STUDENT ASSESSMENTS AND ASSOCIATED GROWTH MODELS FOR TEACHER AND PRINCIPAL EVALUATION

FORM C

PUBLICLY AVAILABLE SERVICES SUMMARY

This form will be posted on the New York State Education Department's Web site and distributed through other means for all applications that are approved in conjunction with this RFQ to allow districts and BOCES to understand proposed offerings in advance of directly contacting Assessment Providers regarding potential further procurements.

Assessment Provider Information	
Name of Assessment Provider:	Curriculum Associates, LLC
Assessment Provider Contact Information:	Ann Larson, Regional Vice President of Sales 314-740-3383| alarson@cainc.com
Name of Assessment:	*i-Ready® Diagnostic* for Mathematics *i-Ready® Diagnostic* for Reading/English language arts (ELA)
Nature of Assessment:	☒ ASSESSMENT FOR USE WITH STUDENT LEARNING OBJECTIVES WITH A TARGET SETTING MODEL; OR ☐ SUPPLEMENTAL ASSESSMENT WITH AN ASSOCIATED GROWTH MODEL: ☐ GAIN SCORE MODEL ☐ GROWTH-TO-PROFICIENCY MODEL ☐ STUDENT GROWTH PERCENTILES ☐ PROJECTION MODELS ☐ VALUE-ADDED MODELS ☐ OTHER:
What are the grade(s) for which the assessment can be used to generate a 0-20 APPR score?	K–12
What are the subject area(s) for which the assessment can be used to generate a 0-20 APPR score?	ELA and mathematics
What are the technology requirements associated with the assessment?	*i-Ready* runs on most standard PC- and Mac-based systems, using common browsers and standard configurations. System requirements can be found at: www.i-Ready.com/support.
Is the assessment available, either for free or through purchase, to other districts or BOCES in New York State?	☒ YES ☐ NO

Please provide an overview of the assessment for districts and BOCES. Please include:

- **A description of the assessment;**
- **A description of how the assessment is administered;**
- **A description of how scores are reported (include links to sample reports as appropriate);**
- **A description of how the Assessment Provider supports implementation of the assessment, including any technical assistance. (3 pages max)**

i-Ready Diagnostic for reading/ELA and math is an effective, research-based, web-based diagnostic assessment for students in grades K–12. Using a compatible computer with internet access and a headset, students take the online *Diagnostic* that assesses performance overall and down to the sub-skill level. *i-Ready's* sophisticated computer-adaptive algorithms ensure learners are assessed efficiently across a number of knowledge domains. The questioning format adapts as students respond to each question—getting more or less challenging as needed—to complete the diagnosis and identify each child's performance level. The adaptive nature of the assessment meets students at their own skill level, so they experience success as well as challenge while *i-Ready* accurately measures their mastery of New York State Learning Standards.

i-Ready includes a powerful management and reporting suite for delivery of essential performance information at the district, school, class, and student/group levels. Actionable, real-time reports guide educators in identifying the instructional needs and abilities of individual students and instructional groups, and also include explicit next steps for remediating areas of academic weakness. For a narrated program tour, go to www.i-ready.com/tour.
For sample reports, go to www.curriculumassociates.com/products/iready/i-ready-reports.aspx.

i-Ready Diagnostic is strongly aligned to the New York State Learning Standards for ELA and math. The independent Educational Research Institute of America conducted a research study evaluating the relationship between *i-Ready Diagnostic* and the 2016 New York State end-of-year assessments. The research found a high correlation between *i-Ready Diagnostic* and the New York State assessments. *i-Ready* was also shown to accurately predict end-of-year proficiency rates based on students' fall, winter, and spring *Diagnostic* performance. The strong correlations between the spring *i-Ready Diagnostic* and the 2016 New York State assessments—with overall correlations of .81 for ELA and .84 for mathematics for all students across grades 3–8—exceed the Center on Response to Intervention's recommended .70 threshold for correlations. For more information, see https://www.curriculumassociates.com/products/ready-research-iRdiag-it-works.aspx.

Curriculum Associates partnered with leading academics to develop a regression-based model for predicting New York State Assessment proficiency rates. *i-Ready* proficiency prediction from fall, winter, and spring *Diagnostic* results proved to be highly accurate and remarkably consistent with observed (actual) NYSTP proficiency rates—often within one percent of observed proficiency for the sample. Plus, *i-Ready* accurately identified individual student needs on the standards to drive targeted instruction—both student- and teacher-led.

Scoring and Reporting. The primary function and purpose of *i-Ready Diagnostic* is to inform appropriate instructional recommendations and placement decisions for students performing within K–12. A grade-level-ready student has demonstrated sufficient skills at the beginning of the school year that he or she is considered ready for curriculum at the chronological grade. To determine scale-score thresholds for the performance standard for each grade level, we held a separate performance standard-setting meeting for each content area.

One of the greatest advantages of using the *i-Ready* system over traditional paper-based assessments is the fact that test results are instantly available to administrators once students have completed the test. *i-Ready* provides numerous reporting views that make the viewing, sorting, and analysis of data intuitive and timely. Access is secure via unique user logins and a user-friendly interface, interpretation of results is streamlined for educators of all backgrounds and experience levels, and there is an emphasis on actionable data that is most likely to inform effective decision making. The program is web-based, so all reporting is instantaneous and available at anytime, anywhere the authorized user has Internet access. Users receive unique logins that enable a permissioned view of the data. All reports may be printed or downloaded in PDF; and administrator-level data may also be exported as CSV files for external analyses.

Overall Instructional Strategies. The *Diagnostic* information is readily aggregated, manipulated, downloaded, and printed to inform strategies and effective planning at the class, grade, school, custom reporting group, district, or domain-specific level.

Recommendations. Results from the *Diagnostic* group students with similar skills and deficits, helping teachers more effectively target small- and large-group instruction or intervention. In addition to the numerous reports available to users via *i-Ready*, Appendices A (mathematics) and B(reading/ELA) provide directions and templates for determining New York State Student Learning Objectives (SLOs) based on *i-Ready Diagnostic* scores. These files allow educators to easily download their *i-Ready* flat files, copy-and-paste the data into the templates, and the automated calculations provide a summary distribution of the ratings for teachers and also for classrooms.

Instructional Modules. Math and reading/ELA instructional modules within *i-Ready Instruction* are available as an optional add-on to *i-Ready Diagnostic*. The instructional component adapts to the student's performance level to deliver differentiated instruction. Student and class Response to Instruction Reports are then immediately available to the teacher to inform instruction.

Implementation Plan Overview. Curriculum Associates employs a straight-forward account set-up process to get school districts and BOCES up and running quickly with *i-Ready*. We support Local Educational Agency (LEA) and school staffs in assessment administration and analysis of results:

1. We assign a primary point of contact (Account Manager) to the LEA.
2. The LEA works with the Account Manager to set up the site accounts prior to training and professional development.
3. We hold a deployment meeting to determine the LEA's specific needs and set the training schedule.
4. We offer professional development via onsite sessions, on topics such as understanding and administering *i-Ready* assessments, accessing and analyzing student results, and using *i-Ready* data to make informed instructional decisions.
5. We offer administrator training on topics that include implementing *i-Ready* and effectively using the assessment as a measure of student growth for purposes of teacher and principal evaluation.

Our in-house Technical Support and Customer Services teams are available throughout the implementation to assist users with any ongoing needs. *i-Ready* users may call or email Curriculum Associates' support team: 800-225-0248 and www.i-Ready.com/support. Technical support is available Monday through Friday from 7:00 AM through 9:00 PM Eastern (excluding holidays).

Additional 24/7 implementation resources—including video tutorials, user guides, reports guidance, best-practice tips, educator ideas, and more—are available to users via *i-Ready Central* (http://i-readycentral.com/).

Please provide an overview of the student-level growth model or target setting model for SLOs for districts and BOCES, along with how student-level growth scores are aggregated to the create teacher-level scores, and how those teacher-level scores are converted to New York State's 0-20 metric.

For the 2018–2019 school year, Curriculum Associates is proposing a **Growth to Proficiency Model** of target setting for SLOs. There are two criteria for students to reach in the Growth to Proficiency Model being proposed. If the students meet either criterion, then they are considered to have met the growth requirement. The first criterion is whether a student has a gain score that is within one-half of the mean standard error of gain of typical growth, based on the placement of their initial assessment during the school year. The second criterion is if the student reaches a placement of mid-on grade level or higher at any point during the school year.

To determine the target growth for SLOs, first use the following tables of typical growth differentiated by subject, grade, and placement category. These are measures of average growth for students in these categories.

Table 1: Mathematics Typical Growth													
Fall *Diagnostic* Placement Level	**K**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
On Level, Mid or Above	21	21	18	21	19	14	13	11	9	9	9	9	9
On Level, Early	24	26	22	25	23	18	13	12	9	9	9	9	9
1 Level Below	32	29	26	26	23	18	14	12	9	9	9	9	9
2 Levels Below	NA	36	29	27	23	18	14	13	10	10	10	10	10
3 or More Levels Below	NA	NA	NA	30	24	20	15	13	12	12	12	12	12
Table 2: Reading Typical Growth													
Fall *Diagnostic* Placement Level	**K**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
On Level, Mid or Above	43	37	22	17	12	7	4	4	4	4	4	4	4
On Level, Early	44	47	29	22	17	13	9	6	4	4	4	4	4
1 Level Below	49	49	39	26	20	16	12	10	9	9	9	9	9
2 Levels Below	NA	54	44	33	23	20	14	12	12	12	12	12	12
3 or More Levels Below	NA	NA	NA	36	28	26	19	17	18	18	18	18	18

To account for the standard error of measurement (SEM) of growth—and as recommended in the current calculations—subtract half the minimum standard error of growth (seven scale points for reading/ELA and four scale points for math) to get the adjusted growth target. However, if the result of the subtraction is less than four, set the adjusted growth target to four points. The results are shown in Tables 3 and 4

Table 3: Mathematics Adjusted Growth Targets													
Fall *Diagnostic* Placement Level	**K**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
On Level, Mid or Above	17	17	14	17	15	10	9	7	5	5	5	5	5
On Level, Early	20	22	18	21	19	14	9	8	5	5	5	5	5
1 Level Below	28	25	22	22	19	14	10	8	5	5	5	5	5
2 Levels Below	NA	32	25	23	19	14	10	9	6	6	6	6	6
3 or More Levels Below	NA	NA	NA	26	20	16	11	9	8	8	8	8	8
Table 4: Reading Adjusted Growth Targets													
Fall *Diagnostic* Placement Level	**K**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
On Level, Mid or Above	36	30	15	10	5	4	4	4	4	4	4	4	4
On Level, Early	37	40	22	15	10	6	4	4	4	4	4	4	4
1 Level Below	42	42	32	19	13	9	5	4	4	4	4	4	4
2 Levels Below	NA	47	37	26	16	13	7	5	5	5	5	5	5
3 or More Levels Below	NA	NA	NA	29	21	19	12	10	11	11	11	11	11

For students who do not meet the gain score requirement, we recommend reviewing all of their *i-Ready Diagnostic* scores. If any of the overall *Diagnostic* scores were at or above the mid-on grade level cut score throughout the year, then those students should also be considered as having met the cut, since they have demonstrated a high likelihood of proficiency.[1] These cut scores are as follows:

Reading/ELA			Math	
Grade	**Mid-Cut**		**Grade**	**Mid-Cut**
K	396		K	373
1	458		1	413
2	513		2	441
3	545		3	464
4	579		4	482
5	609		5	498
6	616		6	514
7	632		7	531
8	642		8	541
9	661		9	556
10	673		10	586
11	692		11	590
12	704		12	602

Target setting should also consider the amount of instructional time between the first and last *Diagnostic*. Specifically, the above targets (see Tables 1 and 2) are based on 30 weeks between the first and last assessment. However, if significantly less time is expected between the first and last assessment, then a lower target might be set to take into account proration of the target over the anticipated number of weeks (i.e., a target might be 80 percent of the 1.0-year target if only 24 weeks are planned between the first and last test).

Typical growth and stretch growth[2] targets will be set automatically for students in *i-Ready* accounts. However, for the purposes of SLO target setting for individual students, Curriculum Associates provides Excel templates—see the Appendix for a draft of this template that can be used outside of the system with an *i-Ready* data export to determine ratings as necessary for teachers and administrators. An example follows:

Name	Typical Growth	Pro-Rating Multiplier	Adjustment for ½ SEM of Growth	Final Adjusted Gain
Anna	13	.83 (25/30 weeks)	7	4
Beatrix	13	.83	7	4
Connor	26	.83	7	15
DeAndre	26	.83	7	15
Elaine	20	.83	7	10
Frederick	20	.83	7	10
George	16	.83	7	6
Hector	20	.83	7	10
Isabella	16	.83	7	6
Juanita	20	.83	7	10

First, the typical growth differentiated by starting placement on the *Diagnostic* is noted. Then, if necessary, a pro-rating multiplier is used. Finally, to reduce the number of incorrect designations of students who have not demonstrated enough growth because of random error, the target is reduced by one-half the mean standard error

of the gain—seven scale points for reading/ELA and four scale points for math—and then rounded and bounded by a minimum of four scale score points.

In this sample scenario, the administrator decided that the target should be reduced to 83 percent of the adjusted gain, because the time between the first and last assessment was significantly less than the requisite 30 weeks. In the past, educators may have set more aggressive targets because students were behind. In this model, the initial placement of the student is already taken into account in the determination of the differentiated typical growth.

For more ambitious targets for students, stretch growth measures are available. The stretch growth measures are designed to help students understand what an ambitious—but realistic—path to proficiency over one, two, or more years would look like. However, Curriculum Associates cautions against using these stretch growth metrics in accountability frameworks.

To determine how these numbers can be changed into a 20-point scale for HEDI—Highly Effective, Effective, Developing, Ineffective—please refer to the crosswalk below.

% Students Meeting Cut	Points	Rating
0-4%	0	Ineffective
5-8%	1	
9-12%	2	
13-16%	3	
17-20%	4	
21-24%	5	
25-28%	6	
29-33%	7	
34-38%	8	
39-43%	9	
44-48%	10	
49-54%	11	
55-59%	12	
60-66%	13	Developing
67-74%	14	
75-79%	15	Effective
80-84%	16	
85-89%	17	
90-92%	18	Highly Effective
93-96%	19	
97-100%	20	

The similarity between the optimized cut scores proposed by the standard-setting committees and the optimal cut score for ensuring classification of proficiency was very similar; and the mid-on grade level cut score is the current best predictor we have for determining whether a student is likely or unlikely to be proficient on the end-of-year New York assessment. Therefore, as an alternative measure of proficiency, the mid-on grade level cut score threshold is used.

[1] In 2013, Curriculum Associates conducted a linking study with the New York State summative assessment, and in 2014, Curriculum Associates conducted a contrasting groups standard setting. The achievement level descriptor for the mid-on grade level placement is as follows: "*Students in this level have met the minimum requirements for the expectations in this grade level to be considered proficient for their grade. These students will most likely benefit from instruction in some of the more advanced on-grade level topics."* Also, please note that due to a recalibration, some placements were adjusted by no more than three points to account for the adjustment due to recalibration.

[2] Stretch growth measures are growth measures that are higher than typical growth and are meant for students to have a realistic path toward closing the proficiency gap or increasing and maintaining high proficiency levels.

New York State Next Generation Assessment Priorities Please provide detail on how the proposed supplemental assessment l or assessment to be used with SLOs addresses each of the Next Generation Assessment Priorities below.	
Characteristics of Good ELA and Math Assessments (only applicable to ELA and math assessments):	The adaptive *i-Ready Diagnostic* leverages advanced technology to provide a deep, customized evaluation of every student and to track student growth consistently and continuously over the child's entire K–12 career. *i-Ready* also provides valid and reliable growth metrics across a district and school environment to optimize administrative decision-making for long-term performance improvements. Educators frequently choose adaptive assessments for the instruments' high precision and efficiency, allowing them to pinpoint student needs more accurately and in less time than with traditional fixed-form assessments. By dynamically selecting test items based on student response patterns, *i-Ready's* adaptive assessment derives large amounts of information from a limited number of test items and can adapt to students with low and high abilities to obtain a more precise measurement of student performance. For administrators, an adaptive assessment has proven to be the most precise measure of student growth (*Growth, Precision, and CAT: An Examination of Gain Score Conditional SEM* by Tony D. Thompson, Research Report, December 2008). This real-time visibility enables immediate, effective course corrections. Administrators using *i-Ready* receive timely, comprehensive insight into: • Percent of students performing below, on, and above grade level • Percent of students on track to meet annual growth expectations • Details by school, grade, class, and student ***i-Ready* for Reading/ELA** **Foundational Skills**. *i-Ready Diagnostic* assesses the foundational skills of phonological awareness, phonics, and high-frequency words: • Phonological Awareness. In *i-Ready Diagnostic*, test items use both audio and visual support to assess children's ability to distinguish and manipulate the sounds in spoken language. The stems, which comprise questions or directions, are read aloud to children, as are the individual answer choices. Students may use an audio icon to hear items and answer choices repeated. Many items are supported by art. Most items focus on segmenting and blending, because these skills are the most important building blocks for phonics instruction. Children are asked to segment and blend syllables, onset and rime, and individual phonemes. Other items assess students' ability to manipulate phonemes by deleting, adding, or substituting sounds in spoken words. • Phonics. *i-Ready Diagnostic* assesses children's ability to recognize sound-spelling correspondences. Test items use both audio and

	visual support. Some items—which comprise questions or directions—are read aloud, and students are asked to choose among written answer choices. Other items are written, and children are asked to choose among answer choices that are read aloud. As with phonological awareness, students may use an audio icon to hear items and answer choices repeated. Many items are supported by art. Items focus on a range of high-utility skills, including: letter recognition; one-to-one letter-sound correspondences; CVC and CCVC words—as well as other one-syllable words; consonant digraphs; final *e* conventions; *r*-controlled vowels; inflectional endings; vowel teams (digraphs and diphthongs); two-syllable words; three-, four-, and five-syllable words; and words with prefixes/suffixes. • High-Frequency Words. Words assessed and taught in *i-Ready Diagnostic & Instruction* are drawn from the *Dolch Basic Word List* (Dolch, 1941) and the *Fry Instant Word List* (Fry, 1999). Test items in *i-Ready Diagnostic* assess students' ability to recognize high-frequency words. Some stems—which comprise questions or directions—are read aloud, and children are asked to choose among written answer choices. Other stems are written, and students are asked to choose among answer choices that are read aloud. Students may use an audio icon to hear items and answer choices repeated. **Vocabulary.** Test items in *i-Ready Diagnostic* assess students' knowledge of both Tier 2 words (academic or literary words) and Tier 3 words (domain-specific or content-area words). Panels of teachers and reading specialists selected the words to be assessed, using research-based lists that included: • *Words Worth Teaching* (Biemiller, 2010) • *The Living Word Vocabulary* (Dale & O'Rourke, 1981) • *The Educator's Word Frequency Guide* (Zeno, 1995) • *The Academic Word List* (Coxhead, 2000) The panels made these selections to reflect the types of words children learn in various disciplines at different grade levels and in various stages of their lives. Test items assess knowledge of these words in context, and those aimed at early readers include visual support. Because oral vocabulary is a critical part of reading development, test items at kindergarten through grade 2 are supported by audio. **Comprehension**. Students' abilities to understand both literary text and informational text are evaluated in *i-Ready Diagnostic*. The focus in kindergarten is on listening comprehension. At this grade, comprehension items are supported by both audio and art. Reading comprehension is the focus at grade 1 and above. Students are presented with a passage, and interactive, multiple-choice items are shown next to the passage. When a passage has more than one page, students may page back and forth through it

	while still viewing the item. This format and process encourages students to find textual support for their selected answer. ***i-Ready* for Mathematics** The College and Career Readiness Standards organize mathematical content within grades by domains—big ideas that connect topics across grades. A major goal of this grouping is to build understanding of mathematical concepts within each domain and how they progress across grades. *i-Ready Diagnostic* further organizes the Common Core domains into four major groups: Number and Operations, Algebra and Algebraic Thinking, Measurement and Data, and Geometry. **Number and Operations**. In *i-Ready Diagnostic*, the items aligned to the Number and Operations in grades K–2 allow students to demonstrate proficiency in the skills associated with counting, whole numbers, the algorithms of the operations, and understanding of place value. In these grades, in the least difficult items, virtual manipulatives are used to help students show conceptual understanding of place value and the algorithms for adding and subtracting. For example, students may utilize a virtual base-ten block tool to help with regrouping for solving subtraction items. In grades 3–5, the items aligned to the Number and Operations domain allow students to demonstrate a deeper understanding of the concepts they learned in the primary grades, while also demonstrating their understanding of how these concepts expand into other sets of numbers, such as fractions and decimals. In this domain, there are technology-enhanced items where students are able to show conceptual understanding of fractions by plotting the fractions on a number line tool. In grades 6–8, the items aligned to the Number and Operations domain allow students to demonstrate their understanding of how the concepts they learned earlier in this domain extend to integers and real numbers. They also demonstrate their facility with converting among different representations of numbers. **Algebra and Algebraic Thinking**. In *i-Ready Diagnostic*, the grades K–2 items aligned to Algebra and Algebraic Thinking allow students to demonstrate their ability to represent problem situations with number sentences. As in Number and Operations, in these earlier grades, students use virtual manipulatives to represent these problem situations. For example, a 10-frame with counters may be used to represent what is meant by the equation 5 + 2 = 7, and how that may be manipulated to show understanding that 7 – 2 = 5. In grades 3–5, the items aligned to Algebra and Algebraic Thinking expand to include students' capabilities of modeling problems using equations. These

	items allow students to demonstrate their understanding by asking them to select the equation that best models a mathematical or real-world problem. In grades 6–8, the items aligned to Algebra and Algebraic Thinking expand on students' understanding of modeling problems to using different representations to solve the problems, including expressions and equations and functions. In these grades, students may represent situations by graphing a line that represents a situation on a coordinate graphing tool. In grades 9-12, the *i-Ready* Algebra domain expands to include the high school Common Core domains of Algebra, Functions, and Numbers and Quantity. In these domains, students extend work with algebraic relationships to polynomial, exponential, logarithmic, and other advanced functions; complex number systems, and vectors. They use equations and inequalities to model real-world and mathematical situations and to solve non-routine problems. **Measurement and Data.** In *i-Ready Diagnostic*, the items aligned to Measurement and Data allow students to observe, collect, display, organize, and interpret measures and data. In grades K–2, the items focus on measuring using virtual tools such as a ruler, and interpreting data displayed in simple graphs such as picture and bar graphs. In grades 3–5, the items aligned to Measurement and Data provide opportunities for students to demonstrate their extended understanding of more complex measurements and data sets. The items aligned to this domain in these grades also emphasize conceptual understanding of geometric measurement. For example, there is a tool that allows students to fill a rectangular prism with unit cubes to demonstrate an understanding of volume. In grades 6–8, the items no longer have any focus on geometric measurement; rather, they concentrate solely on the concepts of statistics and probability. Items ensure that students are given the opportunity to demonstrate their conceptual understanding of more complex data sets. Technology-enhanced items allow students to demonstrate their understanding of bivariate data by graphing linear functions that closely represent a data set. **Geometry**. In *i-Ready Diagnostic*, the items aligned to Geometry allow students to demonstrate proficiency in identifying, analyzing, and reasoning with shapes and figures. In grades K–2, the items are concentrated on two areas—students are provided the opportunity to demonstrate proficiency with the attributes of different shapes, and they are able to show connections to a conceptual understanding of fractions as part of a whole. Technology-enhanced items empower students to sort or identify shapes that have similar attributes.

	In grades 3–5, the items aligned to Geometry expand on students' understanding of figures and begin to assess student understanding of the attributes in hierarchies. These items also require students to demonstrate a conceptual understanding of two-dimensional figures in space. Some of the technology-enhanced items have students plot shapes in the first quadrant of a coordinate grid. Other items may have them fill in a two-dimensional space with unit squares to help demonstrate proficiency with a conceptual understanding of area. In grades 6–8, there is somewhat of a shift in the domain. In grades K–5, the only geometric measurement concepts covered in the Geometry domain are those that deal with conceptual understanding of area. However, in grades 6–8, with the Measurement and Data domain focusing on Statistics and Probability, all of the geometric measurement concepts fall under the Geometry domain. These include area of composite figures, surface area, and volume. In grades 9–12, the Geometry domain expands to include both Geometry and Statistics and Probability from the high school Common Core domains. In these domains, students apply and prove theorems involving lines, angles, and figures to extend their understanding of geometric properties. They also employ logic and data to make informed decisions about real-world situations. In addition to these concepts, higher-level geometric concepts are also assessed in *i-Ready* in grades 6–8. These concepts include relating transformations to congruence and similarity and analyzing proofs of the Pythagorean Theorem and its converse. Some of *i-Ready Diagnostic's* technology-enhanced items in this domain at these grade levels use a virtual protractor to allow students to demonstrate proficiency with rotations.
Assessments Woven Tightly Into the Curriculum:	*i-Ready* may be administered seamlessly in conjunction with regular standards-based classroom instruction, as the assessment is given entirely online, and the program automatically scores, analyzes, and reports student results in real-time. As each student works individually and at his or her own pace on the adaptive test, educators may administer *i-Ready* in small groups or to the whole class, for maximum flexibility. To support the day-to-day academic goals of the teacher, *i-Ready's* comprehensive reports provide explicit next steps for instruction and point-of-use lesson plan PDFs. Based on each student's and instructional group's identified needs, *i-Ready Diagnostic* reports also provide direct connection to optional online lessons via *i-Ready Instruction* (cost option) and recommendations for specific lessons in other Curriculum Associates' programs available for an additional fee (such as *Ready®*).

	In these ways, *i-Ready* embodies the philosophy that learning is a continuous cycle of assessment linked to instruction.
Performance Assessment:	The *i-Ready Diagnostic* test bank includes thousands of multiple-choice and technology-enhanced assessment items, field tested with millions of students to ensure they are accurate, valid, and reliable measures of the intended skills being assessed. The RFQ defines a performance assessment as one in which students are required to perform a task, including problem solving. *i-Ready* items emphasize conceptual understanding and procedural fluency, and many entail word problems/problem solving. For example, *i-Ready Diagnostic* contains mathematics items where students must bisect angles using a virtual compass and straight-edge or fill-in rectangular prisms with unit cubes to determine volume. The reading/ELA assessment contains items where students must pull out evidence from passages to support themes, rather than just choose them from a limited number as in selected-response items. To reflect real-world use of mathematics as well as the Common Core, students have access to onscreen, interactive tools—including a calculator, spreadsheet tool, protractor, compass, straight-edge, and ruler—that may be needed as they answer items.
Efficient Time-Saving Assessments:	*i-Ready's* computer-adaptive format maximizes the yield of actionable data, while optimizing administration efficiency. The assessment enables educators to pinpoint student needs more accurately and in less time than with traditional fixed-form assessments. By dynamically selecting test items based on student response patterns, *i-Ready* derives large amounts of information from a limited number of test items and can adapt to students with low and high ability to obtain a more precise measurement of student performance. When a student fails more difficult items, additional items assessing less difficult skills are presented to drive more precise targeting of instruction. Students receive 54–72 items per subject and take approximately 30–60 minutes per subject to complete the *Diagnostic*. Testing may be completed in multiple shorter sessions. Average duration varies by subject and grade level, with earlier grade levels tending toward the shorter end of the range. Additionally, variability exists in every grade given different student performance levels.
Technology:	*i-Ready Diagnostic* is a fully web-based, vendor-hosted, Software-as-a-Service application. This offers numerous benefits to the Board of Regents, NYSED, and New York educators. Student responses are automatically and immediately scored by *i-Ready's* sophisticated analytics engine, which presents reports to teachers in real time.

<table>
<tr><td></td><td>Authorized users have secure access to the system 24/7 (except for during system maintenance, scheduled during low-usage periods), from any compatible, internet-enabled device. The web-based platform gives our development team the flexibility to rollout new features and enhancements multiple times each year, at no additional cost to active clients. All program maintenance, updates, and upgrades are included in the cost-effective license fee, and we push them automatically to all end users for immediate implementation upon release.

There is no need for local installation or support of i-Ready. System technical requirements are posted online at www.i-Ready.com/support and release notes are posted to i-Ready Central. By virtue of being an online assessment employing computer-adaptive algorithms and technology-enhanced items, i-Ready Diagnostic helps to prepare and familiarize students with needed 21st-Century skills.</td></tr>
<tr><td>Degree to which the growth model must differentiate across New York State's four levels of teacher effectiveness (only applicable to supplemental assessments):</td><td>Our proposed growth model differentiates educators across the State's four levels of teacher effectiveness—Highly Effective, Effective, Developing, and Ineffective, or HEDI. The percentages of educators in each designation in the new proposed model will be similar to the current model.

In a number of districts that use i-Ready Diagnostic for this purpose, the following ratings are noted for the current model and proposed model (numbers may not add to 100 percent due to rounding errors):

<table>
<tr><th>Subject</th><th>H</th><th>E</th><th>D</th><th>I</th></tr>
<tr><td>ELA Proposed Model</td><td>33%</td><td>17%</td><td>14%</td><td>36%</td></tr>
<tr><td>ELA Current Model</td><td>26%</td><td>18%</td><td>15%</td><td>40%</td></tr>
</table>

<table>
<tr><th>Subject</th><th>H</th><th>E</th><th>D</th><th>I</th></tr>
<tr><td>Math Proposed Model</td><td>31%</td><td>15%</td><td>16%</td><td>38%</td></tr>
<tr><td>Math Current Model</td><td>24%</td><td>17%</td><td>18%</td><td>42%</td></tr>
</table>

As described in our previous submission, we expect the overall distribution for the State would look like the following:

<table>
<tr><th>Subject</th><th>H</th><th>E</th><th>D</th><th>I</th></tr>
<tr><td>ELA</td><td>13%</td><td>37%</td><td>30%</td><td>20%</td></tr>
<tr><td>Math</td><td>21%</td><td>40%</td><td>21%</td><td>17%</td></tr>
</table>

Analyzing these changes, we would expect that the above charts would change in the following manner:</td></tr>
</table>

Subject	H	E	D	I
ELA Current Model	13%	37%	30%	20%
ELA Proposed Model	17%	36%	29%	18%

Subject	H	E	D	I
Math Current Model	21%	40%	21%	17%
Math Proposed Model	28%	36%	20%	16%

STUDENT ASSESSMENTS FOR TEACHER AND PRINCIPAL EVALUATION

FORM H

APPLICANT CERTIFICATION FORM –ASSESSMENTS FOR USE WITH STUDENT LEARNING OBJECTIVES

Please read each of the items below and check the corresponding box to ensure the fulfillment of the technical criteria.

PLEASE SUBMIT ONE "FORM H" FOR EACH APPLICANT. CO-APPLICANTS SHOULD SUBMIT SEPARATE FORMS.

The Applicant makes the following assurances:

Assurance	Check each box:
The assessment is rigorous, meaning that it is aligned to the New York State learning standards or, in instances where there are no such learning standards that apply to a subject/grade level, alignment to research-based learning standards.	☒
To the extent practicable, the assessment must be valid and reliable as defined by the Standards of Educational and Psychological Testing.	☒
The assessment can be used to measure one year's expected growth for individual students.	☒
For K–2 assessments, the assessment is not a "Traditional Standardized Assessment" as defined in Section 1.3 of this RFQ.	☒
For assessments previously used under Education Law §3012-c, the assessment results in differentiated student-level performance. If the assessment has not produced differentiated results in prior school years, the applicant assures that the lack of differentiation is justified by equivalently consistent student results based on other measures of student achievement.	☒
For assessments not previously used in teacher/principal evaluation, the applicant has a plan for collecting evidence of differentiated student results such that the evidence will be available by the end of each school year.	☒
At the end of each school year, the applicant will collect evidence demonstrating that the assessment has produced differentiated student-level results and will provide such evidence to the Department upon request.[4]	☒

[4] Please note, pursuant to Section 2.3 of this RFQ, an assessment may be removed from the approved list if such assessment does not comply with one or more of the criteria for approval set forth in this RFQ

To be completed by the Copyright Owner/Assessment Representative of the assessment being proposed and, where necessary, the co-applicant LEA:

Curriculum Associates, LLC 1. Name of Organization (PLEASE PRINT/TYPE)	M. Vicky Hurwitz 4. Signature of Authorized Representative (PLEASE USE **BLUE** INK)
M. Vicky Hurwitz 2. Name of Authorized Representative (PLEASE PRINT/TYPE)	10/9/15 5. Date Signed
Vice President, Strategic Planning 3. Title of Authorized Representative (PLEASE PRINT/TYPE)	

1. Name of LEA (PLEASE PRINT/TYPE)	4. Signature of School Representative (PLEASE USE **BLUE** INK)
2. School Representative's Name (PLEASE PRINT/TYPE)	5. Date Signed
3. Title of School Representative (PLEASE PRINT/TYPE)	