading load with these constraints?
2. NWEA recommends reporting out at the content area only or reporting out at some of the subscore levels.
   1. Moving ELA to Reading and Writing is likely understandable to stakeholders.
   2. What are the pros/cons of reporting out only in 2 subscore reporting areas for math?
   3. If only 2–3 subscores per content area are reported, what kind of information could be provided from the other subscore levels with only 4–5 items?
   4. What other aggregate reporting might be beneficial for informing instruction?
   5. Does the TAC have any recommendations about guiding districts in legitimate uses of results from the spring 2021 design?

## 10:10–10:20: Break

## 10:20–10:50: Spring 2021 NSCAS Science Field Test and Analysis Plan

A full-scale standalone field test will be administered in Spring 2021 to collect information about how well the new NSCAS Science test design and newly developed performance tasks function prior to the operational launch in Spring 2022. At the TAC meetings in September 2019 and March 2020, NWEA presented the field test design and results from a dimensionality study conducted to evaluate potential measurement models. Based on the feedback from previous TAC meetings, NWEA will present the updated approach to the Spring 2021 field test and the psychometric analysis plan to evaluate the quality of the performance tasks and prompts and calibrate all prompts.

NWEA will also continue the dimensionality study to determine a measurement model that captures the patterns within the data and is most appropriate to be used in an operational setting. This analysis will extend the previous measurement model investigations by using field test data that better resemble the operational test and evaluating additional measurement models to make a final model recommendation. Meanwhile, NWEA is considering the potential impact of COVID-19 on the field test administration and adjusting our plans to accommodate possible situations.

*Document 3: Spring 2021 NSCAS Science Field Test and Analysis Plan*

1. What needs to be adjusted in the original field test and analysis plan to accommodate different situations that may happen in Spring 2021?
2. Do you have any recommendations for the planned psychometric analyses and the measurement models to be investigated?

## 10:50–12:05: Year 3 Research Studies

### **25 minutes: Math ALD Validity Study**

The purpose of this study was to test the efficacy of content developers’ alignment of items to the achievement level descriptors (ALDs) against the empirical alignment of items based on item difficulty data to investigate the use of ALDs as the epicenter of the test score interpretation validity argument. To conduct the study, item developers aligned 82–87% of items in the NSCAS Mathematics item pool for Grades 3–8 to the assessment’s Range ALDs intended to describe the full range of the test scale. The degree of consistency between the hypothesized alignment and actual alignment was examined using rater agreement statistics. Raters correctly identified the achievement level of 56–60% of the items, which was above the chance level of agreement. An emerging technique known as the embedded standard setting (ESS) process (Lewis & Cook, 2020[[1]](#footnote-2)) was then used to evaluate whether score interpretations based on rater classifications of items to ALDs were comparable to the score interpretations derived from the cut scores set in 2018. Strong evidence was found to support Developing and On Track cut scores.

*Document 4: NSCAS Mathematics ALD Validity Study*

1. Do you have any additional recommendations for this approach prior to NWEA starting this analysis for ELA?
2. Do you have any additional recommendations for resolving where ALDs and intended item features appear to be disconfirmed by empirical data?

### **50 minutes: Evaluation of Science Task Development Workshop and its Classroom Impact**

edCount and NDE conducted classroom science task development workshops in Summer 2020. The workshops were held instead of the scheduled large-scale assessment science task workshop because of the disruption to the state assessment schedule from the COVID-19 pandemic and the desire to support instruction. The workshops had the following goals:

* Develop a deeper understanding of classroom-based science assessments, their relationship to other forms of assessment, and their purposes and uses in a standards-based system of curriculum, instruction, and assessment
* Develop an understanding of a principled approach for developing three-dimensional tasks aligned to the NCCRS-S for use within classrooms
* Collaborate to develop two classroom science assessment tasks, rubrics, and exemplar responses for an assigned grade or domain and NCCRS-S performance indicator to support instruction

With the assistance of edCount and NDE, NWEA will conduct two surveys that focus on how effectively the workshop achieved the three workshop goals using survey instruments. Survey 1 was already administered that evaluated the effectiveness of the task development processes and tools to understand the impact of these elements on task development. Survey 2 will evaluate the impact of workshop training on the classroom practice of the teacher participants. NWEA will present the design of both studies and the results from Survey 1.

*Document 5: NSCAS Science Task Development Workshop Surveys*

1. Do you have any suggestions for how the findings of these studies might inform the theory of action and the improvements of the task development workshop?
2. Do you have any suggestions for how PAD might be better implemented in the task development workshops?
3. Do you have any suggestions for the Survey 2 questions and when to administer Survey 2?

## 12:05–12:55: COVID Research and Accountability

The NDE is currently planning research to understand the impact of COVID 19. The NDE will present the data currently available.

1. Does the TAC have any recommendations or advice as the NDE builds out the COVID research plan?
2. Is there additional data that the NDE should try to obtain for the planned research.

Additionally, the NDE is planning for the updated accountability system following COVID interruption and including the implementation of the Through-Year Adaptive model.

1. Does the TAC have any recommendation or advice about work that could be started now in order to inform the accountability updates?
2. Does the TAC have any considerations that the NDE should consider for accountability due to the COVID interruptions?

1. Lewis, D., & Cook, R. (2020). Embedded standard setting: Aligning standard-setting methodology with contemporary assessment design principles. *Educational Measurement: Issues and Practice, 39*(1), 8–21. [↑](#footnote-ref-2)