LEA Vision & Proposal Overview

Provide a proposal overview. Clearly state the scope of work of this proposal, including all assessments proposed for design and submission. Provide any relevant context of how this work fits into the strategic vision/plan of the LEA and why the LEA is choosing to engage in this process (see guidance above).

During the 2013-14 school year, NCCVT embarked on an assessment campaign to align our assessment (internal & external) to daily instruction, activities, curriculum, and the Common Core State Standards. Last year we successfully completed three component V assessments in ELA that were approved by the Delaware Department of Education. We would like to continue this work in mathematics. We want to create component V assessments in IM I, II, III, Pre-Calculus and trigonometry. This is also directly aligned to our state approved Implementation Plan—Activities 1 and 2, which are goals to create component v assessments and align all neighboring components

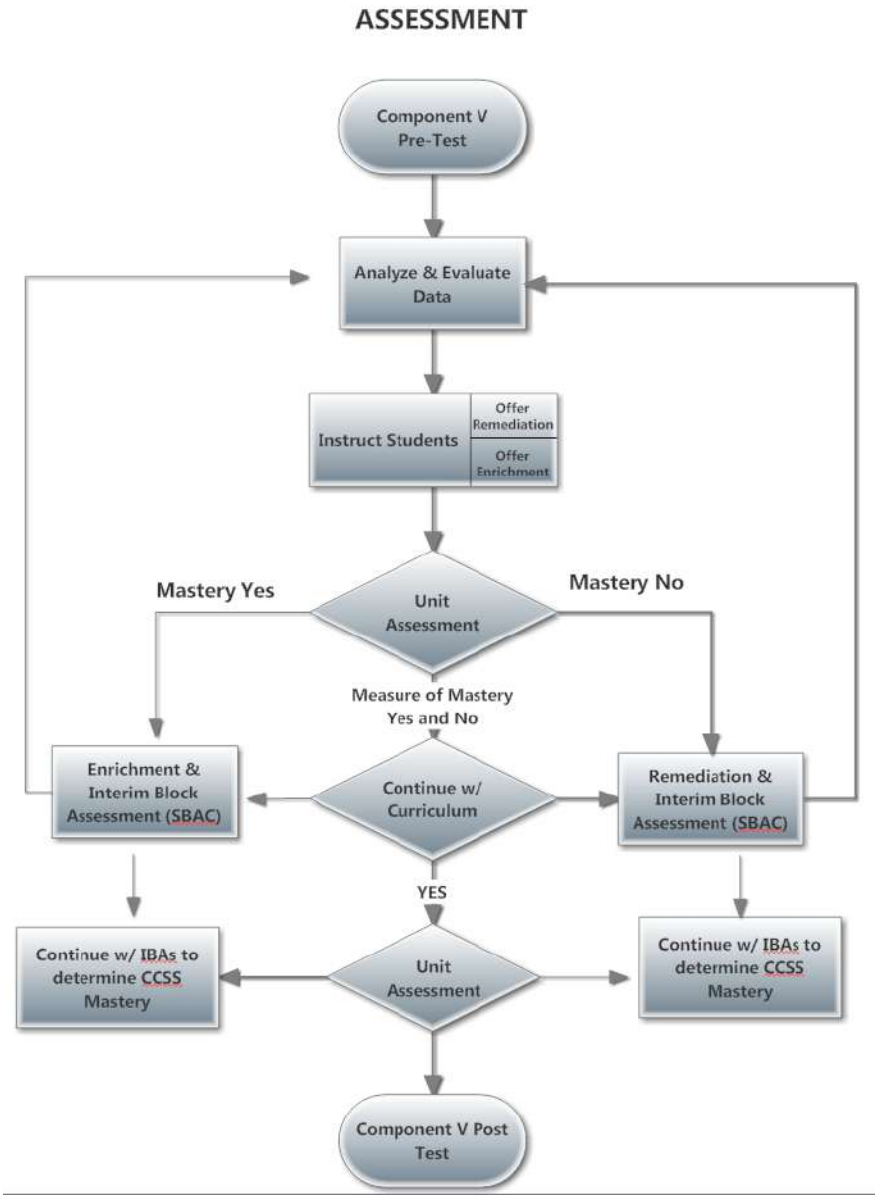
Statement of Need and Impact

Describe the specific need for the proposed assessments citing quality/quantity of options, alignment, accessibility, etc. State how and why this need was identified. Describe the potential impact of proposed new assessments on teachers and students. Cite data where applicable/available.

Our major instructional and assessment goal district wide is to create a comprehensive and uniform assessment process that measures student progress towards mastery of the Common Core State Standards. By having Component V ELA and Math assessments fully aligned to the CCSS we are in a position to evaluate our curriculum and instruction and determine the progress our students are making in learning the standards.

Currently we review our school and district data for DPAS II, as well as for school and district wide targets. We use a variety of data, but currently have different sources of assessment data that can lead to an undesirable dispersion of information, focus, and resources. As a district we offer our own internal assessments throughout a course and by collapsing our assessments, both internal and external, we not only decrease the number of assessments a student completes, but also centralize our information to create greater focus. Below are two sample resources. Sample 1 is the assessment process we are proposing, which is a refinement of our current practices and aligns Component V, our internally Unit Assessments, and the Smarter Interim Block Assessments. Sample 2 is the categorical data that our district officials, building administrators and teacher leaders receive quarterly and an annual summation. By refining the process we can provide assessment data throughout the course (collected and organized district wide) that can be used in the aforementioned ways.

Sample 1



Sample 2

Academic Learning

performance indicators:

ACADEMIC COURSE GRADES

final grade distribution % A

final grade distribution % B

final grade distribution % C

final grade distribution % D

final grade distribution % F

academic grade point average

(GPA)

Unified Summative Assessments

English final exam %passing
math final exam %passing
science final exam %passing
social studies final exam %passing

DE Comprehensive Assessment System

reading assessment

g9 % meeting state standard (spring)
g9 mean accountability score
g9 accountability score change (fall to spring)
g9 cohort acc. score change (spring to spring)
g10 % meeting state standard (spring)
g10 mean accountability score
g10 accountability score change (fall to spring)

Alignment to Standards & Curricula

Describe the process by which you will ensure alignment of all proposed assessments to applicable state standards and local curricula. Describe other assessment design criteria the LEA will use (aligned to college-and-career readiness) and how those criteria will be used throughout the design process. Include content- or grade-level specific detail as applicable.

Over the past two years our ELA and Math have received a Common Core "overhaul." Our ELA has introduced both internally designed activities and assessments and external resources to support our focus on the CCSS. Last year, our ELA I, II and III Component V assessments were approved by the state, which ensured overall alignment among all the elements of the classroom. Our next step is our math assessments. Our math curriculum has received the same intensive overview through academic review process; however, our internal and external assessments need to be aligned to curriculum and the CCSS.

Our assessment construction team has participated in professional development around the expectations of Common Core and the Smarter Balanced Assessment question types. Additionally, the mathematics curricula in grades 9-12 has been aligned to CCSS and covers all material necessary to satisfy the expectations of the Smarter Balanced Assessment at the end of eleventh grade. This alignment has been verified by the 502 review conducted by the Department of Education earlier in the school year. Assessments will be constructed to reflect the Common Core standards included in the course, the rigor of Smarter Balanced and Common Core, any recommendations from the 502 alignment process, and the guidelines set forth in the EQuIP assessment rubric for high school mathematics. This rubric will also be used as a quality control tool during the construction process. Since each course will have a distinct team of assessment writers, members constructing assessments for a different course will serve as reviewers for the assessments created for a course other than the one they constructed. For instance, in order to

assure quality items on the IM-I assessment, members of the IM-II and IM-III team will employ the EQuIP rubric to review the IM-I assessments and make recommendations to the IM-I team, who will then make any needed revisions and present those revisions back for review. All assessment items will be coded by standard, DOK level, and mathematical practice being assessed so that the review teams can easily determine whether the question properly assesses the stated standard and is aligned to the standards being addressed in the course.

Particularly around the standards, the team determines what must be covered in the assessment, which begins with the committee prioritizing the standards covered in the district curriculum for that course. Those standards that are major concepts needed to perform well at the next level are given more consideration than those standards that are less integral to the overall mathematical understanding of students. Once the major standards are selected, the team will determine how to best measure student achievement for that standard. If this process reveals one or two overarching standards that students must understand, then a discussion will ensue around whether that standard should be measured with more than one item on the assessment. When completed, the items created will reflect the team's determination as to what are the integral standards in the course.

Below are excerpts from our guiding documents that will ensure alignment.

Example of our Vertical Alignment Chart & CCSS Overview by Course:

Mathematics Vertical Alignment Chart

IM I	IM II	IM III	Trigonometry
G. CO.A. 1 **U6** Know precise definitions of angle, circle, perpendicular line, parallel line, and line segment, based on the undefined notions of point, line, distance along a line, and distance around a circular arc.	**A. CED. A. 2** **U1 & U5** Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.	**A. CED. A. 2** Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.	**G. SRT. B. 5** Understand that by similarity, side ratios in right triangles are properties of the angles in the triangle, leading to definitions of trigonometric ratios for acute angles.
G. CO. B. 8 **U6** Explain how the criteria for triangle congruence (ASA, SAS, and SSS) follow from the definition of congruence in terms of rigid motions.	**A. CED. A. 4** **U1** Rearrange formulas to highlight a quantity of interest, using the same reasoning as in solving equations. *For example, rearrange Ohm's law $V = IR$ to highlight resistance R.*	**A. REI. D 11** Explain why the x-coordinates of the points where the graphs of the equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$; find the solutions approximately, e.g., using technology to graph the functions, make tables of values, or find successive approximations. Include cases where $f(x)$ and/or $g(x)$ are linear, polynomial, rational, absolute value, exponential, and logarithmic functions.*	**G. SRT. C. 7** Explain and use the relationship between the sine and cosine of complementary angles.
G. CO. C. 9 **U6** Prove theorems about lines and angles. Theorems include: alternate interior angles and congruent and corresponding angles are congruent; points on a perpendicular bisector of a line segment are exactly those equidistant from the segment's endpoints.	**F. IF. B. 4** **U1 & U5** For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship. *Key features include: intercepts; intervals where the function is increasing, decreasing, positive, or negative; relative maximums and minimums; symmetries; end behavior; and periodicity.**	**A. REI. D. 12** Graph the solutions to a linear inequality in two variables as a half-plane (excluding the boundary in the case of a strict inequality), and graph the solution set to a system of linear inequalities in two variables as the intersection of the corresponding half-planes.	**G. SRT. C. 8** Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems.*

CCSS Overview by Course:

Number and Quantity	**The Real Number System** • Extend the properties of rational exponents I, III • Use properties of rational and irrational numbers	**Quantities** • Reason quantitatively and use units to solve problems I, II, III	**The Complex Number System** • Perform arithmetic operations with complex numbers III, + • Represent complex numbers and their operations on the complex plane + • Use complex numbers in polynomial identities and equations III, +	**Vector and Matrix Quantities** • Represent and model with vector quantities + • Perform operations on vectors + • Performs operations on matrices and use matrices in applications +
Algebra	**Seeing Structures in Expression** • Interpret the structure of expressions I, II, III • Write expressions in equivalent forms to solve problems I, II	**Arithmetic with Polynomials and Rational Expressions** • Perform arithmetic operations on polynomials III • Understand the relationship between zeros and factors of polynomials III • Use polynomial identities to solve problems III, + • Rewrite rational expressions III, +	**Creating Equations** • Create equations that describe numbers or relationships I, II, III	**Reasoning with Equations and Inequalities** • Understand solving equations as a process of reasoning and explain the reasoning III • Solve equations and inequalities in one variable I, II • Solve systems of equations I • Represent and solve equations and inequalities graphically I, III

Project Participants

Project Manager: Dr. Joseph Jones, Director of Assessment and Accountability: Initiates the assessment writing process, works with Carol O'Hara to monitor progress according to set timeline milestones, reviews final product, submits final product to RIA.

Project Facilitator: Carol O'Hara, Instructional Specialist: works with mathematics teacher leaders to set timeline milestones; provides any needed professional development around use of EQuIP rubrics, CCSS, and SBAC; organizes writing and review sessions; finalizes committee work for submission to Dr. Jones for final review.

Content Area Specialists: Debbie Tuson, Patricia Creveling, Marie Young, Carrie Barber: As the school's mathematics teacher leaders, they serve as facilitators for the assessment writing and review committees, select and recruit participants for the committees, work with Carol O'Hara to assure compliance with project timeline, and assist with resolving any issues that arise.

Assessment Writers: Mathematics teachers who have experience teaching the newly aligned curriculum for the course being assessed: participate in professional development needed to create high-quality assessments, determine which standards are to be assessed, write questions aligned to CCSS and SBAC for identified standards, use the EQuIP rubric to review the work of other teams and make recommendations, complete a final review of all work to assure quality before submission to Carol O'Hara for final formatting.

Engagement, Training, and Roll-out

This effort is the result of a grass-roots request from mathematics teachers to streamline the amount of time spent on assessment during the school year. Therefore, teachers are highly motivated to create and use these assessments. Since the post-test will also serve as the students' final exam, a full day of instruction will be gained through this process. Additionally, a pre-test that is thoroughly aligned to the standards being addressed by the course will assist teachers with determining how to focus instruction to address student needs.

During the creation process, mathematics teachers will be able to review the work of the committees. After the mathematics teacher leaders have had a chance to review the proposed assessments and comment on them, the assessment committees will reconvene to review recommendations and determine what, if any, revisions need to be made. Once revised, the assessments will be ready to go through the evaluation process using the EQuIP rubric.

Once approved for use as Component V assessments, the assessments will be introduced to all mathematics teachers during professional development sessions at the beginning of the school year. Since the mathematics teacher leader in each school will serve as an integral part of the construction of these assessments, their intimate knowledge of the assessments and their construction will allow them to lead their teachers through their use and scoring in their PLCs and department meetings. If serious deficits in foundational knowledge of the Common Core standards or mathematical practices become apparent during the implementation of these assessments, they can be addressed during the district professional development days. Any needed professional development can be provided at either the district level, if a widespread misconception exists, or at the local level, if confined to one school. The Instructional Specialist will work with the mathematics teacher leaders to determine if further professional development is needed and organize that professional development.

Work Plan Narrative & Proposed Timeline and Milestones

Our first step will focus on the design process of creating the component V assessments with our teacher leaders. Part of this is ensuring everyone fully understands the requirements associated with the assessment(s). Since the assessment development has several components, this first step is critical. Once this process is fully worked out, the actual assessment construction will begin in specific teams. Each school will have a designated team that will focus on one of the assessments led by their teacher leader. This is an advantage since our teachers leaders have expertise within each of the subjects, and

the teams developed will work on the assessment they have the greatest experience and knowledge of from a content and standards perspective. The teams or assessment committees, comprised of four teachers, should be able to fully complete the assessment construction—blueprint, DOK levels, and any rubrics within 8-10 hours of work. After this is complete, an audit of the assessments using the EQuIP rubric will be done and ultimately submitted to RIA and DeDOE for approval.

Milestone Activity	Date
Project Director and Director of Instruction meet with mathematics teacher leaders to create assessment design process and establish a timeline	January 30, 2015
Project Facilitator meets with mathematics teacher leaders to develop templates and further refine the process	February 6, 2015
Templates and requested resources are distributed to mathematics teacher leaders for use with their committees	February 13, 2015
Assessment committees comprised of four teachers for each course are established	February 27, 2015
Assessment committees meet for 8-10 hours to create a test blueprint, establish item DOK levels, create any needed item specific rubrics	February 27, 2015-April 30, 2015
Project Facilitator mid-point meeting with teacher leaders to review progress of committees	March 23, 2015
Assessment committees submit their work to mathematics teacher leaders	May 1, 2015
Mathematics teacher leaders lead the review process of all submitted assessments using the EQuIP rubric and revise, as necessary.	Completed project due to Project Manager and Project Facilitator by May 15, 2015.
Final review of product and preparation for submission to RIA completed by Project Facilitator.	Submitted to RIA for approval by June 5, 2015

Evaluation Plan

Describe the plan for evaluation of both the assessment design process and the assessments themselves in 2015-2016. Explain data-collection processes and plans for use of data and feedback in continuous improvement.

Fortunately, NCCVT currently has an assessment review process in place that systematically looks at the curriculum, activities, and assessments. The teacher leaders (formerly department chairs) meet with the curriculum specialist, Director of Instruction, and Director of Assessment to review the process, implementation, and use of district and state assessments. Regarding the process, the teacher leaders and the district personnel will meet to evaluate how our Assessment Design Process worked. Since assessment development and refinement is ongoing, this process is critical for our sustainable efforts. Regarding the data, district and building staff receive various data on student achievement. The Director of Assessment would provide the administrator, teacher leader, and teacher data on student achievement, which would serve two purposes. One, setting DPAS II goals and two, identifying the "achievement" make up of a teacher's class; thus, allowing for tailored instruction, enrichment and remediation (see Sample 1 above). We are also piloting with the data service center on how we can review our unit assessment results by standard. The report indicates below, meeting, exceeding proficiency for each of the standards addressed in the assessment. This is using data on a granular level, within the classroom, where it will foster the most student growth. The data the Director of Assessment provides will primarily be used for PLCs, curriculum development, activity and content reflection and creation, and department/schoolwide data discussion (flowchart: see sample 1). In addition, we follow a data protocol that can be provided if necessary.

Proposed Budget

Based on our experience last year with the submission of the ELA assessments we were able to guage the extent of the work associated with the development, refinement, and review of the various assessment components.

Design Team Make Up and Scope of work (8-10 hours EPER rate):

4 School Teams (Howard, Hodgson, St. Georges, Delcastle) of 4 teachers on a team.

16 X $40.32*X 10 hours=$6451.2

4 Teacher leaders & curriculum specialist overseeing process & final completion overview– 3 hours

4 X 40.32 X 3 hours = $483.6

Grant Request: $6, 934.00

*adjusted for OEC rates (30.08%)

Alternative Assessments - Student Improvement Component Grant	DELAWARE DEPARTMENT OF EDUCATION Teacher and Leader Effectiveness Unit 401 Federal Street Dover, DE 19901 Phone: 302-735-4023

ALTERNATIVE ASSESSMENTS - STUDENT IMPROVEMENT COMPONENT GRANT – PROPOSED BUDGET INFORMATION

Submitting District Information

DISTRICT AND SCHOOL NAME: New Castle County Vo- Tech	PROJECT TITLE: Component V Assessment Development
CONTACT NAME AND TITLE: Joseph Jones Director of Assessment and Accountability WORK E-MAIL:joseph.jones@nccvtk12.de.us	WORK PHONE NUMBER: 302-683-3650
BUSINESS MANAGER'S NAME AND INITIALS (REQUIRED WHEN SUBMITTED AS AN APPLICATION BUDGET): 2/4/15	FAX NUMBER:

Activity	Salary (Account Code 5100)					Other Employee Costs (Account Code 5120)	Total Salary and OEC	Health Insurance/Other Non-Taxed Benefits	Contracted Services (Account Code 5500)	Travel (Account Code 5400)	Supplies and Materials (Account Code 5600)	Capital Outlay (Account Code 5700)	Audit Fees (Account Code 5500)	Indirect Cost (Account Code 5560)	Total
	Administrative (ex. Assistant Principal and higher)	Instructional (ex. Teachers, Paras)	Support (ex. Secretary, Custodial, Food Service)	Non-Pension Positions (ex. Substitutes)	Salary Subtotal										
Administration					$0	$0	$0						-	-	$0
Instruction		$6734.00			$0	$0	$0						-	-	$0
Curriculum					$0	$0	$0						-	-	$0
Other Educational Materials and Services					$0	$0	$0						-	-	$0
Transportation					$0	$0	$0						-	-	$0
Professional Development					$0	$0	$0						-	-	$0
Grant Subtotal	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	-	-	$0

$6734.00

Grant Check: FOR if Grant total equals grant award grant award amount)

Grant Total	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	-	-	$0