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:	Renaissance Learning, Inc.
Assessment Provider Contact Information:	Debra C. Schoenick 2911 Peach Street P.O. Box 8036 Wisconsin Rapids, WI 54495-8036
Name of Assessment:	STAR Math
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?	Grades K–12, with norm-referenced scores for grades 1–12
What are the subject area(s) for which the assessment can be used to generate a 0-20 APPR score?	Mathematics, or subjects where educator responsibilities include significant support for the development of students' mathematics ability.
What are the technology requirements associated with the assessment?	STAR Math is accessed through Renaissance Place, which can be accessed on both PC and Mac operating systems. Minimum and recommended hardware, software, and network requirements includes the following: ***Windows***

	• **Web browser**: Internet Explorer 9.x–11.x, Firefox 27.0 or later, or Chrome 26 or later (recommended); Internet Explorer 8.x, Firefox 14.x–26.x, Chrome 23–25 (minimum) • **Operating system**: Windows 7–8.1 (recommended); Windows XP Service Pack 3, Vista (minimum) • **Screen resolution**: 1024 × 768 display resolution, thousands of colors (recommended); 1024 × 600 display resolution, 256 or more colors (minimum) ***Mac*** • **Web browser**: Safari 6.0–8.0, Firefox 27.0 or later, or Chrome 26 or later (recommended); Safari 5.1, Firefox 14.x–26.x, Chrome 23–25 (minimum) • **Operating system**: OS X v10.7–v10.10 (recommended); OS X v10.6 (minimum) • **Screen resolution**: 1024 × 768 display resolution, thousands of colors (recommended); 1024 × 600 display resolution, 256 or more colors (minimum) ***Mobile Devices*** • **Chromebooks**: All Renaissance Place products are compatible with Chromebooks and other Chrome OS devices. • **iOS native apps**: o STAR on iOS requires an iPad running iOS 5.x or later • **Tablets**: o STAR testing is supported using a web browser on tablets 7 inches or larger. Students must use Safari 6 or later, Chrome 23 or later, Firefox 27 or later, Silk on Kindle Fire HD, or Internet Explorer 11. ***Other Requirements*** • **Internet connection**: Broadband Internet connection (DSL, satellite, or cable) • **Additional components**: Depending on which Renaissance Place applications will be used, there may be additional client applications/plugins that are required. These include Adobe Reader 9 (or later), Adobe Flash Player 10 (or later), and the RLI Print Plug-In. For further information about Renaissance Place technical requirements, please see the appendix.
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)**

STAR Math is a computer-adaptive interim assessment that provides accurate, norm-referenced scores for grades 1–12, criterion-referenced measures of students' instructional math levels, and a way for educators to track student growth throughout the year.

The STAR Math assessment takes approximately 20 minutes to administer; provides immediate results in easy-to-read reports for administrators, teachers, students, and parents; and has met the highest standards for reliability and validity set forth by the Center on Response to Intervention (CRTI), the most trusted source for unbiased evaluation of screening assessments and progress monitoring tools.

The data provided by STAR Math has diverse utility, and the extensive data analysis capabilities of this assessment system offer educators multiple contexts through which to interpret that data. STAR Math allows educators to view the same scaled score (derived from the assessment) through multiple lenses for varied purposes including growth modeling, screening, progress monitoring, goal-setting, identification of learning gaps, instructional planning, forecasting proficiency, and evaluating mastery of state and CCSS.

STAR Math is statistically linked to an empirically validated learning progression designed to provide the intermediate steps and prerequisite skills necessary to reach the levels of expertise identified in the CCSS. As a result of this statistical link, STAR Math bridges instruction and assessment. When students complete a STAR Math assessment, their scaled score automatically places them at a point on the learning progression for math, which spans grades pre–K–12. Using this information, STAR Math reports the skills students have likely mastered, the skills they are ready to learn, and the skills they need to learn after that. Teachers then use the *Record Book*, an online feature in STAR Math, to view details about each student's current performance and projected growth in relation to pre-selected benchmarks, create instructional groups, and access instructional materials that target the precise level of instructional need.

Renaissance Learning first began to explore the use of STAR assessments—STAR Early Literacy, STAR Reading, and STAR Math—in teacher evaluation when educators came to us on the topic. To inform our approach and recommendations, we consulted national experts in growth, teacher evaluation, interim assessment, and school improvement. Team members included Dr. Damian Betebenner of the National Assessment Center, Dr. Margaret Heritage of UCLA, and Dr. Allan Odden of the University of Wisconsin–Madison. We also consulted with organizations such as the Council of Chief State School Officers (CCSSO), National Conference of State Legislatures (NCSL), and the National Association of Elementary School Principals (NAESP) and National Education Association (NEA).

Renaissance Learning offers extensive professional development opportunities to assist educators in setting up an appropriate testing environment and using STAR Math data to inform decision making. Our professional development is based on Response to Intervention (RTI) principles. It is available in several formats including on-site professional development and consulting, remote coaching, and an expansive web-based training center that includes webinars, implementation guides, and other resources.

Customer Support

Renaissance Learning has built a reputation for providing superior technical support. Our call center is based in the US, and we answer every call and live chat request in person. Customers never talk to a machine when calling us. During 2014, we handled nearly 144,000 calls and 205,000 chat requests. Our average answer speed is eleven seconds for telephone calls, four seconds for chat requests, and one hour for e-mail inquiries. However, speedy responses are only one aspect of the support we provide; our technical support representatives are experts with extensive knowledge of Renaissance Learning software.

Schools and districts with a current Renaissance Place subscription receive unlimited e-mail, toll-free phone, and live chat support with our team of technical experts from 7:30 a.m. to 8:00 p.m. (eastern time), Monday through Friday. These experts provide a variety of services to help with setup, support, and troubleshooting of Renaissance programs. Additionally, a Renaissance Implementation Coordinator works with district personnel to assist with the setup and installation of your Renaissance software and to define the strategies that will be used to meet implementation goals. Renaissance Place subscriptions also include 24/7 access to an online help menu, teacher resources, and software and technical manuals.

In addition to extensive free support and embedded help options, the proposed solution also includes the following:

Online Training and Knowledge Resources

Two online professional development resources available to educators free of charge are the Customer Center (www.renaissance.com/customer-center) and the Renaissance Learning Knowledge Base (http://support.renaissance.com/techkb/). The Customer Center provides customers with 24/7 access to a variety of independent-study options (including on-demand tutorials and detailed implementation guides) as well as information about additional professional services that may be purchased. The Knowledge Base allows customers to search our technical support information for Renaissance Learning products.

Pre-implementation and Program Setup

Renaissance Learning works closely with schools to ensure a successful implementation of our programs. A Renaissance Implementation Coordinator will work with NYSED to assist with the setup of the STAR Math assessment. The coordinator will clarify the steps necessary to prepare for program setup, such as verifying system requirements, discussing the transition checklist, and providing our technical staff with data from desktop versions of any Renaissance Learning software that you currently own. The coordinator will also provide access to your Renaissance Place site and discuss the steps you will need to take once student data is transferred to your site. Some of these steps include setting up IP restrictions, reviewing capabilities, and selecting passwords.

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 over four years, Renaissance Learning has been working with national experts and educators to thoughtfully incorporate the growth data from STAR Math assessments into state educator evaluation frameworks. Based on this ongoing research and experience, Renaissance Learning offers MGP as the aggregated teacher-level growth score for New York State teacher and principal evaluation. The STAR Math MGPs have been converted into ranges for New York's 0–20 APPR scale.

Student growth percentile

The SGP in STAR Math compares student's growth to academic peers nationwide with the same achievement history. STAR Math SGP also includes "growth-to-standard" reporting (e.g. catch up, keep up, move up, stay up). STAR Math aggregates student-level SGPs to group-level medians. STAR Math users can run MGP reports at the classroom, school, or district level, or they can create a custom group.

Conversion to New York's 0–20

To ensure that the conversion of teacher-level growth scores to the 0–20 APPR scale comply with New York Standards for each evaluation category, Renaissance Learning analyzed MGP data for New York students and classrooms over the last three years.

The samples size was more than 330,000 students for STAR Math. Student growth data was grouped to the classroom level and the MGP for each class was identified.

Renaissance Learning examined all of the classrooms that had 16 or more students to estimate the distribution of teacher ratings. In total, data from more than 15,000 STAR Math classrooms was examined.

HEDI Rating Categories

- The Highly Effective range is 61–99 MGP, which is well-above average for similar students.
- The Effective range is 35–60 MGP, which is in the average growth range for similar students.
- The Developing range is 21–34 MGP, which is below average for similar students.
- The Ineffective range is 1–20 MGP, which is well-below average for similar students.

The STAR Math MGP ranges reflect New York's narrative descriptions of teacher effectiveness and effectively differentiate educators' performance in ways that improve student learning and instruction.

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

New York State Next Generation Assessment Priorities

Please provide detail on how the proposed supplemental assessment I 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):	Renaissance Learning is heavily engaged and invested in the ongoing process of standards analysis and alignment in order to keep pace with the expectations of the Common Core. The following are some of the key activities: **Rigorous analysis of the New York State P-12 Common Core Learning Standards and Item development based on Common Core analysis** • Renaissance Learning's standards experts have analyzed the intent and scope of each standards statement in the New York State P-12 Common Core Learning Standards, considering the skill components, placement in the standards hierarchy, and cognitive demand (i.e. DOK) of the standards. • We study the CCSS Publishers' Criteria documents, and other ancillary materials (e.g. the CCSS appendices) to ensure that items are built to the grade-level expectations of the skills inherent in the standard. (For example, math items must address the focus, coherence, and rigor in

	conceptual understanding, procedural skill and fluency expectations of the standards.) • We identify the cognitive level appropriate for the skills being assessed in the standards. Depth of knowledge is confirmed in accordance with widely-accepted CPALMS (Florida's standards information resource) identifications. • Renaissance Learning's professional item writers incorporate the findings of the rigorous analysis as they develop and evaluate STAR Math assessment items. The items are designed to assess the most specific skill components in the standards *and* the DOK levels of the standards. Development follows strict, research-based protocols through a multi-step process that includes the establishment of metadata, a recursive writing and editing process, dynamic calibration of all items, and psychometric analysis of item-testing results. This development process ensures that the highest quality items are added to the operational item bank and that the items have a direct alignment to the skills inherent in the CCSS. **Item alignment** In addition to the item development process for producing items aligned with the CCSS and corresponding DOK levels, STAR Math items have undergone extensive review for standards alignment. Internal reviews are conducted by the full-time, onsite team of standards experts who adhere to alignment specifications informed by work and training with McREL and Education Northwest (formerly NWREL). The alignment analysis is twofold and includes (1) the alignment of skills inherent in the CCSS and the augmented NYS Common Core to the skills assessed in STAR Math; and (2) alignment of the STAR Math assessment to the CCSS and the augmented NYS Common Core. The alignment reports included in the appendix provide evidence that the skills assessed by the STAR Math assessment align to both the CCSS and New York State Common Core Learning Standards.
Assessments Woven Tightly Into the Curriculum:	New York State curriculum in math is aligned to the CCSS and so is STAR Math. Educators can use STAR Math to assess students on the standards taught through the curriculum. STAR Math is aligned to the CCSS mathematics domains, including Numbers and Operations; Data Analysis, Statistics, and Probability; Algebra; and Geometry and Measurement. It is aligned to the most specific standards in grade levels K–12. The alignment report is included in the appendix.

	Diagnostic Information to Support Differentiated Instruction STAR Math provides in-depth diagnostic information on students' strengths, weaknesses, and needs for intervention. STAR Math is statistically linked to the Core Progress learning progression for math, which spans grades pre-K through 12. Immediately after students test, teachers navigate to STAR Math's online *Record Book* to access diagnostic information and instructional planning materials. STAR Math data gives teachers the information they need to identify strengths and weaknesses in a student's overall math achievement. **Teachers Bridge Assessment and Instruction with the *Record Book*** Teachers access information to plan differentiated instruction in the *Record Book*, an online feature in STAR Math. After any test administration, teachers can use the *Record Book* to: • **Create instructional groups** based on students' scaled scores. These groups can be across grades if the teacher has a mixed-grade intervention setting. • **Determine the skills and prerequisite skills in the learning progression on which a student or groups of students need to focus**. These skills for instruction are also reported on the Instructional Planning Report. • **Access aligned instructional materials.** Teachers can use these resources to inform and support a number of programs and purposes, including RTI plans, Individual Education Plans, and Individual School Readiness Plans, among others. The portal provides resources at multiple grade levels, so teachers can quickly access materials to help fill students' gaps in knowledge. And, because students are placed on the progression according to their scaled score, teachers know that the skills identified and targeted materials are the ones students need in order to achieve grade-level expectations. Educators can also be confident that instructional groups focus on the right level of instruction and lead to the greatest growth. In addition, **constructed-response items** and **performance tasks** are optional items that provide additional information about each student's mastery of math skills in terms of the CCSS. Teachers can use that knowledge to better tailor instruction to each student's learning needs.

	The learning progression also provides access to widely used third-party instructional support materials, including the following: ○ **Khan Academy** provides students and teachers with access to an extensive library of content, including interactive math challenges, assessments, and videos. (Khan Academy content is available for no cost at http://www.khanacademy.org.) ○ **SAS Curriculum Pathways** provide interactive, standards-based resources in English language arts, mathematics, and science. (SAS Curriculum Pathways resources are available for no cost at http://www.sascurriculumpathways.com.) ○ **Gooru** works directly with experts and content providers to identify, integrate, and index high-quality content to benefit teachers and students. Hundreds of Gooru resources are available in the learning progressions, primarily for skills in grades K–2. (Gooru resources are available for no cost at http://www.goorulearning.org.) ○ **Curriki** provides a diverse collection of learning materials, including learning journals, reading guides, study guides, vocabulary activities, quizzes, and constructed-response items. Hundreds of Curriki resources are available in the learning progressions, primarily for middle- and high-school students. (Curriki resources are available for no cost at http://www.curriki.org.) ○ **OpenEd** provides standards-based lesson plans, homework assignments, games, and videos for math, English language arts, and science. (OpenEd resources are available for no cost at https://www.opened.io.) ○ **OER Commons** brings together teaching and learning resources from more than 500 content providers. These resources include worksheets, lessons, homework assignments, and classroom activities. (OER Commons resources are available for no cost at https://www.oercommons.org.) When used together, these materials provide teachers with an interactive resource that they can use to plan classroom instruction and to focus instruction on the skills that students need to learn in order to be ready for college and careers.

Performance Assessment:	The STAR Math assessment offers additional item types beyond the multiple-choice items in the computer-adaptive assessment. After teachers have assessed students efficiently with a computer-adaptive STAR Math test, they have the option of using the following additional items, which are accessible through the learning progression for reading: • **Constructed-Response Items.** Constructed-response items assess the student's understanding and application of the concept and skill. • **Performance Tasks.** Performance tasks assess students at the highest depth-of-knowledge levels. More specifically, they enable teachers to assess students' ability to apply a compilation of skills in a real-world scenario. Tasks are designed to be grade-level appropriate, and students' total engagement time for the tasks increases by grade level. At grade 3, students should spend approximately 45 minutes on a task. By grade 12, total engaged time may extend to three or four hours per task. Teachers score students' work using the rubrics provided with the teacher version of each task.
Efficient Time-Saving Assessments:	STAR Math is computer adaptive and is administered on computers or tablets connected to the Internet. CATs tailor each testing experience to the individual student, selecting items that not only assess the concepts and skills that are defined in the test blueprint, but that also match the student's performance level. STAR Math is, therefore, quick and easy to administer. Students can complete a test in as little as 15–20 minutes, as opposed to the more traditional testing times of 30, 40, or even 60 minutes or more, leaving more time for learning and skills-based practice. In fact, we estimate that STAR's short testing time (STAR Early Literacy, STAR Reading, STAR Math) saved more than 30 million instructional hours during the 2014–2015 school year. As documented in research, CATs can be considerably more efficient than conventional tests that present the same test questions to all students. Because a well-designed CAT requires fewer items and less testing time, it is often two or more times as efficient as the conventional test. For example, a good CAT uses only 25 items and about half the testing time to yield the same information as does a 50-item conventional test, and it has a test reliability that is equal to the longer fixed-form test. **Fast and Easy Administration** Educators find that administering STAR Math is straightforward and intuitive. There are no software programs to install, no files to copy, and no rostering of students before each assessment event. The assessment runs on the Renaissance Place platform, a cloud-hosted management program that consolidates all Renaissance Learning software used in the school or district. Setup is easy; a

	student is added once during initial setup, which can be automated by using the Renaissance Data Integrator (RDI). RDI continuously synchronizes records with data in the district's student information system (SIS). To take a STAR Math assessment, students simply log in to the system on any supported device (Internet-connected computer, Chromebook, iPad, or other tablet). Once students are finished, the system automatically scores the test, and, if RDI is used, transfers scores to the local SIS. The data is centralized, and all software and content are updated automatically. As such, teachers across the district can access a student's test records at any time should the student move to a different school within the district. After students complete their tests, educators log into the system from any supported device to run and access the reports. STAR Math's efficiency extends beyond the classroom. Renaissance Learning provides secure software hosting services through our enterprise-class data center. We deliver all new content, features, and other updates instantly and automatically, freeing up the district's technical staff to focus on other important issues. Finally, the STAR Math assessment is highly cost-effective in terms of monetary and human resources. The same test can be administered for multiple purposes, while test-planning, setup, administration, and reporting consume few resources.
Technology:	The STAR Math computer-adaptive test is built on item-response theory. The software continually tailors the test based on a student's response to the current question—increasing the difficulty after a correct answer and decreasing difficulty after an incorrect answer. Research has shown that a CAT can be considerably more efficient than conventional tests that present all students with the same test questions. Because a well-designed CAT requires fewer items and less testing time, it is often two or more times as efficient as the conventional test. For example, a good CAT uses only 25 items and about half the testing time to yield the same information as does a 50-item conventional test. It also has a test reliability that is equal to the longer fixed-form test. **STAR Math Reporting** STAR Math's reports provide important information about what students know and can do. Teachers, school administrators, and district administrators can use the reports and the data they present to help answer key questions that will improve teaching and learning. Educators can control what information they access and view, and they can organize this information based on local

	preferences through Renaissance Place, our cloud-based management platform. Renaissance Place manages student data and generates customized reports for all Renaissance programs, including the STAR Math assessment. STAR Math reports offer these features: ***Available Immediately*** Educators log in to Renaissance Place and run STAR Math reports immediately after students finish taking a test. Reports can be printed or viewed online. Users see only the data that is designed for them: teachers see class and student data, principals see school data, and superintendents see district data. This provides a focused and efficient view for each user in relation to their needs. ***Available at all Levels*** Educators determine which report they want to run and then select the school, class, students, and features they want included on the report. Educators can run reports at the student, classroom, school, or district level; they can specify a group of students whose reports are to be printed in one batch. They can also choose to drill down to focus on one particular grade level, one particular class, or one particular student.
Degree to which the growth model must differentiate across New York State's four levels of teacher effectiveness (only applicable to supplemental assessments):	STAR Math uses median student growth percentile (MGP) as the aggregated teacher-level growth score for New York State teacher and principal evaluation. To develop the conversion of the STAR Math MGPs to the 0–20 APPR scale with associated HEDI ratings, Renaissance Learning reviewed multiple states' definitions for typical and high SGP growth and then created anchor points. The STAR Math MGP ranges included in the 0–20 APPR scale reflect New York's narrative descriptions of teacher effectiveness and effectively differentiate educators' performance in ways that improve student learning and instruction. To ensure that the conversion of teacher-level growth scores to the 0–20 APPR scale comply with New York Standards for each evaluation category, we analyzed MGP data for New York students and classrooms over the last three years. The sample size was more than 330,000 students for STAR Math. Student growth data was grouped to the classroom level and the MGP for each class was identified. Renaissance Learning examined all of the classrooms that had 16 or more students to estimate the distribution of teacher ratings. In

	total, data from more than 15,000 STAR Math classrooms was examined. **HEDI Rating Categories** The Highly Effective range is 61–99 MGP, which is well-above average for similar students. The Effective range is 35–60 MGP, which is in the average growth range for similar students. The Developing range is 21–34 MGP, which is below average for similar students. The Ineffective range is 1–20 MGP, which is well-below average for similar students. The STAR Math MGP ranges reflect New York's narrative descriptions of teacher effectiveness and effectively differentiate educators' performance in ways that improve student learning and instruction.

STUDENT ASSESSMENTS FOR TEACHER AND PRINCIPAL EVALUATION

FORM *G*

ATTESTATION OF TECHNICAL CRITERIA – SUPPLEMENTAL ASSESSMENTS WITH CORRESPONDING GROWTH MODELS

Please read each of the items below and check the corresponding box to ensure the fulfillment of the technical criteria outlined in the Technical Application on "FORM B-2".

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

COMPLETE THIS SECTION:

2.2(A) Narrative Overview of Proposed Supplemental Assessment and Associated Growth Model	
This application contains a short overview of the assessment being proposed, including the intended purpose of the assessment, and how the assessment is administered.	☒
For supplemental assessments, this application contains a description of the growth model and how it is used in conjunction with the assessment.	☒ ☐ N/A
For K-2 assessments, this application contains evidence that the proposed assessment is consistent with this RFQ's requirement that the assessment not be a "Traditional Standardized Assessment" as defined above in the section "Definitions of Key Terms Used in this RFQ."	☒ ☐ N/A
2.2(B) Evidence of Capability	
This application provides an overview of services provided by the Assessment Provider, including a description of the range of support / technical assistance that the Assessment Provider would provide to an LEA if selected by an LEA for this service.	☒
This application contains information as to whether the Applicant or Assessment Provider has been denied approval as a provider of assessment services in another state(s) and the reason(s) for such denial. If denied within New York State, the location and reason are indicated.	☒ ☐ N/A
2.2(C): Evidence of Copyright Owner/Assessment Representative History of Assessment Development	
This application contains evidence that the Copyright Owner/Assessment Representative has a history of developing assessments of student learning (achievement or growth) for the purpose of making defensible judgments about educator effectiveness.	☒ ☐ N/A

2.2(D)-i: Technical Documentation Related to Assessment and Student Growth Score Properties: RELIABILITY ***Both "minimum" and "desired" qualifications are listed. For the purposes of this RFQ, applications will only be rated against the "minimum" qualifications; however, NYSED's aspirational "desired" qualifications are also listed to identify possible future requirements for assessments and associated growth models.***	
For supplemental assessments used in conjunction with growth models: This application contains evidence of the *minimum* criteria for reliability: • Student test scores have adequate levels of reliability (e.g., coefficient alpha > 0.75). This application contains evidence of the *desired* criteria for reliability: • Standard errors provided for students growth scores. • Student growth classifications have adequate decision consistency. • Teacher effectiveness classifications demonstrate adequate consistency. *Examples include agreement statistics (e.g., kappa coefficients) based on simulation studies.*	**Check all that apply:** ☒ ☐ ☐ ☐
2.2(D)-ii: Technical Documentation Related to Assessment and Student Growth Score Properties: VALIDITY – ALIGNMENT ***Both "minimum" and "desired" qualifications are listed. For the purposes of this RFQ, applications will only be rated against the "minimum" qualifications; however, NYSED's aspirational "desired" qualifications are also listed to identify possible future requirements for assessments and associated growth models.***	
For supplemental assessments used in conjunction with growth models: This application contains evidence of the *minimum* criteria for alignment validity: • Evidence that test content is sufficiently aligned with New York State Learning Standards and covers a range of measurable standards. Documentation that demonstrates that: (a) at least 80% of the test measures content aligned with NYS learning standards, (b) no more than 20% of test content is aligned with other learning standards or objectives, and (c) a range of content from the NYS learning standards is measured *Note: Other relevant standards can be proposed if NYS Learning Standards do not apply to subject area.* This application contains evidence of the *desired* criteria for alignment validity: • 100% alignment between NYS Learning Standards and assessment.	**Check all that apply:** ☒ ☐
2.2(D)-iii: Technical Documentation Related to Assessment and Student Growth Score Properties: VALIDITY – RELATIONS TO OTHER VARIABLES ***Both "minimum" and "desired" qualifications are listed. For the purposes of this RFQ, applications will only be rated against the "minimum" qualifications; however, NYSED's aspirational "desired" qualifications are also listed to identify possible future requirements for assessments and associated growth models.***	
For supplemental assessments used in conjunction with growth models: This application contains evidence of the *minimum* criteria for validity in relation to other variables: • Evidence students' growth scores are correlated with other measures of student progress (e.g., r > .5 with measures such as the number of objectives	**Check all that apply:**

mastered by a student over the course of the year, teachers' ratings of students' progress, or scores from other assessments). This application contains evidence of the *desired* criteria for validity in relation to other variables: • Evidence teacher effectiveness ratings are positively correlated (e.g., r > .5) with other measures of teaching effectiveness.	☒ ☒
2.2(D)-iv: Technical Documentation Related to Assessment and Student Growth Score Properties: VALIDITY – INTERNAL STRUCTURE ***Both "minimum" and "desired" qualifications are listed. For the purposes of this RFQ, applications will only be rated against the "minimum" qualifications; however, NYSED's aspirational "desired" qualifications are also listed to identify possible future requirements for assessments and associated growth models.***	
For supplemental assessments used in conjunction with growth models: This application contains evidence of the *minimum* criteria for validity of internal structure: • Scale properties appropriate for growth model used (*see notes*). Total scores and subscores on student assessments should be supported by dimensionality analyses (e.g., IRT residual analyses, factor analyses). This application contains evidence of the *desired* criteria for validity of internal structure: • Evidence students' scores are on an interval scale. **Notes: If **gain score model** is used, evidence is needed that students' pretest and posttest scores are on the same scale. If **student growth percentile** model used, justification for the number of years included in the model should be provided. If **growth-to-proficiency**, projection, or **value-added models** are used, evidence is needed that the model explains a significant amount of variability in student achievement. Also, models should demonstrate robustness to missing data.*	**Check all that apply:** ☒ ☐
2.2(D)-v: Technical Documentation Related to Assessment and Student Growth Score Properties: UTILITY AND COMPREHENSIBILITY ***Both "minimum" and "desired" qualifications are listed. For the purposes of this RFQ, applications will only be rated against the "minimum" qualifications; however, NYSED's aspirational "desired" qualifications are also listed to identify possible future requirements for assessments and associated growth models.***	
For supplemental assessments used in conjunction with growth models: This application contains evidence of the *minimum* criteria for utility and comprehensibility: • Technical documentation that describes how student growth and educator effectiveness are calculated. This application contains evidence of the *desired* criteria for utility and comprehensibility: • Student growth reports support instructional improvement. Resources and supporting materials available to the field.	**Check all that apply:** ☒ ☒
2.2(E)-i: Technical Documentation Related to Aggregating Student-Level Growth Scores to Teacher-Level Scores: CREATION OF TEACHER LEVEL SCORES	

For supplemental assessments used in conjunction with growth models: This application includes a narrative description of how student-level scores are aggregated to create a single teacher-level score for each teacher.	☒ ☐ N/A
2.2(E)-ii: Technical Documentation Related to Aggregating Student-Level Growth Scores to Teacher-Level Scores: EXCLUSION RULES	
This application includes a description of any exclusion rules that remove students associated with a given teacher from the teacher's teacher-level score (either through a growth model or in conjunction with an SLO).	☒ ☐ N/A
2.2(F): Technical Documentation Related to Converting Teacher-Level Growth Score to New York State's 0-20 APPR Scale	
This application includes a crosswalk that maps scores on the assessment's aggregated teacher-level growth score to the required New York State teacher and principal evaluation metric, which ranges from 0-20. This application includes procedures for converting teacher-level growth scores to the 0-20 APPR scale comply with the New York Standards for each evaluation rating category, which are based on the following definitions. **For supplemental assessments used in conjunction with growth models:** This application includes an explanation of the assignment of HEDI rating categories based on the following ranges: • Highly Effective: results are well-above State average* for similar students • Effective: results meet State average* for similar students • Developing: results are below State average* for similar students • Ineffective: Results are well-below State average* for similar students	☒ ☒ ☒ ☐ N/A
2.2(G)-i: Technical Documentation Related to Fairness: TEST TAKERS Consistent with the new Testing Standards (2014), there is an increased focus in the industry on fairness of assessments and their uses. Please provide evidence of fairness for both the proposed assessment and, if applicable, the proposed growth model.	
This application includes evidence that the proposed assessments are fair to all test takers (e.g., Differential Item Functioning [DIF] / bias information, fairness evaluation / sensitivity review plan.)	☒
2.2(G)-ii: Technical Documentation Related to Fairness: TEACHER GROWTH SCORES	
This application includes evidence of fairness of the proposed aggregated teacher growth scores (e.g., lack of correlation between aggregated teacher growth scores and student demographics). The evidence of fairness of the proposed aggregated teacher growth scores includes an explanation of how the growth model incorporates (a) prior academic history, (b) poverty, (c) students with disabilities, and (d) English language learners.	☒ ☒ ☐ N/A

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

Renaissance Learning, Inc. 1. Name of Organization (PLEASE PRINT/TYPE)	Deval Ashworth 4. Signature of Authorized Representative (PLEASE USE **BLUE** INK)
Debra C. Schoenick 2. Name of Authorized Representative (PLEASE PRINT/TYPE)	October 2, 2015 5. Date Signed
Vice President of Strategic Support 3. Title of Authorized Representative (PLEASE PRINT/TYPE)	

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