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:	Hunter-Tannersville CSD
Assessment Provider Contact Information:	Dr. Susan Vickers, 518-589-5400
Name of Assessment:	School District developed final exams
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, 7-12
What are the subject area(s) for which the assessment can be used to generate a 0-20 APPR score?	K, ELA 7-12, Math 7-12, Science 7-12, Social Studies 4-6,7,8,9 and 12, Arts and Music K-12, Foreign Language 7-12, Health, Physical Education, ESL, and Career & Technical Education Classes.
What are the technology requirements associated with the assessment?	none
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)**

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.

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):	Includes assessment of Common Core standards and NYS curriculum.
Assessments Woven Tightly Into the Curriculum:	Benchmark assessments occur throughout the year as well as formative assessments that model the final summative assessment.
Performance Assessment:	Assessments require students write out the thought process behind their responses, include performance in Foreign Language, science the arts and math.
Efficient Time-Saving Assessments:	Benchmark assessments are set up to allow for uniform assessments throughout the year – thus negating long drawn out tests.
Technology:	Computer assisted testing when appropriate.
Degree to which the growth model must differentiate across New York State's four levels of teacher effectiveness (only applicable to supplemental assessments):	Assessments will denote student growth for one year upon initial baseline testing and the summative assessment at the end of the year. Student growth will be included within the four levels of teacher effectiveness.

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

Hunter-Tannersville CSD	4. Signature of Authorized Representative (PLEASE USE **BLUE** INK)
DR. SUSAN VICKERS	8-21-2016
Superintendent	

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)	

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.[1]	☐

[1] 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:

1. Name of Organization (PLEASE PRINT/TYPE)	4. Signature of Authorized Representative (PLEASE USE **BLUE** INK)
2. Name of Authorized Representative (PLEASE PRINT/TYPE)	5. Date Signed
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)	

Appendix A: New York State Learning Standards

The New York State Learning Standards are adopted by the New York State Board of Regents for educational purposes including assessment, curriculum, and professional development.

For the purposes of this RFQ, Applicants must demonstrate that the assessment is aligned with the New York learning standards below for the content area and grade level the assessment is designed to measure
In instances in which there are no such standards that apply to the content area / grade level, evidence of alignment must be provided to research-based learning standards.

Content Areas in which New York State Has Learning Standards:

Arts
http://www.p12.nysed.gov/ciai/arts/artsls.html

Career Development and Occupational Studies (CDOS)
http://www.p12.nysed.gov/cte/cdlearn/

English Language Arts (Note: only the 2010 standards are admissible)
http://www.p12.nysed.gov/ciai/ela/elarg.html

Health (The Learning Standards for Physical Education, Health, and Family Consumer Science)
http://www.p12.nysed.gov/sss/schoolhealth/schoolhealtheducation/

Languages other than English (LOTE; Note: Must specify alignment to either Checkpoint A, Checkpoint B, or Checkpoint C)
http://www.p12.nysed.gov/ciai/lote/lotels.html

Mathematics (Note: only the 2011 standards are admissible)
http://www.p12.nysed.gov/ciai/mst/math/standards/

Science (Note: Alignment to content described in Resource Guides is admissible)
http://www.p12.nysed.gov/ciai/mst/math/standards/

Social Studies
http://www.p12.nysed.gov/ciai/socst/ssrg.html

Appendix B: Definitions of Growth Models[2]

Gain Score Model

The Gain Score model is the model that is most aligned with what people commonly associate with the idea of growth. The gain score model quantifies changes in student scores on a particular assessment. For example, if a test produces scores on a 100 point scale, and a student received a score of 70 at time 1, and 80 at time 2, then the gain score would be 10 points. That is gain is conceptualized as:

$$Gain = X_2 - X_1 \quad (1)$$

where X_2 represents that score at time 2, and X_1 represents the score at time 1. The underlying assumption, of course, is that the scores are on the same scale, to make the difference meaningful. This would imply either that the scores are obtained on a single assessment/parallel forms, where the scores are comparable, or there is a vertical scale underlying the scores that are being subtracted.

Growth-to-Proficiency Model

The Growth to Proficiency Model defines growth in terms of progress toward proficiency. The growth to proficiency model typically only measures growth for students below proficiency (or any other defined target). The amount of gain required for a student to reach proficiency is calculated, and a target amount of gain for a student to exhibit each year to be on track to proficiency is calculated. A student is said to have exhibit growth if they reach or exceed the target set for them. There are many different ways to operationalize this model, and this model does not inherently require a vertical scale. To aggregate these measures to a teacher level, the percent of students that meet their gain target is typically used.

Student Growth Percentiles

The Student Growth Percentile (SGP) is one of the most complex models for computing "growth." This model does not assume a vertical scale. The statistical details of the model can be found in Betebenner (2009). As noted by Goldschmidt et al. (2012) the SGP does *not* measure absolute growth in performance. Instead, it is a conditional status model, rather than a growth measure.

In computing SGPs, a student's performance on a test is compared to hypothetical students' performance on the test who are predicted to have scored similarly to that student in the past (commonly referred to as "academic peers," but it is important to note the model *estimates* this student group rather than using an observed student group). A percentile rank is assigned to the student to indicate where in the distribution of scores of his "academic peers" his/her score falls. For example, a student with a SGP of 60 performed better than 60% of his/her hypothetical peers predicted to have similar test score histories. Many students may receive an SGP of 60, but that does not mean that the change in the performance of those students is the same. Some of them may have shown more "growth" than others. Because this model does not measure growth in the sense that is most commonly understood, these results can be confusing. Therefore, it is important for stakeholders to understand the proper interpretation of the measure, and how to use it. As with other models, there are variants to this model (e.g. New

[2] See also Castellano and Ho (2013) for more complete descriptions of growth models.

York City Residual Gain Model) which are not discussed in detail in this document, since the models are specific to the jurisdictions, and many of the issues that apply to the overarching model (the SGP) remain.

Projection Models

The projection model (also called a residual gain or conditional status model) uses a linear regression model created from a previous group of students to make a prediction about how a student will do based on his/her previous test scores. That is, for each student, a predicted posttest score (e.g., this year's summative posttest score) is computed based on a regression equation from a prior year and the students' pretest (e.g., last year's summative test score). This predicted score is the "projection" of how the student is expected to do this year. A residual score is calculated for each student by subtracting their projected score from their actual posttest score. These residual scores represent "growth." Students whose actual posttest scores are larger than their projected posttest scores demonstrate positive growth.

Value-Added Models

Value-added models are typically used for measuring teacher or school effectiveness, rather than individual student growth. Student achievement data (via test scores) are used as inputs into the model to determine the effect that the teacher (or school) has had on the student. One of the great differentiating factors of value-added models compared to other student growth models is the ability to include student-level covariates, or background variables. By including these variables in the models, we attempt to "level the playing field" for making comparisons among teachers and their effects on student learning.

There is no one value-added model; rather it is a class of models, whose goals are to determine what impact a teacher has on student performance after controlling for student background experience, typically including prior academic achievement. The models are typically hierarchical linear models, with models for the student-level, classroom-level, and teacher level (the model can be extended to school-level as well, of course).

To compute a value-added score, the expected growth (based on previous achievement and background variables) is computed for each student in a classroom. The actual "growth" of the student is compared to the expected growth, and the difference between the two is the "achievement beyond expectation"; this can be a positive or a negative value. The average value of these differences is computed for a teacher. This is the value-added score for the teacher. It can be conceptualized as the average residual of the students' growth. Value-added models are currently popular, and are being used in North Carolina, Ohio, Pennsylvania, and Tennessee, among other states.

References

Castellano, K. E, & Ho, A. D. (2013a). *A practitioner's guide to growth models*. Washington, DC: Council of Chief State School Officers (https://www.createspace.com/4167243).

Lee, W. (2010). Classification Consistency and Accuracy for Complex Assessments Using Item Response Theory. *Journal Of Educational Measurement*, *47*(1), 1-17.

Livingston, S. A., & Lewis, C. (1995). Estimating the Consistency and Accuracy of Classifications Based on Test Scores. *Journal Of Educational Measurement*, *32*(2), 179-97.

mpleted by the Copyright Owner/Assessment Representative of the assessment

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.[2]	☒

[2] 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:

Hunter-Tannersville CSD 1. Name of Organization (PLEASE PRINT/TYPE)	*Dr. Susan Vickers* 4. Signature of Authorized Representative (PLEASE USE **BLUE** INK)
Dr. Susan Vickers 2. Name of Authorized Representative (PLEASE PRINT/TYPE)	7-12-2016 5. Date Signed
Superintendent 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)	