IOWA
ASSESSMENT TASK FORCE
REPORT

December 31, 2014

State of Iowa
Department of Education
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Des Moines, IA 50319-0146

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Executive Summary

In 2013, the Iowa Legislature established the Iowa Assessment Task Force, charged with recommending a statewide assessment of student performance for accountability purposes. Comprised of practicing teachers and administrators, technical assistance and professional development providers, higher education, and one representative each from the Iowa Department of Education, the Iowa Business Council, and a parent, the Task Force met for just over a year to study the issues and opportunities around assessment and to deliberate what is best for Iowa's children.

After careful study, the Task Force makes the following recommendations for the statewide accountability assessments in mathematics, reading, and science, along with four additional recommendations necessary for implementation.

The Task Force Recommends:

1. **Statewide Assessment of Mathematics and Reading**
   Through a vote of 20 to 1, the Task Force recommends the Smarter Balanced Assessments as the statewide assessment of student progress on a set of core academic indicators in mathematics and reading.

2. **Statewide Assessment of Science**
   Through a unanimous vote, the Task Force recommends that the Task Force should be reconvened as soon as the new science standards are approved and new assessments are available for review (and in the meantime, continue with the current assessment).

Additional Recommendations Are:

3. **Technology Readiness for Statewide Online Administration of Assessments**
   Through a unanimous vote, the Task Force recommends the Legislature create a work group to study technology readiness, including technology required for accommodations, and create a plan for moving to statewide online administration of assessments.

4. **Funding for the New Assessments**
   Through a unanimous vote, the Task Force recommends that the state appropriate funds to provide all districts access to the full suite of Smarter Balanced assessment tools.

5. **Professional Development**
   Through a unanimous vote, the Task Force recommends that appropriations be available to ensure professional development is provided to support the administration of the new assessments, use of new assessment data, and other related needs; professional development resources are available for use by any providers, teacher leaders, and users; and time is provided for educators to take part in professional development.

6. **Monitoring Effectiveness of the New Assessments**
   Through a unanimous vote, the Task Force recommends that the state monitor the effectiveness of the new assessments, including its ability to measure student progress toward college and career readiness.

Introduction

Statewide assessments are administered to Iowa students annually to meet federal and state law requirements for reporting student assessment results and for purposes of determining adequate yearly progress (AYP). The Iowa Assessments are currently used as the statewide assessment for these purposes. Iowa school districts and buildings must report Iowa Assessments results in mathematics and reading for all students[1] in grades 3-8 and 11, and results in science for all students in grades 5, 8, and 11. Iowa school districts can choose from fall, mid-year, or spring testing windows.

The state-mandated reporting requirements for the core academic indicators of mathematics, reading, and science are contained in Iowa Code Section 256.7(21)(b), which has been amended several times in recent years. Senate File 2284, passed in 2012, directed that the State Board of Education adopt rules specifying that the approved assessment of student progress administered for purposes of reporting the core academic indicators shall be the assessment utilized statewide in the 2011-2012 school year. House File 215, passed in 2013, allowed for a successor assessment administered by the same assessment provider. Senate File 2230, passed in 2014, made technical corrections to clarify that the indicators to be assessed by the statewide assessments of student progress are the core academic indicators in mathematics, reading, and science, rather than the other indicators, such as graduation rate, that are also specified in Iowa Code Section 256.7(21)(b).

House File 215 also directed other changes to statewide assessment of student progress on the core academic indicators of mathematics, reading, and science. Beginning in the 2016-2017 school year, all students in grades 3-11 shall be administered an assessment during the last quarter of the school year that at a minimum assesses the core academic indicators identified in Iowa Code Section 256.7(21)(b); is aligned with the Iowa common core standards in both content and rigor; accurately describes student achievement and growth for purposes of the school, the school district, and state accountability systems; and provides valid, reliable, and fair measures of student progress toward college or career readiness.

In addition, House File 215 directed the Director of the Department of Education to establish this assessment task force to review and make recommendations for a statewide assessment of student progress on the core academic indicators identified in Iowa Code Section 256.7(21)(b). This is our report of our review and our recommendations for a statewide assessment of student progress.

[1] Note that some students with the most significant cognitive disabilities are assessed using the Dynamic Learning Maps alternate assessment. The Task Force has not reviewed or made any recommendations about alternate assessments.

House File 215[2]

DIVISION V ASSESSMENTS

Sec. 47. Section 256.7, subsection 21, paragraph b, Code 2013, is amended to read as follows:

b. A set of core academic indicators in mathematics and reading in grades four, eight, and eleven, a set of core academic indicators in science in grades eight and eleven, and another set of core indicators that includes but is not limited to graduation rate, postsecondary education, and successful employment in Iowa.

(1) Annually, the department shall report state data for each indicator in the condition of education report. Rules adopted pursuant to this subsection shall specify that the approved district-wide assessment of student progress administered for purposes of ~~this paragraph~~ the **core academic** indicators shall be the assessment utilized by school districts statewide in the school year beginning July 1, 2011, or a successor assessment administered by the same assessment provider.

(2) Notwithstanding subparagraph (1), for the school year beginning July 1, 2016, and each succeeding school year, the rules shall provide that all students enrolled in school districts in grades three through eleven shall be administered an assessment during the last quarter of the school year that at a minimum assesses the **core academic** indicators identified in this paragraph *"b"*; is aligned with the Iowa common core standards in both content and rigor; accurately describes student achievement and growth for purposes of the school, the school district, and state accountability systems; and provides valid, reliable, and fair measures of student progress toward college or career readiness.

(3) The director shall establish an assessment task force to review and make recommendations for a statewide assessment of student progress on the **core academic** indicators identified pursuant to this paragraph *"b"*. The task force shall recommend a statewide assessment that is aligned to the Iowa common core standards and is, at a minimum, valid, reliable, tested, and piloted in Iowa. In addition, in developing recommendations, the task force shall consider the costs to school districts and the state in providing and administering such an assessment and the technical support necessary to implement the assessment. The task force shall submit its recommendations in a report to the director, the state board, and the general assembly by January 1, 2015. The task force shall assist with the final development and implementation of the assessment administered pursuant to subparagraph (2). The task force shall include but not be limited to teachers, school administrators, business leaders, representatives of state agencies, and members of the general public. This subparagraph is repealed July 1, 2020.

(4) The state board ~~may~~ shall submit to the general assembly recommendations the state board deems appropriate for modifications of assessments of student progress administered for purposes of this paragraph *"b"*.

[2] Iowa Code Section 256.7(21)(b) was further amended by Senate File 2230, passed in 2014. The Senate File 2230 changes are shown in bold.

Task Force Membership

Ruth Allison, Administrative Consultant, Iowa Vocational Rehabilitation Services, Des Moines

Catherine Blando, College Supervisor Faculty, Iowa Wesleyan College, Cedar Rapids

Shelly Bosovich, Executive Director, Des Moines Public Schools, Des Moines

Kathy Brenny, Consultant, Prairie Lakes Area Education Agency, Storm Lake

Martha Bruckner, Superintendent, Council Bluffs Community School District, Council Bluffs

Joe DeHart, Executive Director, Institutional Effectiveness, DMACC, Ankeny

Lowell Ernst, Director of K-12 Instruction, Pella Community School District, Pella

Diana Gonzalez, Chief Academic Officer, Board of Regents, Urbandale

Harry Heiligenthal, Leadership Development Director, Iowa Association of School Boards, Des Moines

Tina Hoffman, Regional Administrator, Grant Wood Area Education Agency, Cedar Rapids

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Jane Lindaman[4], Superintendent, Waterloo Community School District, Waterloo

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Colleen Anderson, Iowa Department of Education, Des Moines

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[3] Principal of Jensen Elementary, Urbandale, at the time of appointment.
[4] Associate Superintendent for Educational Services, Waterloo, at the time of appointment.
[5] Teacher at Union High School, La Porte City, at the time of appointment.

Meeting Schedule

Date	City	Facility	Time
October 29, 2013	Des Moines	Grimes Building	10 a.m. to 3 p.m.
November 22, 2013	Des Moines	Grimes Building	10 a.m. to 3 p.m.
January 15, 2014	Des Moines	Grimes Building	10 a.m. to 3 p.m.
February 20, 2014	virtual meeting	--	10 a.m. to 3 p.m.
March 14, 2014	Des Moines	Grimes Building	10 a.m. to 3 p.m.
March 28, 2014	virtual meeting	--	8:30 a.m. to 12 p.m.
May 6, 2014	virtual meeting	--	12 p.m. to 3 p.m.
May 22, 2014	virtual meeting	--	1 p.m. to 2:30 p.m.
June 12, 2014	Des Moines	Grimes Building	9:30 a.m. to 4 p.m.
July 17, 2014	Des Moines	Grimes Building	10 a.m. to 4 p.m.
July 30, 2014	virtual meeting	--	9 a.m. to 10 a.m.
September 17, 2014	Ankeny	DMACC, Building 7	8 a.m. to 8 p.m.
October 15, 2014	West Des Moines	West Des Moines Learning Center	10 a.m. to 3 p.m.
November 4, 2014	Des Moines	Grimes Building	10 a.m. to 3 p.m.
December 10, 2014	Des Moines	Grimes Building	10 a.m. to 3 p.m.
December 17, 2014	virtual meeting	--	7 a.m. to 8 a.m.

Subgroups and small groups also met:

December 13, 2013, in Des Moines

June 6, 10, and 11, 2014, in Cedar Rapids and West Des Moines

July 11 and 15, 2014, in Cedar Rapids and Des Moines

August 14, 2014, in Cedar Rapids and Des Moines

October 23, 2014, in Iowa City

Task Force Process

The work of the Task Force began in October 2013 with discussions about the charge to the Task Force by the Legislature and the uses and qualities of statewide assessments. In November 2013, the Task Force established norms and agreements and decision-making rules.

Norms and Agreements

Among the norms and agreements were ground rules for how the Task Force would make decisions:

- Remember that every decision should be made by considering how it affects children in Iowa.
- Scoring criteria should be clear.
- Data informs the decision, but the Task Force makes the decision.
- The Task Force should seek knowledge from outside the group.
- Task Force members will not individually talk to vendors.

Decision-Making Rules

The Task Force adopted the following decision-making rules:

- Decisions will be made by consensus to the greatest extent possible.
- To the extent possible, the Assessment Task Force will be self-governing.
- Sufficient time will be provided for dissenting views to be expressed.
- When consensus does not appear to be possible:
    - Members may call for a vote.
    - A quorum (50 percent of the membership) must be present for decisions to be made.
    - Decisions will be determined by a ¾ vote of those present and voting.
    - The final vote on recommendations will be noted.
    - Final recommendations may include authored dissenting and supporting opinions.
- Assessment Task Force members must be present to vote.

Science Assessment

During review of the legislative charge, questions were raised about whether the words “is aligned to the Iowa common core standards in both content and rigor” restricted the Task Force’s review and recommendations to an assessment of mathematics and reading but not science. The Task Force determined that science assessment should be addressed. However, the state currently is in the process of updating science standards. Thus, evaluating and recommending a new science assessment would not be appropriate until the new standards are approved by the State Board of Education. After discussion at a subsequent meeting, the Task Force decided to recommend that the Task Force should be reconvened as soon as the new science standards are approved and new assessments are available for review and, in the meantime, the state should continue with the current assessments. No further review of science assessments was undertaken by the Task Force, and no mathematics and reading assessment was removed from consideration for lack of a companion science assessment.

Round One

The initial Request for Information (RFI) was issued November 6, 2013. Information requested in the RFI included the extent to which the vendor’s assessment is aligned to the Iowa common core standards; is, at a minimum, valid, reliable, tested, and piloted in Iowa; the costs to school districts and

the state in providing and administering such an assessment; and, the technical support necessary to implement the assessment. The following eight vendors submitted responses to the initial RFI:

- ACT: ACT Aspire, ACT Engage, ACT Plus Writing, and ACT WorkKeys
- CollegiateZone Enterprises, L.P.: DNA (Discover, Nurture, Achieve) System
- CTB/McGraw Hill (CTB): customized solutions
- Data Recognition Corp (DRC): DRC INSIGHT online assessment system
- The Iowa Testing Programs (ITP): Next Generation Iowa Assessments
- Northwest Evaluation Association
- Pearson: custom Iowa-based assessment, ACT Aspire, Smarter Balanced Assessments
- Turning Technologies, LLC: Triton Data Collection System, ResponseCard NXT (clicker)

After receiving responses to the initial RFI, but before reviewing the submissions, the Task Force spent five months drafting a scoring rubric to evaluate whether proposed assessments met the minimum legislative requirements described in House File 215 and to assist the Task Force in identifying which assessments should move on to further consideration in Round Two. The rubric included major criteria and sub-criteria based on the requirements found in House File 215, along with descriptions of how an assessment would be evaluated in each sub-criterion. (See Appendix 2 for more details on the rubric.)

After crafting the rubric, the Task Force determined the relative importance of each criterion and sub-criterion for purposes of evaluating vendor submissions. Task Force members considered how accurately they could evaluate each criterion and which criteria were more important than others when evaluating what is best for Iowa's children. In general, the Task Force gave lower weightings to criteria that are difficult to accurately evaluate for an assessment still in development, such as reliability, and higher weightings to criteria that were determined to be of great importance, such as an assessment's ability to accurately describe student achievement or its alignment to the Iowa Core and its ability to measure Depth of Knowledge.

Weighting	Criterion
10%	Fair
8%	Available
20%	Describes Student Achievement
13%	Valid
7%	Reliable
5%	Piloted/Tested in Iowa
20%	Aligned
7%	Measures Progress toward College and Career Readiness
10%	Accompanied by Technical Supports

Upon completion of the criteria weighting process, the rubric and additional survey questions to collect information for use in Round Two were submitted to the vendors that responded to the initial RFI. Four of the vendors chose not to submit the additional information requested. Responses were received from ACT (ACT Aspire, ACT, ACT WorkKeys, and ACT Engage), CTB (CoreLink), ITP (Next Generation Iowa Assessments), and Pearson (ACT Aspire).

Each of these vendor responses was scored by one or two small groups, and the vendor responses and small group scores were discussed at the June meeting. After discussion, the Task Force decided that vendor submissions that received a zero in one or more of the following rubric items would not move into Round Two: availability for grades 3-11, piloted and tested in Iowa, and availability in the last quarter of the school year. The Task Force then voted to move the Next Generation Iowa Assessments into Round Two and to notify ACT, CTB, and Pearson that they did not move into Round Two.

At the June 2014 meeting, the Task Force also discussed the fact that no vendor submitted the Smarter Balanced Assessments for review.[6,7] As part of its federal charter, the Smarter Balanced Assessment Consortium (SBAC) is prohibited from directly responding to a Request for Information, though the Smarter Balanced Assessments will be open source and any vendor can propose to administer them. Pearson had responded to the initial RFI with its intent to submit the Smarter Balanced Assessments for review, but it did not ultimately submit information on the Smarter Balanced Assessments. Based on Pearson's original response to the initial RFI, the Task Force expected to have the opportunity to review the Smarter Balanced Assessments. To meet this expectation, the Task Force decided to open another RFI to all vendors and for any assessment and decided to reach out to specific vendors to ask them to submit the Smarter Balanced Assessments for our review. This second RFI was issued June 24, 2014, and requested submission of the information requested in the rubric and additional survey questions sent to the initial RFI respondents.

Responses to the second RFI were received from ACT (re-submission of a combined ACT Aspire and ACT), DRC (Smarter Balanced Assessments), and Turning Technologies (resubmission of Triton Data Collection System, ResponseCard NXT).

The Turning Technologies response could not be scored by the Task Force because it offered a testing technology but not a specific assessment. The ACT and DRC responses were scored by small groups and discussed at the July meeting. Since neither the ACT submission nor the DRC submission received zeroes in the categories availability for grades 3-11, piloted and tested in Iowa, and availability in the last quarter of the school year, the Task Force voted to move both the combined ACT Aspire/ACT assessments and the Smarter Balanced Assessments into Round Two. The Task Force voted not to move Turning Technologies into Round Two.

[6] In 2009-10, a group of states formed the Smarter Balanced Assessment Consortium (SBAC) in response to the opportunity to receive federal funds to develop a system of assessments designed to measure student progress; by 2012, 27 states were working together with experts to develop the Smarter Balanced Assessments. For more information, see http://www.smarterbalanced.org/.

[7] Throughout this report, we refer to the summative assessments in English language arts and mathematics developed by SBAC as the "Smarter Balanced Assessments." SBAC also developed interim assessments and formative assessment tools. These additional resources are referred to separately in this report.

Round Two

For the Round Two reviews, the Task Force developed a set of criteria for decision making and determined a plan for collecting and evaluating multiple forms of data and evidence.

The Task Force adopted the following decision-making criteria for recommendations:

- Evidence from Round One plus additional evidence from vendor/assessment developer interviews and Task Force-generated evidence
- Presentation and experience of the assessment developer
- Review of test items
- References (user experiences)
- Cost

At the July 17, 2014, meeting, the Task Force deliberated which vendors/assessment developers should be invited for interviews. A motion to interview all three of the vendor/assessment developers failed on a 3-11 vote. A motion to remove ACT from further consideration based on its inability to satisfactorily answer the questions on achievement and alignment passed on a 13-3 vote.[8] A subsequent motion to interview DRC for Smarter Balanced Assessments and ITP for Next Generation Iowa Assessments passed on a unanimous vote of Task Force members present.

DRC/SBAC and ITP were interviewed at the September 2014 meeting and provided additional materials at that time. Follow-up interviews were held with both DRC/SBAC and ITP at the October 2014 meeting.

As one way to gather information on "user experience," a panel of Iowa students, teachers, and administrators involved in pilot or field testing the Smarter Balanced Assessments was interviewed at the September meeting. A panel of Iowa students, teachers, and administrators involved in pilot or field testing the Next Generation Iowa Assessments or the *current* Iowa Assessments online administration platform was interviewed at the October meeting. The Task Force also received summaries of online survey responses from Iowans involved with pilot or field testing either the Smarter Balanced Assessments or the Next Generation Iowa Assessments.

In addition, the Task Force collected and considered other sources of information including, but not limited to:

- Criteria for High-Quality Assessment, Stanford Center for Opportunity Policy in Education, Stanford University
- States' Commitment to High-Quality Assessments Aligned to College- and Career-Readiness, Council of Chief State School Officers
- A Review of Models for Computer-Based Testing, College Board
- Iowa STEM Advisory Council Broadband Committee Initial Action Recommendations report and appendices 13 and 14
- UEN Technology Directors memo on statewide assessment technology costs and support,
- Letter from Prairie Lakes Area Education Agency
- Education Week articles and other articles relating to the experiences of schools/other states with online testing

[8] At the September meeting, the Task Force was asked to reconsider the decision to remove ACT from further consideration. A motion to consider ACT's request failed on a 4-16 vote.

The Smarter Balanced Assessments and the Next Generation Iowa Assessments

The Task Force determined that the Smarter Balanced Assessments and the Next Generation Iowa Assessments each meet the minimum legislative requirements. Both the Smarter Balanced Assessments and the Next Generation Iowa Assessments are still in development, though they are at somewhat different stages of readiness. Both have been field tested in Iowa, but validity and reliability studies for both are still in progress. Both assessments were written to the Common Core State Standards, which represent 90 percent or more of the Iowa Core in mathematics and English language arts. Both DRC (for the Smarter Balanced Assessments) and ITP (for the Next Generation Iowa Assessments) assured the Task Force that, if desired, they could add items to cover the portions of the Iowa Core in mathematics and reading that go beyond the Common Core, for an additional cost.

Beyond these similarities, the Task Force determined that the two assessments also have distinct differences. The major areas of difference are discussed below, with a brief description of the *current* Iowa Assessments to provide context.

Approach to Testing

The approach to testing consists of the test structure, including item types, and approach to measurement. The approach to testing used in the *current* Iowa Assessments is a fixed-form test. Approximately half of the items on a grade-level test were written toward content on that grade level with the rest of the items coming from content one grade level above and below. The entire test is made up of selected response (multiple-choice) items.

The Smarter Balanced Assessments are computer adaptive tests plus performance tasks. During the computer adaptive portion of the assessment, the computer will select questions for a student from a large bank of test items written to the content specifications of the Common Core.[9] More or less difficult items are selected based on the student's answers to prior questions. The design of the assessment provides a range of difficulty levels on grade-level items, as well as items above and below grade level that can be pulled in based on a student's responses. This allows the assessments to better pinpoint the performance of students at very high and very low levels relative to the Iowa Core, with less measurement error and a shorter test time for the computer adaptive portion of the test than fixed-form assessments.

The Smarter Balanced Assessments include selected response, constructed response, and technology-enhanced item types, plus performance task items. Test items cover Depth of Knowledge (DOK) levels 1-4. (Depth of Knowledge refers to cognitive complexity of a task. Norman Webb's formulation allows for tasks to be described at four levels of cognitive complexity, starting with Level 1 – "recall and reproduction" – and going through Level 4 – "extended" thinking." For a more complete description of DOK, please refer to Appendix 7.) Test blueprints ensure that students will receive a mix of questions with DOK levels aligned with the specifications of the Common Core standards. Performance tasks address DOK Level 4.

[9] The Smarter Balanced Assessments platform can incorporate items to assess the additional content in the Iowa Core.

Performance task items are a collection of questions and activities on a central theme or scenario and covering two or more standards, allowing for more breadth of the standards to be assessed. A classroom activity precedes the performance task to familiarize students with the theme of the assigned performance task. The performance tasks are intended to challenge students to apply their skills and knowledge to real-world problems and are intended to measure knowledge and skills that cannot be adequately assessed through other test items.

The Next Generation Iowa Assessments are a fixed-form assessment. All students at a grade level will receive the same test items. This facilitates an easier process for both item response analysis and later alignment studies to validate that each student has received an assessment aligned to the Common Core standards.[10] Students will receive only grade level items.

The Next Generation Iowa Assessments include multiple-choice, constructed response, extended response, and technology-enhanced item types. Test items cover DOK levels 1-3. The Next Generation Iowa Assessments will not include performance task items. At the September interview, Catherine Welch of ITP addressed that decision, explaining that because of the costs of scoring, the costs in student time, and that most of the benefits of performance task items are seen at the local level, ITP had concluded that determining where these types of items fit in instruction should be a local decision.

Test Formats

Test formats address the availability of testing via paper-and-pencil versus online administration via computer. The *current* Iowa Assessments are administered in a paper-and-pencil format and an online option is available for the first time this year.

The Smarter Balanced Assessments are computer adaptive and will be administered online. However, a paper-and-pencil version of the assessment will be available for the first three years of operational testing to allow states time to transition to statewide online testing. The last year of the consortium-supported paper-and-pencil option will be the 2016-2017 school year. States can choose to support paper-and-pencil beyond three years.

The Next Generation Iowa Assessments will be available in both paper-and-pencil and online formats. ITP plans to offer both formats indefinitely, allowing school districts to choose the format, or mix of formats, that works best for local circumstances.

College or Career Readiness

College or career readiness addresses the ability of a test to predict future success after completion of high school. Definitions of these concepts are still evolving, but the most common current definition of college readiness involves predicting later success. The Task Force concluded that mastery of the Iowa Core could represent a meaningful prediction of parts of what is meant by college and career readiness. The *current* Iowa Assessments provide a statistical prediction of college readiness based on the ACT college readiness benchmark scores.

[10] Both the Smarter Balanced Assessments and the Next Generation Iowa Assessments were developed to measure the Common Core. The Iowa Core includes additional content not specified in the Common Core. Both assessments report the ability to add supplemental items to measure the additional content if desired.

The Smarter Balanced Assessment Consortium has developed Achievement Level Descriptors to describe college-content readiness for entry-level, credit-bearing college coursework. The Consortium will establish performance benchmarks that define the level of content and skill mastery that marks students as on track to college and career readiness at each grade level. The Consortium also has set performance standards for these Achievement Level Descriptors on the Smarter Balanced Assessments. The Consortium plans to study actual college performance of students who have taken the Smarter Balanced Assessments to validate the cut scores.

ITP plans to conduct studies relating the Next Generation Iowa Assessments to the ACT college readiness benchmark scores that predict performance in credit-bearing, first-year college coursework. ITP indicates that currently, starting in the middle school grades, predictors of college readiness and ACT scores are available. ITP also plans to study the actual first year college performance of students who have taken the Next Generation Iowa Assessments.

The Smarter Balanced Assessments and the Next Generation Iowa Assessments will not assess high school math topics beyond Algebra II and will not assess readiness for the higher-level college math coursework required of first-year students in many STEM majors. College-content readiness will also be dependent upon a student's choice of, and performance in, grade 12 courses.

The Smarter Balanced Assessments and the Next Generation Iowa Assessments will not offer career readiness indicators.

Cost

The cost of an assessment is the sum of the costs of developing the assessment, costs for vendor services (administration, scoring, and reporting), and costs of technology and IT support for computer-based administration, if used. The *current* Iowa Assessments cost to the district is $4.25 to $6.25 per student for paper-and-pencil tests or $13.00 per student for online tests for basic scoring and reporting services (plus optional costs for additional reports and other services).[11] It should be noted that additional costs of approximately $2.25 per student ($575,000) for additional data management and reporting are borne by the Department of Education. Item development costs are borne by ITP.

For the Smarter Balanced Assessments, SBAC plans to charge $6.20 per student to cover the cost of ongoing item development and other consortium services. The exact cost of vendor services will be dependent upon the outcome of a Request for Proposal (RFP) or other negotiations. However, SBAC estimates vendor services can be procured for $16.30 per student, for a total cost of $22.50 per student for the summative assessment only. Online administration of the Smarter Balanced Assessments will be required beginning with the 2017-2018 school year; the costs to school districts and the state for technology and IT support for statewide online administration of this assessment have not been quantified.

For the Next Generation Iowa Assessments, ITP proposes to provide item development at no charge to Iowa schools. The exact costs of administration, scoring, and reporting will be dependent upon the outcome of an RFP or other negotiations. However, ITP estimates delivery, scoring, and reporting will cost $15.00 per student for English language arts, mathematics, and science. Online administration of

[11] Iowa Testing Programs. *2014-2015 Iowa Testing Programs Price Information.*

the Next Generation Iowa Assessments is optional; the costs to Iowa school districts and the state for technology and IT support for online administration of this assessment have not been quantified.

Time to Administer

The *current* Iowa Assessments have specified time limits for each test. See below for a table summarizing the time per test/grade.

The Smarter Balanced Assessments and the Next Generation Iowa Assessments are untimed. Consequently, the times given below are the estimated times provided by the assessment developers.

	Current Iowa Assessments*	Smarter Balanced Assessments	Next Generation Iowa Assessments
Grade 3	4 hrs 30 mins	3 hrs (+4 hr performance tasks**)	3 hrs
Grades 4-5	3 hrs 45 mins	3 hrs (+4 hr performance tasks)	3 hrs
Grades 6-8	3 hrs 45 mins	3 hrs 30 mins (+4 hr performance tasks)	3 hrs
Grades 9-11	2 hrs 35 mins	4 hrs (+4 hr 30 mins performance tasks)	3 hrs

*The times listed are for reading and mathematics only. The complete Iowa Assessments, which include science and social studies, are 70 minutes longer for grades 3-8 and 80 longer for grades 9-11.

**Each of the performance tasks includes an hour of in-class activity.

Additional Products and Services

Each assessment offers additional supports, products, and services. For example, the *current* Iowa Assessments include sample test items at the elementary, middle and high school levels and materials accessible on the ITP website to aid in interpreting test results.

For the Smarter Balanced Assessments, SBAC offers practice tests, training tests, and a technology readiness calculator. SBAC also offers interim assessments and a digital library of curriculum, instruction and assessment resources, which can be added to the summative assessments for a cost of $9.55 per student for ongoing item development and consortium services or an estimated total cost of $27.30 per student (including the summative and interim assessments, the digital library, and vendor services).

For the Next Generation Iowa Assessments, ITP will offer practice tests, sample tests, and professional development workshops on administration, scoring, and reporting. The Next Generation Iowa Assessments will include assessments for science.

Task Force Recommendations

Taking into consideration all of these factors, the Task Force provides the following recommendations for the statewide accountability assessments in mathematics, reading, and science, along with four additional recommendations necessary for implementation.

1. **Statewide Assessment of Mathematics and Reading**

   Through a vote of 20 to 1, the Task Force recommends the Smarter Balanced Assessments as the statewide assessment of student progress on a set of core academic indicators in mathematics and reading.

2. **Statewide Assessment of Science**

   Through a unanimous vote, the Task Force recommends that the Task Force should be reconvened as soon as the new science standards are approved and new assessments are available for review (and in the meantime, continue with the current assessment).

Additional recommendations

3. **Technology Readiness for Statewide Online Administration of Assessments**

   Through a unanimous vote, the Task Force recommends the Legislature create a work group to study technology readiness, including technology required for accommodations, and create a plan for moving to statewide online administration of assessments.

4. **Funding for the New Assessments**

   Through a unanimous vote, the Task Force recommends that the state appropriate funds to provide all districts access to the full suite of Smarter Balanced Assessment tools.

5. **Professional Development**

   Through a unanimous vote, the Task Force recommends that appropriations be available to ensure professional development is provided to support the administration of the new assessments, use of new assessment data, and other related needs; professional development resources are available for use by any providers, teacher leaders, and users; and time is provided for educators to take part in professional development.

6. **Monitoring Effectiveness of the New Assessments**

   Through a unanimous vote, the Task Force recommends that the state monitor the effectiveness of the new assessments, including their ability to measure student progress toward college and career readiness.

Rationale

1. Statewide Assessment of Mathematics and Reading

The Task Force recommends the Smarter Balanced Assessments as the statewide assessment of student progress on a set of core academic indicators in mathematics and reading.

Best practice in education involves aligning what kids should know with what is taught and what is assessed. The Iowa Core standards tell us what we want kids to know, while professional development has helped us to focus on how to teach to these standards. Our task as a Task Force was to identify the assessment that best measures student progress toward these expectations.

To accomplish this task, we reviewed assessments based on the criteria provided by the Iowa Legislature. As we looked more deeply at the final contenders, we looked for assessments that are deeply aligned to the Iowa Core, that accurately measure the knowledge that all students have in specific subjects, and that measure the ability of Iowa's students to bring their knowledge to solving real-world problems. We believe the Smarter Balanced Assessments are superior on these criteria. We further were pleased to find, in this global economy, the Smarter Balanced Assessments are nationally and internationally benchmarked and the full assessment system has strong supports available for educators, students, and families.

The Smarter Balanced Assessment items were written specifically to address the state-developed Common Core State Standards. The Common Core represents 90 percent or more of the Iowa Core in English language arts and mathematics. The test items in the Smarter Balanced Assessments have been written by thousands of teachers, including Iowa teachers, and other experts in education who have a working understanding of the Common Core. They have been nationally field tested with more than 4.2 million students and have proven to accurately assess students' ability. Iowa will have the ability to write, field test, and add specific questions to the Smarter Balanced Assessments to address content in the Iowa Core that goes beyond the Common Core standards. DRC, the vendor that proposed the Smarter Balanced Assessments to the Task Force, has a demonstrated ability to construct such assessment items and would be available to support Iowa in this endeavor. Thus, the Smarter Balanced Assessments will add coherence to Iowa's education system.

The test items in the Smarter Balanced Assessments range in cognitive complexity from simple recall and understanding to the ability to demonstrate thinking at the highest levels, addressing real-world issues and deeper conceptual understanding. The computer adaptive platform will benefit Iowa's students as compared to traditional fixed-form assessments. Computer adaptive testing, where the computer selects more or less difficult items based on the student's answers to prior questions, is better able to pinpoint (more reliably and with fewer items than a fixed-form assessment) the performance of students performing at both high and low levels of performance (e.g., students who are gifted, students with disabilities). This means more precise scores for Iowa's students. Moreover, computerized assessments can make selected response results quickly available to educators, students and parents.

In addition to the computer adaptive portion of the tests, the Smarter Balanced Assessments performance tasks require students to apply their learning to a real-world problem. Students must create a product that has the following characteristics:

1) It synthesizes information across multiple disciplines (e.g., reading, science, mathematics, social studies) to create an acceptable response.
2) It demonstrates their writing skills.
3) It demonstrates skills such as problem solving, generalization, evaluation, analysis - all of which demonstrate aspects of higher-order thinking.
4) It reflects the students' ability to transfer their learning to real-world situations.

Through the performance task, the Smarter Balanced Assessments are able to measure Depth of Knowledge at Level 4, which cannot be done on a traditional selected response or short answer test.

Thus, the combination of computer adaptive technology and performance tasks mean that the Smarter Balanced Assessments will provide more – and more accurate – information, more quickly, about the performance of Iowa's students.

Moreover, the Smarter Balanced summative assessments are intended to be part of a larger assessment system that is more than just an accountability test. The full suite of tools from the Consortium includes interim and formative assessment practices, lesson resources, and professional development, as well as ongoing data collection. These features make the Smarter Balanced Assessments a comprehensive solution for Iowa.

As an added benefit, we believe that the comprehensiveness of the Smarter Balanced Assessment suite should allow districts to reduce or eliminate some of their other testing. Currently, in order to address the breadth of the Iowa Core standards, districts have been creating and purchasing additional assessments, such as grade-level content tests and computer adaptive tests. The Smarter Balanced Assessments may allow districts to reduce or eliminate the extensive time it takes for educators to develop and review assessments and the cost of purchasing additional assessments. Further, the varying levels of financial resources and expertise across the state means that a reliance on locally and individually developed and purchased assessments can lead to inconsistencies within buildings and inequities across districts. Having a shared system allows for powerful collaboration that has the potential to transform teaching and learning for our students, as well as reduce costly, wasteful, and duplicative efforts.

Also important is the fact that, in today's global economy, our students ultimately compete against students across the country and beyond. The Smarter Balanced Assessments have been adopted by 21 states and a U.S. Territory. The Smarter Balanced Assessment System affords Iowa students, families, and educational professionals the opportunity to compare and benchmark progress on a local, multi-state, and international scale; currently, a reliance on National Assessment of Educational Progress (NAEP) results for national benchmarking does not allow us to have district-level comparisons. The Smarter Balanced Assessment System also will be linked to the Program for International Student Assessment (PISA) and Trends in International Math and Science Studies (TIMSS).

By selecting the Smarter Balanced Assessments, we would rejoin a consortium of states to oversee the continual improvement and updating of the assessments. The major infusion of federal funds to pay for the Smarter Balanced Assessment Consortium, along with the investment of time and talent from 27 states in the original development of the assessment, meant that the expertise of an impressive array of experts went into the original design of the tests, including the process of test design, item writing, platform design, and piloting. As a member of the Smarter Balanced Assessment Consortium, we would be able to pool our investments with other states to ensure we have the highest caliber item writers to support the continual updating of assessment items over time. We also are able to bring in Iowa's teachers to the item development process, ensuring the assessment remains responsive to Iowa's context and that our teachers continue to have the opportunity for professional development through assessment development.

Finally, the cost of the Smarter Balanced Assessments remains proportionately small compared to the overall spending for education in Iowa from state and local sources (0.17 percent of Iowa's spending on education[12]). The Task Force recognizes that current costs associated with the Iowa Assessments are

[12]At $22.50 per student, the cost to administer the Smarter Balanced summative assessments in Iowa would be $5,632,740. The total state and local spending on education in Iowa is $3,246,291,392.

exceptionally low when compared to other states in the nation; however, the current assessment was not one of the assessments being considered. When conducting an apples-to-apples comparison between Next Generation Iowa Assessments and Smarter Balanced Assessments, the Task Force considered not only the cost per pupil but also the added benefits offered by Smarter Balanced. In addition, when considering the total cost of a balanced assessment system – the costs of which currently are borne at *both* the state and district levels – the cumulative cost being spent on the assessments currently will likely be the same or less than what is being recommended by the Task Force.

The other costs that cause concern are related to districts' technology readiness to support online testing. While there is no doubt that some districts are behind in technology readiness, schools will not be required to make devices and internet connections available to each and every child simultaneously. As the Consortium notes, "A 600-student middle school could test its students using only one 30-computer lab."[13] In these ways, the costs of upgrading school technology infrastructures are not likely to be overly burdensome on the whole. Besides, these are costs the state of Iowa should shoulder. We must better incorporate technology into the delivery and conduct of not just our assessments, but our instruction as well. The future of assessments is online, but so is the future of teaching and learning. Investing in devices and bandwidth is necessary and should be done by the state regardless.

All in all, if there are added costs to implement Smarter Balanced Assessments, the Task Force believes that the added costs are well worth the benefits for Iowa's children.

One member dissented from this Task Force recommendation; the dissent is provided at the conclusion of all the recommendations.

2. Statewide Assessment of Science

The Task Force recommends that the Task Force should be reconvened as soon as the new science standards are approved and new assessments are available for review (in the meantime, continue with the current assessment).

The state currently is in the process of updating science standards. Evaluating and recommending a new science assessment would not be appropriate until the new standards are adopted. At that time, the Legislature should reconvene the Assessment Task Force to determine if there are any assessments that can measure the new science standards and to make recommendations about which assessment to adopt.

3. Technology Readiness for Statewide Online Administration of Assessments

The Task Force recommends the Legislature create a work group to study technology readiness, including technology required for accommodations, and create a plan for moving to statewide online administration of assessments.

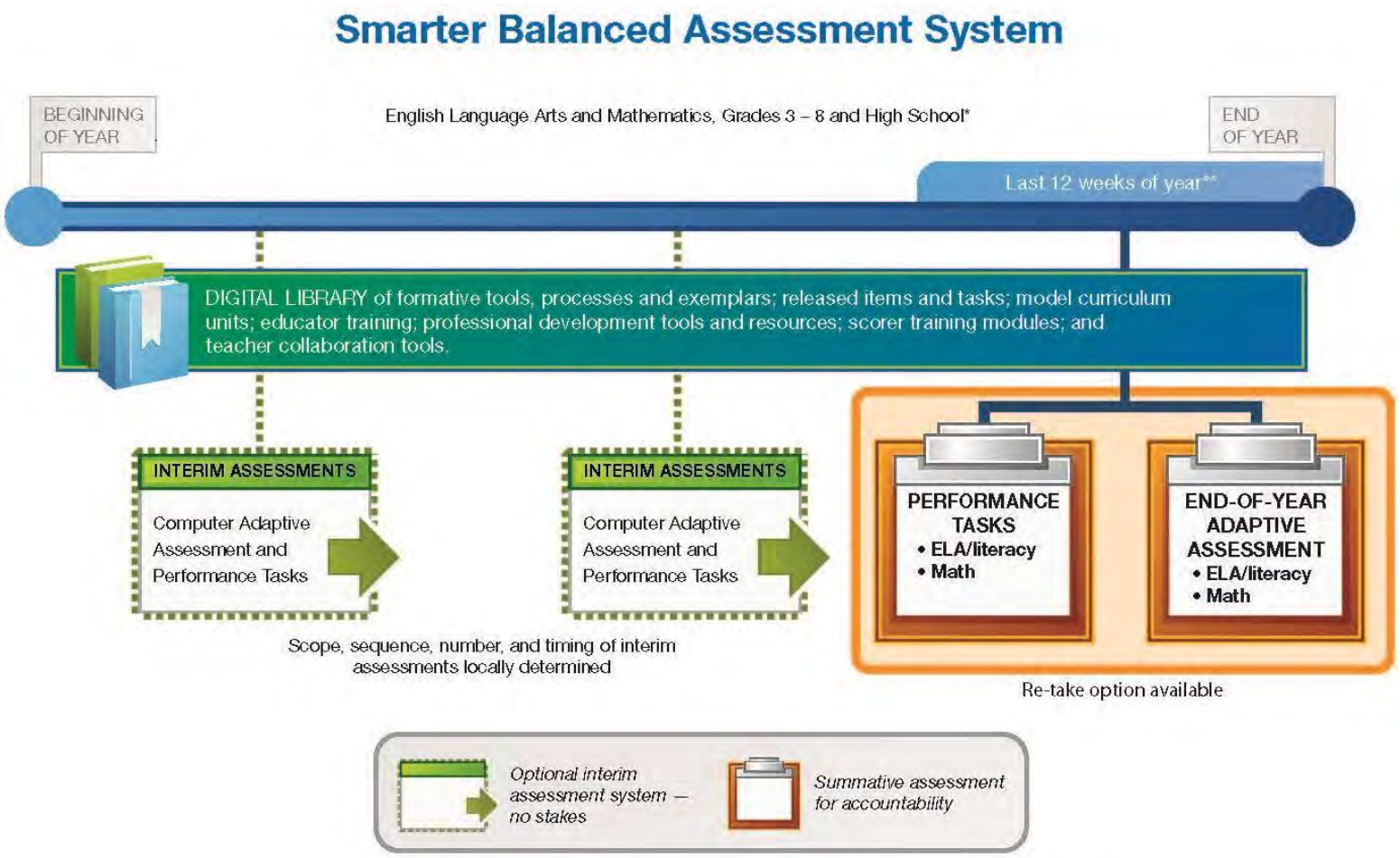
The Task Force discussed the imperative for technology in education at length. It is apparent that some school districts are more ready for online assessments than others. In order to ensure that *all* Iowa school districts can be ready, we must learn more specifically about technology needs and make a plan to meet them. This recommendation aligns with the work of other state commissions and initiatives designed to increase broadband access and connectivity.

[13] Smarter Balanced Assessment Consortium, Frequently Asked Questions, "What if my school district does not have the infrastructure to support computer adaptive testing?" Accessed December 13, 2014, http://www.smarterbalanced.org/resources-events/faqs/#2451

4. Funding for the New Assessments

The Task Force recommends that the state appropriate funds to provide all districts access to the full suite of Smarter Balanced Assessment tools.

It is critical to maximize the state's investment to use the Smarter Balanced Assessment resources to improve teaching and learning, in addition to meeting the state's accountability needs. The state should provide funding for the assessments themselves and for scoring, as well as for interim assessments, the Digital Library, and stakeholder communications. The interim assessments will be predictive of performance on the summative assessment, providing teachers with critical information to help them adjust instruction throughout the year. The Digital Library is comprised of an online collection of resources aligned to the standards that supports K–12 teachers in their use of the formative assessment processes to adjust teaching to improve student learning. These resources include commissioned, interactive assessments and exemplar instructional modules on English language arts and mathematics. The library has collaboration features that allow users to rate materials and share their expertise with educators across the country.



Having access to all these crucial components will move the state from simply testing for accountability's sake to testing as a means to improve instruction and learning.

5. Professional Development

The Task Force recommends that appropriations be available to ensure professional development is provided to support the administration of the new assessments, use of new assessment data, and other related needs; professional development resources are available for use by any providers, teacher leaders, and users; and time is provided for educators to take part in professional development.

There are many high-quality resources available as part of the Smarter Balanced Assessment Consortium's Digital Library that will support professional development. However, it is also important to provide additional time and resources to learn how to administer and use them effectively, as well as how to interpret and use assessment results. Current professional development resources (time and money) are already fully in use for other improvement efforts. Additional support is needed to avoid a negative impact on other work to improve outcomes for Iowa's children.

6. Monitoring Effectiveness of the New Assessments

The Task Force recommends that the state monitor the effectiveness of the new assessments, including their ability to measure student progress toward college and career readiness.

The final two assessments reviewed by the Assessment Task Force were still in development at the time of our review. While the field and pilot testing of the Smarter Balanced Assessments showed positive results, there are still additional studies that must be conducted to make sure that the assessments do what we expect they will do. In particular, we must study student performance over time to ensure there is a relationship between performance on the Smarter Balanced Assessments and preparedness for college and careers.

Dissent

One member dissented from the first Task Force recommendation:

The Smarter Balanced Assessments are by far the costlier of the two assessment options in front of the Task Force. Whether the Smarter Balanced Assessments are worth the additional costs cannot be determined without quantifying all of the costs involved. This has not yet been done.

The information reviewed by the Task Force shows that the Smarter Balanced Assessments will take more than twice the amount of time to administer as the equivalent portion of the Next Generation Iowa Assessments and do not include a required science assessment. Science and social studies assessments can be added to the Next Generation Iowa Assessments for a total test administration time that is still 2 to 3.5 hours shorter than the Smarter Balanced Assessments alone.

The information reviewed by the Task Force shows that the Smarter Balanced Assessments will cost more per student, at an estimated $22.50 for the summative assessment only, and that those costs do not include a required science assessment. The Next Generation Iowa Assessments can include a science assessment for an estimated total cost to Iowa schools of $15 per student.

However, the Task Force lacks adequate information about the costs for school districts and the state to build and maintain the necessary school technology infrastructure to administer the Smarter Balanced Assessments. No comprehensive survey of the current state of school technology infrastructure has been conducted yet; consequently, these costs have not been quantified and are unknown at this time. The limited evidence in front of the Task Force suggests that these costs will be significant and ongoing. Even if the Legislature were to appropriate money for these costs, the appropriation would likely come at the cost of reduced supplemental state aid and thus would be in effect an unfunded mandate.

At the outset of our work, Task Force members agreed that our recommendations should be guided by what is best for Iowa's children. Accountability testing is something we do for the adults; great instructional programming – including high-quality art, music, world languages, and extra-curricular programs – is what we do for the children. Ultimately, it is best for Iowa's children to obtain the accountability data required with the least impact on instructional programming possible. The Smarter Balanced Assessments divert more time and money from instruction than necessary for accountability purposes, and for these reasons, I respectfully dissent from the Task Force's recommendation to adopt the Smarter Balanced Assessments. Based on the evidence currently in front of the Task Force, I would recommend adoption of the Next Generation Iowa Assessments instead.

Appendices

Appendix 1: First-Round Rubric Criteria and Sub-Criteria
Appendix 2: Smarter Balanced Assessment Communication Resources
Appendix 3: Working Glossary of Terms 2014
Appendix 4: Links to Background Resources
Appendix 5: UEN Tech Directors Memorandum
Appendix 6: AEA Letter Regarding SBAC
Appendix 7: Depth-of-Knowledge Explanation and Examples
Appendix 8: System of Assessment

Appendix 1: First-Round Rubric Criteria and Sub-Criteria

The full rubric is available on the Iowa Department of Education site at https://www.educateiowa.gov/sites/files/ed/documents/ScoringRubricforInitialAssessmentReview.pdf. Criteria and sub-criteria include:

- **Fairness**
  - Statistical evidence of fairness in development
  - Fairness in development (Universal Design)
  - Fairness in administration; accommodations (accessibility)
  - Fairness in administration; standardized directions
  - Fairness in administration; practice items
- **Availability**
  - Grade availability
  - Availability in last quarter of school year
- **Describes Student Achievement**
  - Accurately describes student achievement
  - Accurately describes growth
- **Validity**
  - Criterion validity coefficient (correlational evidence)
  - Quality of validity evidence
- **Reliability**
  - Internal consistency
  - Stability over time
  - Scorer consistency (if applicable)
  - Quality of reliability evidence
- **Piloted/Tested in Iowa**
  - Piloted in Iowa (item tryout)
  - Tested in Iowa (field tested)
- **Alignment**
  - Methodology of content alignment to domains, standards and clusters
  - Tables of specifications
  - Amount of content coverage
  - Evidence of alignment in Depth of Knowledge (DOK) (AKA rigor or cognitive level)
  - Language is consistent with the Iowa Core
- **College/Career**

  - Measures progress toward college or career (content) readiness

- **Availability of Technical Supports**
  - Training on assessments and interpretation of reports
  - Availability of results: machine scored (including AI scored constructed response items)
  - Availability of results: human scored (student-constructed responses)
  - Technical support and help desk

Appendix 2: Smarter Balanced Assessment Communication Resources

The Smarter Balanced Assessment Consortium further provides informational items to help Iowa's stakeholders better understand the system overall. Following are examples of the sorts of information easily accessible by anyone on the internet, and that can be distributed locally at any time:

Smarter Balanced Assessment Core Components
Smarter Balanced Assessments: What Do They Mean to Me?
Teacher Fact Sheet
Parent Fact Sheet
Smarter Balanced Assessment System Graphic
Adaptive Testing Fact Sheet
Practice and Training Tests
Accessibility and Accommodations
Support for Underrepresented Students

Their materials also explain the process for determining achievement levels and anticipated results:

Q & A Initial Achievement Levels
Video on Achievement Level Setting

Appendix 3: Working Glossary of Terms 2014

Following are terms used in discussions throughout the Task Force's deliberations, along with a sampling of definitions. In some cases, several different definitions are offered.

Academic Rigor

Instruction, schoolwork, learning experiences, and educational expectations that are academically, intellectually, and personally challenging. An assignment may be considered "rigorous" or a learning expectation may reflect "academic rigor," for example. (*The Great Schools partnership. retrieved from http://edglossary.org/assessment/, November 2013.)*

Academic rigor in a thinking curriculum holds that students must be exposed to a rich knowledge core that is organized around the mastery of major concepts. This curriculum should provide students with regular opportunities to pose and solve problems, formulate hypotheses, justify their reasoning, construct explanations, and test their own understanding. Students must have opportunities to engage with academically rich content material and to develop their thinking skills in order to achieve at high levels *(Institute for Learning, 2002).*

Accessibility Using Universal Design

A set of construction principles that seeks to maximize accessibility of an assessment for all students by developing items and content without distractions or irrelevancies.(*CCSSO, Operational Best Practices In Large Scale Assessment 2013)*

Achievement

The extent of knowledge or skill possessed by a student within some specific area of the school curriculum, such as mathematics, science, or writing. (*National Council on Measurement in Education. Glossary of Important Assessment and Measurement Terms. http://ncme.org/resource-center/glossary/ 2013).*

What a student has learned as a result of formal instruction, usually in school. (*The Joint Committee on Standards for Educational Evaluation, The Student Evaluation Standards. 2003).*

Achievement growth

Achievement growth refers to academic progress made over a period of time, as measured from the beginning to the end of the defined period. Achievement growth can be tracked and determined for individual students, schools, states, or countries, and a wide variety of variables and methodologies may be used to determine whether "growth" is being achieved. (*The Great Schools partnership. retrieved from http://edglossary.org/assessment/, November 2013).*

Adequate yearly growth (AYG) is the improvement that current students are expected to make from one year to the next. *(Iowa Department of Education. No Child Left Behind Growth Model Pilot Proposal U. S. Department of Education. January 19, 2007)*

Accommodation

A change in the administration of an assessment (including, but not limited to, a change in assessment setting, scheduling, timing, presentation format, response mode, or any combinations of these changes), that does not change the construct intended to be measured by the assessment or the meaning of the resulting scores. An accommodation is used by the client to establish equity and accessibility for all students taking a specific assessment. A change in the administration of an assessment that alters the construct being measured is considered a modification not an accommodation. (*CCSSO, Operational Best Practices in Large Scale Assessment 2013)*

A change in how a test is presented, in how it is administered, or in how the test taker is allowed to respond. This term generally refers to changes that do not substantially alter what the test measures. The proper use of accommodations does not substantially change academic level or performance criteria. Appropriate accommodations are made to provide equal opportunity to demonstrate knowledge. The most frequently used accommodations in NAEP are large-print booklets, extended time in regular test sessions, reading questions aloud in regular sessions, small groups, one-on-one sessions, scribes or use of computers to record answers, bilingual booklets (mathematics assessment only), and bilingual dictionaries (not for the reading assessment). In NAEP, accommodations may be provided to certain **students with disabilities (SD)** and/or **English language learners (ELL)**, as specified in the student's **Individualized Education Program (IEP)**. *(National Center for Education Statistics. The NAEP Glossary of Terms. Retrieved November 2013)*

A change made in a standard test-administration procedure to reduce or remove the influence of a test taker's disability on the assessment process. Examples include extended testing time limits and having certain tests read aloud. When implemented appropriately, such changes do not alter the meaning of the scores. (*National Council on Measurement in Education. Glossary of Important Assessment and Measurement Terms. http://ncme.org/resource-center/glossary/, 2013)*

Describe changes in format, response, setting, timing, or scheduling that do not alter in any significant way what the test measures or the comparability of scores. Accommodations are designed to ensure that an assessment measures the intended construct, not the child's disability. Accommodations affect three areas of testing: 1) the administration of tests, 2) how students are allowed to respond to the items, and 3) the presentation of the tests (how the items are presented to the students on the test instrument). Accommodations may include Braille forms of a test for blind students or tests in native languages for students whose primary language is other than English. (*Wrightslaw. retrieved from http://www.wrightslaw.com/links/glossary.assessment.htm November* 2013)

Accountability

Accountability systems are used to achieve specific educational goals by attaching to performance indicators certain consequences meant to effect change in specific areas of functioning. *(CCSSO, A Framework for Examining Validity in State Accountability Systems 2004)*

Achievement

The extent of knowledge or skill possessed by a student within some specific area of the school curriculum, such as mathematics, science, or writing. (*National Council on Measurement in Education. Glossary of Important Assessment and Measurement Terms. http://ncme.org/resource-center/glossary/, 2013)*

Adequate Yearly Progress (AYP)

The amount of annual achievement growth to be expected by students in a particular school, district, or state in the U.S. federal accountability system, No Child Left Behind (NCLB). (*National Council on Measurement in Education. Glossary of Important Assessment and Measurement Terms. http://ncme.org/resource-center/glossary/, 2013)*

Alignment

The extent to which the content and cognitive demands of an assessment tool are consistent with (or match) those given in a set of content standards or benchmarks that describe the curriculum with which the assessment was designed to be used. (*National Council on Measurement in Education. Glossary of Important Assessment and Measurement Terms. http://ncme.org/resource-center/glossary/, 2013)*

Alignment

The degree of agreement between the content measured on an assessment and the content standards, frameworks, and benchmarks required in the curriculum (e.g., alignment with the Common Core State Standards and/or the content frameworks developed by a particular state). (*CCSSO, Operational Best Practices In Large Scale Assessment 2013)*

The match between standards, instruction, and assessment is important to the validity of your assessment. (IASB, *A School Leader's Guide to Assessing Student Achievement in Iowa*, 2000)

The adjustment of one element or object in relation to others. (*Susan Green and Robert* Johnson. *Assessment Is Essential* 2010)

Bias

Systematic errors in test content, test administration, and/or scoring procedures that can cause some test takers to get either lower or higher scores than their true ability would merit. The source of the bias is irrelevant to the trait the test is intended to measure. (*National Council on Measurement in Education. Glossary of Important Assessment and Measurement Terms. http://ncme.org/resource-center/glossary/, 2013)*

Fairness

What a test demands of a student and how the test is presented (the layout) as well as the conditions under which the test is administered must not limit the ability of some students to show their mastery of the standards. All assessment tools should be designed to accurately assess or be "fair" for all students, including students with special needs or students whose first language is not English. Issues of fairness need to be considered in designing assessment tools, including differences in students' cultural and life experiences. (*IASB, A School Leader's Guide to Assessing Student Achievement in Iowa*, 2000)

Fairness implies that every test taker has the opportunity to prepare for the test and is informed about the general nature and content of the test, as appropriate to the purpose of the test. Fairness also extends to the accurate reporting of individual and group test results. Fairness is not an isolated concept, but must be considered in all aspects of the testing process. (*Joint Committee on Testing Practices. Code of Fair Testing Practices in Education. 2004).*

Pilot test

A test administration that occurs during the development process to check on the quality and appropriateness of test items, administration procedures, scoring, and/or reporting. Sometimes the purpose is to check on the impact of optional ways of administering, scoring, or reporting. (*National Council on Measurement in Education. Glossary of Important Assessment and Measurement Terms. http://ncme.org/resource-center/glossary/, 2013)*

A stand-alone administration of test items, tools, or a system, to evaluate how particular items function prior to a field test and operational use. The pilot test generally occurs with a sample of students that matches the purpose of the pilot. (*CCSSO, Operational Best Practices in Large Scale Assessment. 2013)*

A brief, simplified preliminary trial study designed to learn whether a proposed evaluation seems likely to yield valuable results. (*The Joint Committee on Standards for Educational Evaluation, The Student Evaluation Standards. 2003).*

A pretest of items to obtain information regarding clarity, difficulty levels, timing, feasibility, and special administrative situations. The pilot test is performed before revising and selecting the items to be used in the assessment, or in the case of math and reading at grades 4 and 8, before selecting items to be used in the field test. (*National Center for Education Statistics. The NAEP Glossary of Terms, retrieved November 2013)*

Reliability

The characteristic of a set of test scores that relates to the amount of random error from the measurement process that might be embedded in the scores. Scores that are highly reliable are accurate, reproducible, and consistent from one testing occasion to another. That is, if the testing process were repeated with a group of test takers, essentially the same results would be obtained. Various kinds of reliability coefficients, with values ranging between 0.00 (much error) and 1.00 (no error), are usually used to indicate the amount of error in the scores. *(National Council on Measurement in Education. Glossary of Important Assessment and Measurement Terms. http://ncme.org/resource-center/glossary/, 2013)*

The consistency of scores resulting from an assessment. (*CCSSO, Operational Best Practices in Large Scale Assessment. 2013)*

A measure of how consistent the results obtained in an assessment are in comparison of how well a student's ranking within a group of students within which the student is being compared. *(The Joint Committee on Standards for Educational Evaluation, The Student Evaluation Standards. 2003).*

Consistency of a set of measurements or of the measuring instrument. Because NAEP findings have an impact on the public's understanding of student academic achievement, precautions are taken to ensure the reliability of these findings. In its current legislation, as in previous legislative mandates, Congress has called for an ongoing evaluation of the assessment as a whole. In response to these legislative mandates, the National Center for Education Statistics (NCES) has established various panels of technical experts to study NAEP, and panels are formed periodically by NCES or external organizations, such as the National Academy of Sciences, to conduct evaluations. The Buros Center for Testing, in collaboration with the University of Massachusetts/Center for Educational Assessment and the University of Georgia, recently conducted an external evaluation of NAEP. *(National Center for Education Statistics. The NAEP Glossary of Terms. Retrieved November 2013)*

Reliability refers to the consistency of judgments being made or the conclusions being drawn about similar performances by students. Reliability relates to how consistently the test measures what it is intended to measure. An assessment tool shown to consistently measure a standard would have a high level of reliability, and therefore allow you greater confidence in making judgments about the needs of students related to the standard being measured. Validity and reliability must go hand in hand. A test can be reliable without being valid (consistently measuring the wrong concept), but to be valid, the test must also be reliable (with regard to the consistency of conclusions being made from the results). (*IASB*, *A School Leader's Guide to Assessing Student Achievement in Iowa*, 2000)

The consistency with which a test measures the area being tested; describes the extent to which a test is dependable, stable, and consistent when administered to the same individuals on different occasions. (*Wrightslaw. retrieved from http://www.wrightslaw.com/links/glossary.assessment.htm, November* 2013)

Standardized Assessment

Standardized assessments are designed, administered, and scored in a standard, or consistent, manner. They often use a multiple-choice format, though some include open-ended, short-answer questions. Historically, standardized tests featured rows of ovals that students filled in with a number-two pencil, but increasingly the tests are computer-based. Standardized tests can be administered to large student populations of the same age or grade level in a state, region, or country, and results can be compared across individuals and groups of students. (*The Great Schools partnership. retrieved from http://edglossary.org/assessment/ November 2013).*

An assessment tool that has a “sameness” to it for all who take it, in terms of the items presented, the procedures used to administer it, and the methods used to score it. Unless all conditions are the same when different groups are given the test on different occasions, it is not meaningful to compare their scores or to combine their scores to describe overall group performance. Such sameness is required when norms are acquired in a process called standardization. However, standard conditions also are essential, even when norms are not used for score interpretation purposes, if scores from multiple groups tested in different places at different times are to be combined. (*National Council on Measurement in Education. Glossary of Important Assessment and Measurement Terms. http://ncme.org/resource-center/glossary/ 2013)*

Standards-Based Assessments

Assessments that are developed to measure student attainment of a specific set of content standards. The test specifications detail the content and cognitive processes that have been the focus of student learning, as written in the school's content standards. (*National Council on Measurement in Education. Glossary of Important Assessment and Measurement Terms. http://ncme.org/resource-center/glossary/, 2013)*

Standards-referenced or standards-based assessments are designed to measure how well students have mastered the specific knowledge and skills described in local, state, or national learning standards. Standardized tests and high-stakes tests may or may not be based on specific learning standards, and individual schools and teachers may develop their own standards-referenced or standards-based assessments. (*The Great Schools partnership. retrieved from http://edglossary.org/assessment/, November 2013).*

State Indicators

State indicators provide information about the general health of the educational system. Districts must report results on these indicators annually to their local community, the Department of Education, and the local area education agency (e.g. The percentage of all 4th, 8th, and 11th grade students achieving proficient or higher reading status as measured in at least three achievement levels and separated by gender, race, socioeconomic status, disability status, and other subgroup categories as required by state law*). (IASB*, *A School Leader's Guide to Assessing Student Achievement in Iowa*, 2000)

Student-growth Measures

Student-growth measures compare the relative change in a student's performance on a specific test with the performance of all other students on that same test. The scores of all students are used to create an "index of student growth" and to identify a median achievement score that can be used as a point of comparison for all student scores—i.e., some students will show growth that is greater than the median, while others will show growth that is lower than the median. *(The Great Schools partnership. retrieved from http://edglossary.org/assessment/ November 2013).*

Summative Assessment

Summative assessments are used to evaluate student learning at the conclusion of a specific instructional period—typically at the end of a unit, course, semester, program, or school year. Summative assessments are graded tests, assignments, or projects that are used to determine whether students have learned what they were expected to learn during the defined instructional period. (*The Great Schools partnership. retrieved from http://edglossary.org/assessment/, November 2013).*

Summative assessment, often referred to as assessment of learning, is the after-the-fact assessment in which we look back at what students have learned, such as end-of-course or end-of-year examinations. The most familiar forms are the end-of-year standardized tests, though in classrooms we also assess students' learning at the end of a unit. These assessments are likely to be uniform or standardized. (*National Council of Teachers of English. Retrieved from http://www.ncte.org/standards/assessmentstandards/glossary November 2013).*

Validity

The degree to which the evidence obtained through validation supports the score interpretations and uses to be made of the scores from a certain test administered to a certain person or group on a specific occasion. Sometimes the evidence shows why competing interpretations or uses are inappropriate, or less appropriate, than the proposed ones. (*National Council on Measurement in Education. Glossary of Important Assessment and Measurement Terms. http://ncme.org/resource-center/glossary/, 2013)*

Related to the purpose of the evaluation, the degree to which inferences drawn about a student's knowledge, skills, attitudes, and behaviors from the results of assessment methods used are correct, trustworthy, and appropriate for making decisions about students. *(The Joint Committee on Standards for Educational Evaluation, The Student Evaluation Standards. 2003)*

The match between standards, instruction, and assessment is important to the validity of your assessment. The validity of an assessment tool refers to how well it measures what it is intended to measure (for example, mathematics ability) and the degree to which the results can be used for the intended purposes (for example, determining proficiency). (*IAS*B, *A School Leader's Guide to Assessing Student Achievement in Iowa*, 2000)

The extent to which an assessment supports accurate, representative, and relevant inferences (e.g. conclusions, prediction) about student performance. (*Susan Green and Robert* Johnson. *Assessment Is Essential* 2010).

The extent to which a test measures the skills it sets out to measure and the extent to which inferences and actions made on the basis of test scores are appropriate and accurate. *(Wrightslaw. retrieved from http://www.wrightslaw.com/links/glossary.assessment.htm, November* 2013).

Appendix 4: Links to Background Resources

The following documents provided background information to the Iowa Assessment Task Force. All are available, along with notes from each Task Force meeting, on the Task Force webpage at: https://www.educateiowa.gov/resources/boards-commissions-committees-councils-and-task-forces/assessment-task-force.

Criteria for Higher Quality Assessment, June 2013

https://edpolicy.stanford.edu/sites/default/files/publications/criteria-higher-quality-assessment_2.pdf

By Linda Darling-Hammond, Joan Herman, James Pellegrino, Jamal Abedi, J. Lawrence Aber, Eva Baker, Randy Bennett, Edmund Gordon, Edward Haertel, Kenji Hakuta, Andrew Ho, Robert Lee Linn, P. David Pearson, James Popham, Lauren Resnick, Alan H. Schoenfeld, Richard Shavelson, Lorrie A. Shepard, Lee Shulman, Claude M. Steele

Published by: Stanford Center for Opportunity Policy in Education, Stanford University; Center for Research on Student Standards and Testing, University of California at Los Angeles; and Learning Sciences Research Institute, University of Illinois at Chicago

States' Commitment to High-Quality Assessments Aligned to College- and Career-Readiness, October 1, 2013

http://www.ccsso.org/Documents/2013/CCSSO%20Assessment%20Quality%20Principles%2010-1-13%20FINAL.pdf

By the Council of Chief State School Officers

A Review of Models for Computer-Based Testing, 2011

https://research.collegeboard.org/sites/default/files/publications/2012/7/researchreport-2011-12-review-models-for-computer-based-testing.pdf

By Richard M. Luecht and Stephen G. Sireci

Published by: College Board

Iowa Science, Technology, Education, Engineering, & Mathematics Advisory Council Broadband Committee, *Initial Action Recommendations*, December 1, 2013

https://broadband.iowa.gov/sites/files/connect_iowa/documents/Iowa%20STEM%20Broadband%20Committee%20Recommendations%20Report.pdf

Appendix 5: UEN Tech Directors Memorandum

Iowa City Community School District
Educational Services Center

David Dude, Ph.D. Chief Operating Officer
1725 North Dodge Street • Iowa City, IA 52245 • (319) 688-1000 • Fax (319) 688-1009 • www.iowacityschools.org

TO: Iowa Statewide Assessment Task Force

CC: Brad Buck, Director, Iowa Department of Education
David Tilly, Deputy Director, Iowa Department of Education
Lew Finch, Executive Director, Urban Education Network of Iowa

FROM: David Dude, on behalf of technology directors of the Urban Education Network of Iowa

DATE: August 4, 2014

SUBJECT: Statewide assessment technology costs and support

The following is feedback from the UEN technology directors regarding the charge in House File 215 for the task force to "consider the costs to school districts and the state in providing and administering [a statewide] assessment and the technical support necessary to implement the assessment." This feedback was collected at our July 23, 2014, quarterly meeting.

The directors believe there are many costs associated with a statewide assessment that uses technology- based delivery. Those costs related to technology include networking and bandwidth, delivery devices, loss of instructional time, and tech support. Additional direct and indirect costs, such as loss of instructional time, are beyond the scope of the feedback provided here.

Directors shared many concerns regarding networking and bandwidth. Delivery of technology-based assessments requires robust wired and Wi-Fi networks and sufficient bandwidth—both between schools and from the district to the internet—to handle the required number of simultaneous users. The costs associated with building and maintaining such networks are significant and can vary widely depending on the current state of systems in each district.

While many districts have undertaken initiatives to supply each student with a device—such as a laptop, tablet, or Chromebook—many have not. The ubiquity of devices to deliver a technology-based assessment is a major concern of the directors. Districts without a one-to-one initiative would likely have to use existing devices to handle assessment needs, perhaps scheduling computer labs and/or carts for several weeks or months solely to deliver assessments. In addition, some assessments various districts have evaluated are not device-independent. They require specific devices, keyboards, plug-ins, microphones, speakers, etc. Directors expect initial and ongoing costs to provide enough delivery devices to administer all required assessments within an acceptable time period to be extensive.

Finally, directors discussed issues of supporting technology related to technology-based assessment. Most districts are stretched thin in providing the level of tech support expected of staff and students, so the addition of support for an assessment system is of great concern. An assessment system is of critical importance and support of such a system would likely come at the cost of support to other systems. The costs of sufficient support are significant and would include costs at both the state and district level.

The UEN technology directors believe it is critical that the state quantify the costs associated with delivery of a technology-based assessment. Many of the components discussed previously can be easily quantified through an appropriate survey of existing district technologies. Relying solely on data collected for other purposes—such as BEDS reporting—is insufficient in accurately considering the costs associated with such an assessment system, as required by HF 215. The directors appreciate the opportunity to provide this feedback to the Iowa Statewide Assessment Task Force and would be happy to work further with the task force in quantifying these costs.

Appendix 6: AEA Letter Regarding SBAC

Prairie Lakes Area Education Agency

August 18, 2014

Dr. Dave Tilly and the Assessment Task Force,

We have been spending part of our board meetings over the past few months reading John Kendall's book Understanding Common Core State Standards. We are in support of the Common Core and respectful of the state's position with the Iowa Core. We are however concerned about our state's latest decision to discontinue being a Governing State in the Smarter Balance Assessment Consortium. We realize that politically this may make sense but we worry that the wrong message is being sent to our local districts (and AEAs for that matter) who have been working hard to prepare our students for this major shift in assessments. Please make sure that Iowa kids and their future are the focus of your work!

First of all, we believe that assessment in Iowa must be markedly different than it currently is. The application of knowledge and skills is so much more important to our children's futures and we know that Iowa Assessments just don't measure this as well as other assessments that are out there. We believe in Tony Wagner's comment from Creating Innovators; "the world does not care what you know but rather what you can do with what you know." Assessments like Smarter Balance and the College Work Readiness Assessment (from the Council for Aid to Education), as well as other types of critical thinking, problem-solving and/or analytical reasoning assessments should be considered very seriously by the Taskforce. The time for change is now!

Secondly, we believe that not adopting these types of assessments will continue to support very traditional teaching methods. We are just beginning to make great progress with the teachers who are changing their instructional strategies we and we do not want to go backward. We believe in the saying, "what gets measured gets done." Let's make sure we start measuring the things that will drastically change the classroom experience for our next generation of leaders, employers, captains of industry, entrepreneurs and decision-makers.

Thank you for the time and effort you are taking to create a balanced assessment system for the state of Iowa. We know that these are complex issues and that we do not have all the background information you may have but please put assessments like Smarter Balance and the College Work Readiness Assessment at the top of your consideration list. If you have any questions or need stakeholder input, we would be glad to engage in the conversation. The best way to get this started would be to get hold of our Chief Administrator, Jeff Herzberg, by phone (515-570-2601) or email (jherzberg@aea8.k12.ia.us).

Respectfully,

Mr. Jeff Herzberg, Chief Admn.
Manson, Iowa

Mr. Dean Saunders, President
Spencer, Iowa

Mr. Steve Jimmerson, Vice-President
Alta, Iowa

Dr. Gary Astor, Director
Fort Dodge, IA

Mr. Todd Lundgren, Director
Lehigh, IA

Ms. Pat Brown, Director
Graettinger, IA

Mrs. Sue Brown, Director
Emmetsburg, IA

Mr. Rick Morain, Director
Jefferson, IA

Appendix 7: Depth-of-Knowledge Explanation and Examples

Following is a two-page explanation of "Depth-of-Knowledge" (DOK), copies from the AEA 267 website. Page three, compiled for the Assessment Task Force by Iowa Department of Education staff in October 2014, includes examples of performance at each DOK level in English language arts and mathematics.

AEA 267
AREA EDUCATION AGENCY
leadership in learning

Serving children, families & educators

Webb's Depth-of-Knowledge (DOK)

Norman L. Webb, a senior research scientist and mathematics educator from the University of Wisconsin-Madison (Webb, 1997) developed a process and criteria for systematically analyzing the alignment between curriculum standards and assessments. This body of work offers educators a model to analyze the cognitive expectation demanded by standards, curricular activities and assessment tasks. Each grouping of tasks reflects a different level of cognitive expectation, or depth of knowledge, required for the student to complete the task or respond in an acceptable manner

The following table reflects an adapted version of the model.

DOK Level	Title of Level
1	Recall and Reproduction
2	Skills and Concepts
3	Short-term Strategic Thinking
4	Extended Thinking

As DOK levels are assigned to standards and course objectives, the following served as general guidelines for developers of this model:

- The DOK level assigned should reflect the level of work students are most commonly required to perform in order for the response to be deemed acceptable.
- The DOK level should reflect the **complexity** of the cognitive processes demanded by the task as outlined by the objective, rather than its **difficulty**. Ultimately the DOK level describes the kind of thinking required by a task, not whether or not the task is "difficult".
- The DOK level should be assigned based upon the cognitive demands required by the central performance described in the objective.

- The objective's central verb(s) alone is/are **not sufficient** information to assign a DOK level. Users of this model must also consider the complexity of the task and/or information, conventional levels of prior knowledge for students at the grade level, and the mental processes used to satisfy the requirements set forth in the objective.

Tutorial

The Wisconsin Center of Education Research has a website with an Alignment Tool that is designed to produce reports on the alignment of curriculum standards and student assessments. On their Tutorial web page you can select your specific areas of study: Mathematics, Language Arts, Science, or Social Studies.

Additional web resources with test examples:

Chandler Unified School District: Higher Levels of Cognitive Demand (DOK)

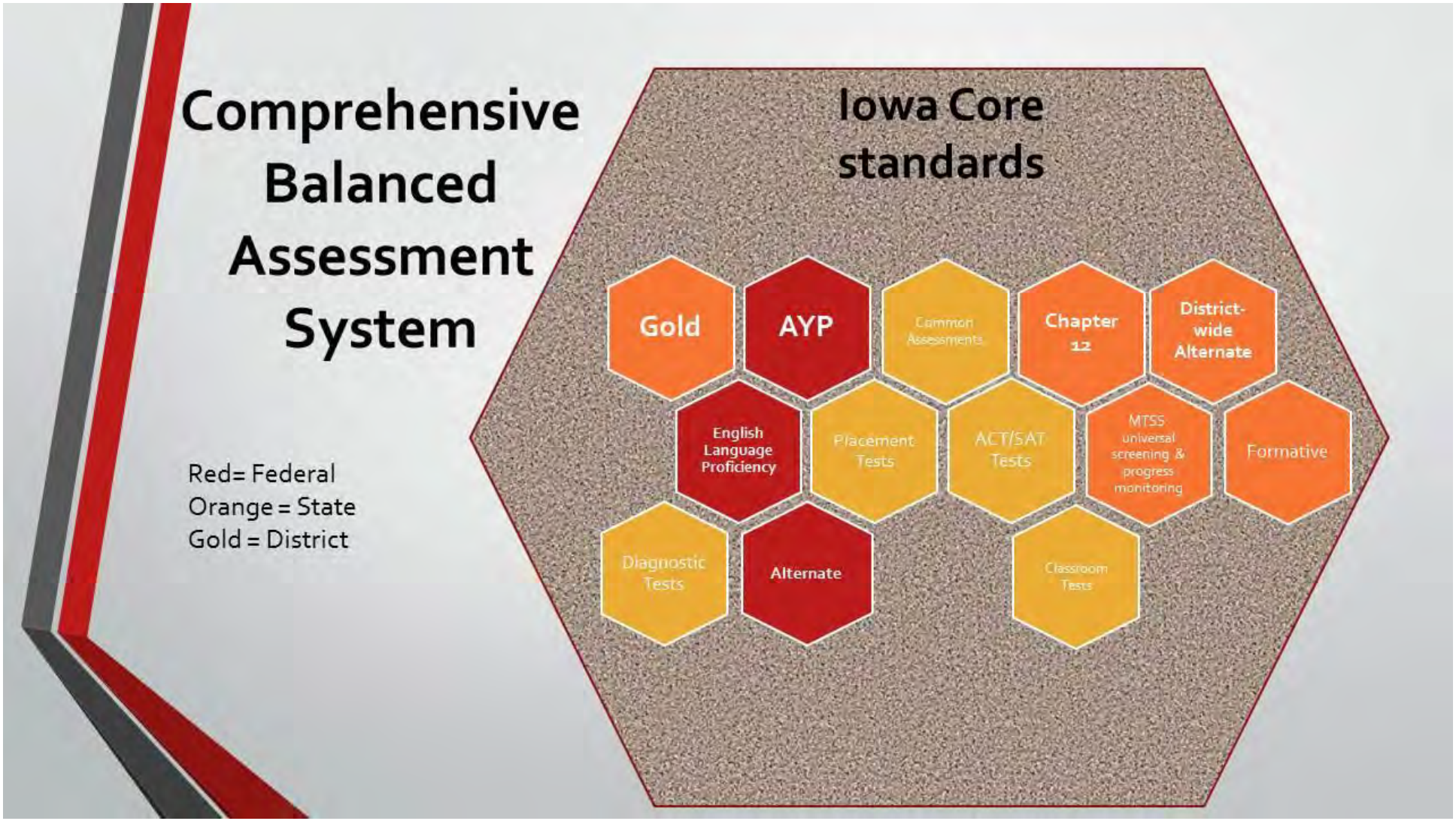
Nebraska Department of Education: Assessment Division:

- Reading DOK Levels
- Mathematics DOK Levels

Kentucky Department of Education: Support Materials for Core Content for Assessment:

- Reading Sample Questions
- Writing Sample Questions
- Mathematics Sample Questions
- Science Sample Questions

DOK Level	Title of Level	Explanation of Level	English Language Arts Examples	Mathematics Examples
1	Recall and Reproduction	One step recall or recognition of a fact, information, a concept, or a procedure.	• Recognize figurative language in a reading passage. • Use punctuation marks correctly.	• Read, write, and compare decimals in a scientific notation. • Solve two digit equations.
2	Skills and Concepts	Use of information; conceptual knowledge; following or selecting appropriate procedures with two or more steps and decision points along the way; routine problems; organizing and displaying data.	• Identify and summarize the major events in a narrative. • Edit compound or complex sentences.	• Interpret information from a simple graph. • Collect and display data.
3	Short-term Strategic Thinking	Requires reasoning, developing a plan or sequence of steps to approach a problem; requires some decision making and justification; abstract and complex; often having more than one possible answer.	• Summarize information from multiple sources. • Edit writing to produce a logical progression of ideas.	• Explain how changes in the dimensions affect the area and perimeter/circumference of geometric figures. • Provide a mathematical justification when a situation has more than one possible outcome.
4	Extended Thinking	An investigation or application to real work; requires time to research, think, and process multiple conditions of the problem or task non-routine manipulations, across disciplines/content areas/multiple sources, requires complex reasoning, planning, developing most usually over an extended period of time.	• Analyze and synthesize information from multiple sources. • Write an analysis of two selections, identifying common theme and generating a purpose that is appropriate for both	• Collect data over time taking into consideration a number of variables and analyze the results. • Develop a rule for a complex pattern and find a phenomenon that exhibits that behavior.

Appendix 8: System of Assessment

The following graphic displays what a comprehensive balanced assessment system in Iowa looks like. The Assessment Task Force was charged with recommending the summative assessment to measure AYP (Adequate Yearly Progress).