

**Delaware Department of Education  
University of Delaware Contract**

Math Science Partnership Grant  
DISCOVERY: The Discovery Delaware Interdisciplinary STEM Citizen Science Project

This Agreement, which is effective only upon the execution of a State of Delaware Purchase Order, and will end on **September 30, 2017**, is between the State of Delaware, Department of Education, hereafter referred to as DDOE, and **University of Delaware**, hereafter referred to as UD.

WHEREAS, DDOE desires to obtain certain services to **have UD provide services specified in the Statement of Work attached hereto and identified as Appendix A**; and

WHEREAS, UD desires to provide such services to DDOE on the terms set forth below;

WHEREAS, DDOE and UD represent and warrant that each party has full right, power and authority to enter into and perform under this Agreement;

FOR AND IN CONSIDERATION OF the premises and mutual agreements herein, DDOE and UD agree as follows:

**1. Services.**

1.1 UD shall perform for DDOE the services specified in the Appendices to this Agreement, attached hereto and made a part hereof.

1.2 Any conflict or inconsistency between the provisions of the following documents shall be resolved by giving precedence to such documents in the following order: (a) this Agreement, including the Statement of Work (including any amendments or modifications thereto); (b) DDOE's request for proposals, attached hereto as Appendix C; and (c) UD's response to the request for proposals, attached hereto as Exhibit D. The aforementioned documents are specifically incorporated into this Agreement and made a part hereof.

1.3 DDOE may, at any time, by written order, make changes in the scope of this Agreement and in the services or work to be performed. No services for which additional compensation may be charged by UD shall be furnished without the written authorization of DDOE. When DDOE desires any addition or deletion to the deliverables or a change in the Services to be provided under this Agreement, it shall notify UD, who shall then submit to DDOE a "Change Order" for approval authorizing said change. The Change Order shall state whether the change shall cause an alteration in the price or the time required by UD for any aspect of its performance under this Agreement. Pricing of changes shall be consistent with those established within this Agreement.

1.4 UD will not be required to make changes to its scope of work that result in UD's costs exceeding the current unencumbered budgeted appropriations for the services. Any claim of either party for an adjustment under Section 1 of this Agreement shall be asserted in the manner specified in the writing that authorizes the adjustment.

## **2. Payment for Services and Expenses.**

2.1 The term of the initial contract shall be from July 1, 2016 through September 30, 2017.

2.2 DDOE will pay UD for the performance of services described in Appendix A, Statement of Work. The fee will be paid in accordance with the payment schedule attached hereto as part of Appendix B.

2.3 DDOE's obligation to pay UD for the performance of services described in Appendix A, Statement of Work will not exceed the fixed fee amount of \$100,000. It is expressly understood that the work defined in the appendices to this Agreement must be completed by UD and it shall be UD's responsibility to ensure that hours and tasks are properly budgeted so that all services are completed for the agreed upon fixed fee. DDOE's total liability for all charges for services that may become due under this Agreement is limited to the total maximum expenditure(s) authorized in DDOE's purchase order(s) to UD.

2.4 UD shall submit invoices in accordance with Statement of Work; Appendix A. DDOE agrees to pay those invoices within thirty (30) days of receipt. In the event DDOE disputes a portion of an invoice, DDOE agrees to pay the undisputed portion of the invoice within thirty (30) days of receipt and to provide UD a detailed statement of DDOE's position on the disputed portion of the invoice within thirty (30) days of receipt. DDOE's failure to pay any amount of an invoice that is not the subject of a good-faith dispute within thirty (30) days of receipt shall entitle UD to charge interest on the overdue portion at no more than 1.0% per month or 12% per annum. All payments should be sent to UD, Cashier's Office, 30 Lovett Avenue, 116 Student Services Building, Newark, DE 19716 Attn: Dr. John Jungck.

2.5 Unless provided otherwise in an Appendix, all expenses incurred in the performance of the services are to be paid by UD. If an Appendix specifically provides for expense reimbursement, UD shall be reimbursed only for reasonable expenses incurred by UD in the performance of the services, including, but not necessarily limited to, travel and lodging expenses, communications charges, and computer time and supplies.

2.6 DDOE is a sovereign entity, and shall not be liable for the payment of federal,

state and local sales, use and excise taxes, including any interest and penalties from any related deficiency, which may become due and payable as a consequence of this Agreement.

2.7 DDOE shall subtract from any payment made to UD all damages, costs and expenses caused by UD's negligence, resulting from or arising out of errors or omissions in UD's work products, which have not been previously paid to UD.

2.8 Invoices shall be submitted to:

John Epstein, Education Associate  
Curriculum, Instruction & Professional Development  
Delaware Department of Education  
401 Federal Street  
Suite 2  
Dover, DE 19901

**3. Responsibilities of UD.**

3.1 UD shall be responsible for the professional quality, technical accuracy, timely completion, and coordination of all services furnished by UD, its subcontractors and its principals, officers, employees and agents under this Agreement. In performing the specified services, UD shall follow practices consistent with generally accepted professional and technical standards. UD shall be responsible for ensuring that all services, products and deliverables furnished pursuant to this Agreement comply with the standards promulgated by the Department of Technology and Information ("DTI") published at <http://dti.delaware.gov/>, and as modified from time to time by DTI during the term of this Agreement. If any service, product or deliverable furnished pursuant to this Agreement does not conform with DTI standards, UD shall, at its expense and option either (1) replace it with a conforming equivalent or (2) modify it to conform with DTI standards. UD shall be and remain liable in accordance with the terms of this Agreement and applicable law for all damages to DDOE directly caused by UD's failure to ensure compliance with DTI standards.

3.2 It shall be the duty of the UD to assure that all products of its effort are technically sound and in conformance with all pertinent Federal, State and Local statutes, codes, ordinances, resolutions and other regulations. UD will not produce a work product that violates or infringes on any copyright or patent rights. If deficiencies in the services specified in the Statement of Work require revisions or corrections, UD and DDOE will work together in good faith to establish a remediation plan whereby vendor will correct any deficiencies.

3.3 Permitted or required approval by DDOE of any products or services furnished by UD shall not in any way relieve UD of responsibility for the professional and technical accuracy and adequacy of its work. DDOE's review,

approval, acceptance, or payment for any of UD's services herein shall not be construed to operate as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement, and UD shall be and remain liable in accordance with the terms of this Agreement and applicable law for all damages to DDOE caused by UD's performance or failure to perform under this Agreement.

3.4 UD shall appoint Key Personnel and a Project Manager who will manage the performance of services. All of the services specified by this Agreement shall be performed by the Project Manager, or by UD's associates and employees under the personal supervision of the Project Manager.

Project	Team	Title	% of Project Involvement
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As mutually agreed by the parties, the individuals listed above shall be designated Key Personnel and be subject to Section 3.5 below.

3.5 Performance of Key Personnel assigned by UD will be monitored by DDOE, who will provide documented quarterly assessments of the progress of the work to UD to ensure that the work, as specified in the attached Statement of Work, is being performed according to DDOE standards. Upon a documented determination by DDOE that Key Personnel assigned by UD are ineffective in the performance of the work enumerated in the Statement of Work, the parties will communicate in good faith to reassign Key Personnel to perform other services and develop a mutually acceptable replacement plan. Should the parties mutually agree that Key Personnel need to be diverted off the project for what are now unforeseeable circumstances, the parties will work out a mutually agreeable transition plan to replace said personnel.

3.6 UD shall furnish to DDOE's designated representative copies of all correspondence to regulatory agencies for review prior to mailing such correspondence.

3.7 UD agrees that its officers and employees will cooperate with DDOE in the performance of services under this Agreement and will be available for consultation with DDOE at such reasonable times with advance notice as to not conflict with their other responsibilities.

3.8 UD has or will retain such employees as it may need to perform the services required by this Agreement.

3.9 UD will not use DDOE's name, either express or implied, in any of its advertising or sales materials without DDOE's express written consent.

3.10 The rights and remedies of DDOE provided for in this Agreement are in addition to any other rights and remedies provided by law.

**4. Time Schedule.**

4.1 A project schedule is included in Appendix B.

4.2 Any delay of services or change in sequence of tasks must be approved in writing by DDOE.

4.3 In the event that UD fails to complete the project or any phase thereof within the time specified in the Contract, or with such additional time as may be granted in writing by DDOE, or fails to prosecute the work, or any separable part thereof, with such diligence as will insure its completion within the time specified in this Agreement or any extensions thereof, DDOE shall suspend the payments scheduled as set forth in Appendix A.

**5. State Responsibilities.**

5.1 In connection with UD's provision of the Services, DDOE shall perform those tasks and fulfill those responsibilities specified in the appropriate Appendices.

5.2 DDOE agrees that its officers and employees will cooperate with UD in the performance of services under this Agreement and will be available for consultation with UD at such reasonable times with advance notice as to not conflict with their other responsibilities.

5.3 The services performed by UD under this Agreement shall be subject to review for compliance with the terms of this Agreement by DDOE's designated representatives. DDOE representatives may delegate any or all responsibilities under the Agreement to appropriate staff members, and shall so inform UD by written notice before the effective date of each such delegation.

5.4 The review comments of DDOE's designated representatives may be reported in writing as needed to UD. It is understood that DDOE's representatives' review comments do not relieve UD from the responsibility for the professional and technical accuracy of all work delivered under this Agreement.

5.5 DDOE shall, without charge, furnish to or make available for examination or use by UD as it may request, any data which DDOE has available, including as examples only and not as a limitation:

- a. Copies of reports, surveys, records, and other pertinent documents;
- b. Copies of previously prepared reports, job specifications, surveys, records, ordinances, codes, regulations, other document, and

information related to the services specified by this Agreement.

UD shall return any original data provided by DDOE.

5.6 DDOE shall assist UD in obtaining data on documents from public officers or agencies and from private citizens and business firms whenever such material is necessary for the completion of the services specified by this Agreement.

5.7 UD will not be responsible for accuracy of information or data supplied by DDOE or other sources to the extent such information or data would be relied upon by a reasonably prudent contractor.

5.8 DDOE agrees not to use UD's name, either express or implied, in any of its advertising or sales materials. UD reserves the right to reuse the nonproprietary data and the analysis of industry-related information in its continuing analysis of the industries covered.

## **6. Work Product.**

6.1 All materials, information, documents, and reports, whether finished, unfinished, or draft, developed, prepared, completed, or acquired by UD for DDOE relating to the services to be performed hereunder shall become the property of DDOE and shall be delivered to DDOE's designated representative upon completion or termination of this Agreement, whichever comes first. UD shall not be liable for damages, claims, and losses arising out of any reuse of any work products on any other project conducted by DDOE. DDOE shall have the right to reproduce all documentation supplied pursuant to this Agreement.

6.2 UD retains all title and interest to the data it furnished and/or generated pursuant to this Agreement. Retention of such title and interest does not conflict with DDOE's rights to the materials, information and documents developed in performing the project. Upon final payment, DDOE shall have a perpetual, nontransferable, non-exclusive paid-up right and license to use, copy, modify and prepare derivative works of all materials in which UD retains title, whether individually by UD or jointly with DDOE. Any and all source code developed in connection with the services provided will be provided to DDOE, and the aforementioned right and license shall apply to source code. The parties will cooperate with each other and execute such other documents as may be reasonably deemed necessary to achieve the objectives of this Section.

6.3 In no event shall UD be precluded from developing for itself, or for others, materials that are competitive with the Deliverables, irrespective of their similarity to the Deliverables. In addition, UD shall be free to use its general knowledge, skills and experience, and any ideas, concepts, know-how, and techniques within the scope of its consulting practice that are used in the course of providing the services.

6.4 Notwithstanding anything to the contrary contained herein or in any attachment hereto, any and all intellectual property or other proprietary data owned by UD prior to the effective date of this Agreement (“Preexisting Information”) shall remain the exclusive property of UD even if such Preexisting Information is embedded or otherwise incorporated into materials or products first produced as a result of this Agreement or used to develop such materials or products. DDOE’s rights under this section shall not apply to any Preexisting Information or any component thereof regardless of form or media.

**7. Confidential Information.**

To the extent permissible under 29 *Del. C.* § 10001, et seq., the parties to this Agreement shall preserve in strict confidence any information, reports or documents obtained, assembled or prepared in connection with the performance of this Agreement.

**8. Warranty.**

8.1 UD warrants that its services to be provided pursuant to the Statement of Work will be performed in a good and workmanlike manner. UD agrees to re-perform any work not in compliance with the Statement of Work brought to its attention within a reasonable time after that work is performed.

8.2 Third-party products within the scope of this Agreement are warranted solely under the terms and conditions of the licenses or other agreements by which such products are governed. With respect to all third-party products and services purchased by UD for DDOE in connection with the provision of the Services, UD shall pass through or assign to DDOE the rights UD obtains from the manufacturers and/or vendors of such products and services (including warranty and indemnification rights), all to the extent that such rights are assignable.

**9. Indemnification; Limitation of Liability.**

9.1 UD shall indemnify and hold harmless the State, its agents and employees, from any and all liability, suits, actions or claims, together with all reasonable costs and expenses (including attorneys’ fees) directly arising out of (A) the negligence or other wrongful conduct of the UD, its agents or employees, or (B) UD’s breach of any material provision of this Agreement not cured after due notice and opportunity to cure, provided as to (A) or (B) that (i) UD shall have been notified promptly in writing by DDOE of any notice of such claim; and (ii) UD shall have the sole control of the defense of any action on such claim and all negotiations for its settlement or compromise.

9.2 If DDOE promptly notifies UD in writing of a third party claim against DDOE that any Deliverable infringes a copyright or a trade secret of any third party, UD will defend such claim at its expense and will pay any costs or damages that may be finally awarded against DDOE. UD will not indemnify DDOE, however, if the claim of infringement is caused by (1) DDOE's misuse or modification of the Deliverable; (2) DDOE's failure to use corrections or enhancements made available by UD; (3) DDOE's use of the Deliverable in combination with any product or information not owned or developed by UD; (4) DDOE's distribution, marketing or use for the benefit of third parties of the Deliverable or (5) information, direction, specification or materials provided by Client or any third party. If any Deliverable is, or in UD's opinion is likely to be, held to be infringing, UD shall at its expense and option either (a) procure the right for DDOE to continue using it, (b) replace it with a noninfringing equivalent, (c) modify it to make it noninfringing. The foregoing remedies constitute DDOE's sole and exclusive remedies and UD's entire liability with respect to infringement.

9.3 DDOE agrees that UD' total liability to DDOE for any and all damages whatsoever arising out of or in any way related to this Agreement from any cause, including but not limited to contract liability or UD negligence, errors, omissions, strict liability, breach of contract or breach of warranty shall not, in the aggregate, exceed fees paid to UD.

In no event shall UD be liable for special, indirect, incidental, economic, consequential or punitive damages, including but not limited to lost revenue, lost profits, replacement goods, loss of technology rights or services, loss of data, or interruption or loss of use of software or any portion thereof regardless of the legal theory under which such damages are sought, and even if UD has been advised of the likelihood of such damages.

## **10. Employees.**

10.1 UD has and shall retain the right to exercise full control over the employment, direction, compensation and discharge of all persons employed by UD in the performance of the services hereunder; provided, however, that it will, subject to scheduling and staffing considerations, attempt to honor DDOE's request for specific individuals.

10.2 Except as the other party expressly authorizes in writing in advance, neither party shall solicit, offer work to, employ, or contract with, whether as a partner, employee or independent contractor, directly or indirectly, any of the other party's involved, significant Personnel during their participation in the services or during the twelve (12) months thereafter. For purposes of this Section 10.2, "Personnel" includes any individual or company a party employs as a partner, employee or independent contractor and with which a party comes into direct contact in the course of the services contemplated in this Agreement.

10.3 Possession of a Security Clearance, as issued by the Delaware Department of Safety and Homeland Security, may be required of any employee of UD who will be assigned to this project.

## **11. Independent Contractor.**

11.1 It is understood that in the performance of the services herein provided for, UD shall be, and is, an independent contractor, and is not an agent or employee of DDOE and shall furnish such services in its own manner and method except as required by this Agreement. UD shall be solely responsible for, and shall indemnify, defend and save DDOE harmless from all matters relating to the payment of its employees, including compliance with social security, withholding and all other wages, salaries, benefits, taxes, exactions, and regulations of any nature whatsoever.

11.2 UD acknowledges that UD and any subcontractors, agents or employees employed by UD shall not, under any circumstances, be considered employees of DDOE, and that they shall not be entitled to any of the benefits or rights afforded employees of DDOE, including, but not limited to, sick leave, vacation leave, holiday pay, Public Employees Retirement System benefits, or health, life, dental, long-term disability or workers' compensation insurance benefits. DDOE will not provide or pay for any liability or medical insurance, retirement contributions or any other benefits for or on behalf of DDOE or any of its officers, employees or other agents.

11.3 UD shall be responsible for providing liability insurance for its personnel.

11.4 As an independent contractor, UD has no authority to bind or commit DDOE. Nothing herein shall be deemed or construed to create a joint venture, partnership, fiduciary or agency relationship between the parties for any purpose.

## **12. Suspension.**

12.1 DDOE may suspend performance by UD under this Agreement for such period of time as DDOE, at its sole discretion, may prescribe by providing written notice to UD at least 30 working days prior to the date on which DDOE wishes to suspend. Upon such suspension, DDOE shall pay UD its compensation, based on the percentage of the project completed and earned until the effective date of suspension, less all previous payments. UD shall not perform further work under this Agreement after the effective date of suspension. UD shall not perform further work under this Agreement after the effective date of suspension until receipt of written notice from DDOE to resume performance.

12.2 In the event DDOE suspends performance by UD for any cause other than

the error or omission of the UD, for an aggregate period in excess of 30 days, UD shall be entitled to an equitable adjustment of the compensation payable to UD under this Agreement to reimburse UD for additional costs occasioned as a result of such suspension of performance by DDOE based on appropriated funds and approval by DDOE.

### **13. Termination.**

13.1 This Agreement may be terminated in whole or in part by either party in the event of substantial failure of the other party to fulfill its obligations under this Agreement through no fault of the terminating party; but only after the other party is given:

- a. Not less than 30 calendar days written notice of intent to terminate; and
- b. An opportunity for consultation with the terminating party prior to termination.

13.2 This Agreement may be terminated in whole or in part by DDOE for its convenience, but only after UD is given:

- a. Not less than 30 calendar days written notice of intent to terminate; and
- b. An opportunity for consultation with DDOE prior to termination.

13.3 If termination for default is effected by DDOE, DDOE will pay UD that portion of the compensation which has been earned as of the effective date of termination but:

- a. No amount shall be allowed for anticipated profit on performed or unperformed services or other work, and
- b. Any payment due to UD at the time of termination may be adjusted to the extent of any additional costs occasioned to DDOE by reason of UD's default.
- c. Upon termination for default, DDOE may take over the work and prosecute the same to completion by agreement with another party or otherwise. In the event UD shall cease conducting business, DDOE shall have the right to make an unsolicited offer of employment to any employees of UD assigned to the performance of the Agreement, notwithstanding the provisions of Section 10.2.

13.4 If after termination for failure of UD to fulfill contractual obligations it is determined that UD has not so failed, the termination shall be deemed to have been effected for the convenience of DDOE.

13.5 The rights and remedies of DDOE and UD provided in this section are in addition to any other rights and remedies provided by law or under this Agreement.

13.6 Gratuities.

13.6.1 DDOE may, by written notice to UD, terminate this Agreement if it is found after notice and hearing by DDOE that gratuities (in the form of entertainment, gifts, or otherwise) were offered or given by UD or any agent or representative of UD to any officer or employee of DDOE with a view toward securing a contract or securing favorable treatment with respect to the awarding or amending or making of any determinations with respect to the performance of this Agreement.

13.6.2 In the event this Agreement is terminated as provided in 13.6.1 hereof, DDOE shall be entitled to pursue the same remedies against UD it could pursue in the event of a breach of this Agreement by UD.

13.6.3 The rights and remedies of DDOE provided in Section 13.6 shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Agreement.

**14. Severability.**

If any term or provision of this Agreement is found by a court of competent jurisdiction to be invalid, illegal or otherwise unenforceable, the same shall not affect the other terms or provisions hereof or the whole of this Agreement, but such term or provision shall be deemed modified to the extent necessary in the court's opinion to render such term or provision enforceable, and the rights and obligations of the parties shall be construed and enforced accordingly, preserving to the fullest permissible extent the intent and agreements of the parties herein set forth.

**15. Assignment; Subcontracts.**

15.1 Any attempt by UD to assign or otherwise transfer any interest in this Agreement without the prior written consent of DDOE shall be void. Such consent shall not be unreasonably withheld.

15.2 Services specified by this Agreement shall not be subcontracted by UD, without prior written approval of DDOE.

15.3 Approval by DDOE of UD's request to subcontract or acceptance of or payment for subcontracted work by DDOE shall not in any way relieve UD of responsibility for the professional and technical accuracy and adequacy of the work.

All subcontractors shall adhere to all applicable provisions of this Agreement.

15.4 UD shall be and remain liable for all damages to DDOE caused by negligent performance or non-performance of work under this Agreement by UD, its subcontractor or its sub-subcontractor.

15.5 The compensation due shall not be affected by DDOE's approval of the UD's request to subcontract.

**16. Force Majeure.**

Neither party shall be liable for any delays or failures in performance due to circumstances beyond its reasonable control.

**17. Non-Appropriation of Funds.**

17.1 Validity and enforcement of this Agreement is subject to appropriations by the General Assembly of the specific funds necessary for contract performance. Should such funds not be so appropriated DDOE may immediately terminate this Agreement, and absent such action this Agreement shall be terminated as to any obligation of the State requiring the expenditure of money for which no specific appropriation is available, at the end of the last fiscal year for which no appropriation is available or upon the exhaustion of funds.

17.2 Notwithstanding any other provisions of this Agreement, this Agreement shall terminate and DDOE's obligations under it shall be extinguished at the end of the fiscal year in which the State of Delaware fails to appropriate monies for the ensuing fiscal year sufficient for the payment of all amounts which will then become due.

**18. State of Delaware Business License.**

UD and all subcontractors represent that they are properly licensed and authorized to transact business in the State of Delaware as provided in 30 *Del. C.* § 2301.

**19. Complete Agreement.**

19.1 This agreement and its Appendices shall constitute the entire agreement between DDOE and UD with respect to the subject matter of this Agreement and shall not be modified or changed without the express written consent of the parties. The provisions of this agreement supersede all prior oral and written quotations, communications, agreements and understandings of the parties with respect to the subject matter of this Agreement.

19.2 If the scope of any provision of this Agreement is too broad in any respect

whatsoever to permit enforcement to its full extent, then such provision shall be enforced to the maximum extent permitted by law, and the parties hereto consent and agree that such scope may be judicially modified accordingly and that the whole of such provisions of the Agreement shall not thereby fail, but the scope of such provision shall be curtailed only to the extent necessary to conform to the law.

19.3 UD may not order any product requiring a purchase order prior to DDOE's issuance of such order. Each Appendix, except as its terms otherwise expressly provide, shall be a complete statement of its subject matter and shall supplement and modify the terms and conditions of this Agreement for the purposes of that engagement only. No other agreements, representations, warranties or other matters, whether oral or written, shall be deemed to bind the parties hereto with respect to the subject matter hereof.

## **20. Miscellaneous Provisions.**

20.1 In performance of this Agreement, UD shall comply with all applicable federal, state and local laws, ordinances, codes and regulations. UD shall solely bear the costs of permits and other relevant costs required in the performance of this Agreement.

20.2 Neither this Agreement nor any appendix may be modified or amended except by the mutual written agreement of the parties. No waiver of any provision of this Agreement shall be effective unless it is in writing and signed by the party against which it is sought to be enforced.

20.3 The delay or failure by either party to exercise or enforce any of its rights under this Agreement shall not constitute or be deemed a waiver of that party's right thereafter to enforce those rights, nor shall any single or partial exercise of any such right preclude any other or further exercise thereof or the exercise of any other right.

20.4 UD covenants that it presently has no interest and that it will not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of services required to be performed under this Agreement. UD further covenants, to its knowledge and ability, that in the performance of said services no person having any such interest shall be employed.

20.5 UD acknowledges that DDOE has an obligation to ensure that public funds are not used to subsidize private discrimination. UD recognizes that if they refuse to hire or do business with an individual or company due to reasons of race, color, gender, ethnicity, disability, national origin, age, or any other protected status, DDOE may declare UD in breach of the Agreement, terminate the Agreement, and designate UD as non-responsible.

20.6 UD warrants that no person or selling agency has been employed or retained

to solicit or secure this Agreement upon an agreement or understanding for a commission, or a percentage, brokerage or contingent fee. For breach or violation of this warranty, DDOE shall have the right to annul this contract without liability or at its discretion deduct from the contract price or otherwise recover the full amount of such commission, percentage, brokerage or contingent fee.

20.7 This Agreement was drafted with the joint participation of both parties and shall be construed neither against nor in favor of either, but rather in accordance with the fair meaning thereof.

20.8 UD shall maintain all public records, as defined by 29 *Del. C.* § 502(7), relating to this Agreement and its deliverables for the time and in the manner specified by the Delaware Division of Archives, pursuant to the Delaware Public Records Law, 29 *Del. C.* Ch. 5. During the term of this Agreement, upon reasonable notice, authorized representatives of DDOE may inspect or audit UD's performance and records pertaining to this Agreement at the UD business office during normal business hours.

## 21. Insurance.

21.1 UD shall maintain the following insurance during the term of this Agreement:

- A. Worker's Compensation and Employer's Liability Insurance in accordance with applicable law, **and**
- B. Comprehensive General Liability - \$1,000,000.00 per person/\$3,000,000 per occurrence, **and**
- C. Medical/Professional Liability - \$1,000,000.00 per person/\$3,000,000 per occurrence; or
- D. Miscellaneous Errors and Omissions - \$1,000,000.00 per person/\$3,000,000 per occurrence, or
- E. Automotive Liability Insurance covering all automotive units used in the work with limits of not less than \$100,000 each person and \$300,000 each accident as to bodily injury and \$25,000 as to property damage to others.

21.2. UD shall provide forty-five (45) days written notice of cancellation or material change of any policies.

21.3. Before any work is done pursuant to this Agreement, the Certificate of Insurance and/or copies of the insurance policies, referencing the contract number

stated herein, shall be filed with the State. The certificate holder is as follows:

Delaware Department of Education  
401 Federal Street, Suite 2  
Dover, DE 19901

21.4. In no event shall the State of Delaware be named as an additional insured on any policy required under this agreement.

**22. Assignment of Antitrust Claims.**

As consideration for the award and execution of this contract by the State, UD hereby grants, conveys, sells, assigns, and transfers to DDOE all of its right, title and interest in and to all known or unknown causes of action it presently has or may now or hereafter acquire under the antitrust laws of the United States and the State of Delaware, relating to the particular goods or services purchased or acquired by the State pursuant to this contract.

**23. Governing Law.**

This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware, except where Federal Law has precedence. UD consents to jurisdiction venue in the State of Delaware.

**24. Notices.**

Any and all notices required by the provisions of this Agreement shall be in writing and shall be mailed, certified or registered mail, return receipt requested. All notices shall be sent to the following addresses:

CONTRACTOR:



*Clarissa Roth*  
~~Dr. John Jungck, Project Director~~  
~~DISCOVERY: The Discovery Delaware Interdisciplinary~~  
~~STEM Citizens Science Project~~  
University of Delaware  
~~402A ISE Lab~~ *210 Hulihan Hall*  
Newark, DE 19716  
Phone: (302) 831-~~6400~~ *8626*  
Email: ~~jungck@udel.edu~~  
*croth*

DDOE:

David Blowman, Associate Secretary  
Financial Management and Operations  
Delaware Department of Education  
John G. Townsend Building  
401 Federal Street, Suite 2  
Dover, DE 19901

Phone No. (302) 735-4040

Fax No. (302) 739-7768

DOE Certificated Staff coordinating activity:

John Epstein, Education Associate

IN WITNESS THEREOF, the Parties hereto have caused this Agreement to be duly executed as of the date and year first above written.

University of Delaware  
Original On File

Delaware Department of Education  
Original On File

Authorized Official  
*Clarissa Roth*  
Contract & Grant Specialist

~~David Blowman~~ (or Designee)  
Associate Secretary,  
Financial Management and Operations

*8/8/16*  
Date

Original On File

*7/26/16*  
Date Finance Director

Original On File

Principal Investigator  
*John R. Jungck*

*8/8/16*  
Date

~~Branch Associate Secretary~~

Original On File

*7/14/16*  
Date Workgroup Director  
Initials

## Comprehensive Project Budget Summary

### *Funding Request*

Project Title: DIScovery: The Discover Delaware Interdisciplinary STEM Citizen Science Project  
 Director: Professor John Jungck, Professor of Biological & Mathematical Sciences  
 LEA Partner Representative, Title: Renee Parsley, District Math Specialist, Capital School District  
 IHE Partner Representative, Title: John Jungck, Director of Dupont Interdisciplinary Science Learning Laboratories  
 Fiscal Agent (Institution Name): Department of Biological Sciences, University of Delaware

Direct Cost Requested	07/01/2016-06/30/2017
<b>Salaries and Other Employee Costs</b>	
• Professional	18,738
• Substitutes	8,400
• Teacher Compensation	32,550
• Tuition, if applicable	0
• Support Staff	613
• Students	1,000
• Other Employee Costs (Fringe Benefits)	7,114
<b>Consultants &amp; Contracted Services (List separately)</b>	
• Evaluator	16,000
<b>Partner Funding Request(s) if Given as a Sub- award(s)</b>	0
<b>In State Travel (Include registration costs)</b>	4,350
<b>Out of State Travel (Include registration costs)</b>	0
<b>Materials and Supplies</b>	2,500
• Food (must not exceed 1% of total request)	1,000
<b>Indirect Costs *</b>	6,785
<b>Other (please specify)</b> (Printing & Postage)	950
<b>Total</b>	<b>100,000</b>
<b>Cost per Teacher per Contact Hour</b>	<b>\$ 42.52</b>

\* The indirect cost rate for the fiscal agent shall not exceed 8% of direct costs.

*"DIScovery: The Discover Delaware – Interdisciplinary STEM Citizen Science Project"*

**UD/9-12 Science/Math Teachers/Schools**

### **Appendix A - Scope of Work**

## **Narrative for Comprehensive Project Budget Request**

The project budget narrative for the partnership funding request must describe **in detail** the basis for determining **each** amount shown on the budget form, with the exception of sub award(s) that will be explained in the partner funding request narrative(s). The project budget narrative should be aligned with the proposed work plan and should show evidence of effective, appropriate, and efficient use of funds.

This budget is presented as a request for funds for a new MSP grant through the period 07/01/2016-06/30/2017. *The University of Delaware will consider the costs and requests in the justification approved if an award is made and no contrary guidance from the agency is included in the award notice.*

1. *Salaries and Wages* covers six CNTT STEM UD faculty (Mark Baillie, Chemistry & Biochemistry, Jacqueline Hilsenbeck-Fajardo, Chemistry & Biochemistry, Alenka Hlousek-Radojeic, Biology, and Adebanjo Oriade, Physics and two engineers) who will provide curriculum development as well as more direct support for our January and June 2016 and professional development. They will each receive \$2,000 for each of the two years of the project. Dr. Amy Trauth-Nare, Associate Director for Science for the Professional Development Center for Educators, is a co-PI on this project and will continue to provide leadership for the project at 8.33% effort for a cost of \$6,738 for the first year. The Principal Investigator and project director, Prof. John Jungck, Director of the Interdisciplinary Science and Engineering Learning Laboratory, will provide project leadership as an in kind contribution with an equivalent annual effort of 8% or approximately one day each month. Four ISE Lab Preceptors, will provide support for the ISE Lab professional development. These Lab Preceptors are 100% university funded and, as such, will require no additional project support.
2. The grant will also include stipends for undergraduate University of Delaware students who will serve in a variety of support roles before and during the summer academy. We will recruit undergraduates in the NUCLEUS program as we are able. Given a target of 96 academy students, we anticipate a need for funding for four undergraduates (one for each of the four simultaneous lab sessions) at \$250 per student per week during the week of the academy itself, for a total of  $4 \times \$250 = \$1,000$ . These undergraduates will work out of the ISE Lab.
3. We are also requesting funds to cover clerical support for the Teacher (January) and Student (June) academies. This represents an expense for a total of \$613 in clerical support.
4. *Fringe Benefits* for faculty at the University of Delaware are calculated as 35.9% and salaried staff as 63.1%.
5. *Travel In-State* will cover driving for the project leadership to the eight participating school sites the spring and fall.
  - a. Each site is expected to receive at least two site visits by project leadership during the school year. Driving costs are compensated at \$0.54 per mile. Calculating a mean distance to participating schools to be approximately 15 miles, this results in a budget of approximately \$250 for this aspect of local travel.
  - b. We are also requesting participant support costs in the form of a parking offset of \$7.50 per vehicle at the Academy Street Parking garage that is two blocks south of the ISE Lab and hence ideally suited for participant parking. The \$7.50 per diem is a special rate for educators and, assuming carpooling by participating teachers, we are requesting 30 parking passes each to cover parking for 42 teachers for each of the two days of the January Winter Teacher Workshop and each of the five days of the Summer STEM Student Academy for a total of  $\$7.50 \times 30 \times 7 = \$1,575$ . We are once again requesting funds to support bus transportation for students to attend our Student STEM Summer Academy in June. We estimate that five school districts (Appoquinimink, Brandywine, Capital, Christina, Colonial) will be able to take advantage of the offer of bus transportation for their students for four days in June at an

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**UD/9-12 Science/Math Teachers/Schools**

estimate of \$505 per school district. This cost will go to provide broader access for students from participating districts.

6. *Travel Out-of-State:* Because the MSP program no longer will hold a national conference, we have removed this item from our request.
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8. *Consultants and Contracts*
  - a. In order to evaluate the success of this project, we will contract with Research for Better Schools (RBS), a third-party evaluator with extensive experience in conducting state-funded MSP evaluations in the mid-Atlantic region. Specifically, the RBS evaluators will administer appropriate pre/post measures of teachers' content knowledge (using validated tools based upon MOSART) as well as survey data on participant, both student and teacher, attitudes. Administer the online teacher content assessment at the January 2017 PD event and again in June 2017 and analyze changes in teacher content knowledge. Given the extensive nature of instrument development, data collection and analysis, we are requesting that \$16,000 be allocable to the evaluator for this proposal.
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    - ii. RBS will measure summative outcomes using the following methods. First, they will analyze participants' knowledge using items culled from the Chemistry and Physics MOSART and additional Biology questions that the project administers at the January in-person professional development (PD) and June Summer Institute. Second, they will measure changes in teacher practice through an annual focus group interview and surveys completed in January and June. The focus group interview will provide some qualitative details that are missed in quantitative data collection.
    - iii. Third, pending the MSP project liaison's assisted coordination and receipt of student data, RBS will use a matched comparison group design for examining differences in student achievement on the Smarter Balanced assessment. Working with the MSP liaison, RBS will develop the data request to be used for analyzing students' course-taking patterns. RBS will refrain from using additional student assessments because of growing concerns about the burden on students, but RBS will ask teachers about changes that they observe in their students during focus group interviews. In all, RBS will draw conclusions about impacts of the DIScovery Project from analyses of evidence collected from interviews, surveys, review of materials, and observations of the PD.
9. Teacher Compensations will cover participation of 42 project teachers (approximately 5 from each of 8 schools) for a 5-day summer academy to be compensated at \$155 for a total of \$32,550. This funding is regarded as incentivizing teacher participation during the summer and is, therefore, subject to indirect costs.
10. Substitute costs will be covered by the grant at \$100 per day for a mean of 42 participating teachers for the two ISE Lab immersion days in January 2015. This cost of  $42 \times 2 \times \$100 = \$8,400$  is regarded as teacher support and is, therefore, not subject to indirect costs.
11. Tuition: NA
12. Other (Printing, Postage, etc.): We are requesting \$500 to cover costs of printing for materials for both our Winter Workshop and Student STEM Summer Academy.
13. Partner Funding Requests: NA
14. Food: Although the cost to provide lunch for our 42 teachers plus guests for two days during the Winter STEM Workshop and Student STEM Summer Academy exceeds the allotted amount, the grant guidelines limit

*"DIScovery: The Discover Delaware – Interdisciplinary STEM Citizen Science Project"*

**UD/9-12 Science/Math Teachers/Schools**

## **Appendix A - Scope of Work**

expenditures of grant funds to at most 1% of the total budget. This limits our food request to \$1,000.

15. Indirect Costs: The University of Delaware's predetermined rate of 56% for FY17, effective 07/01/2015 was not used; rather, the 8% sponsor cap was implemented. The University of Delaware's Facilities and Administrative (F&A) rates are approved by the Department of Defense, Office of Naval Research. The distribution base for the F&A rate is MTDC. Equipment, capital expenditures, charges for patient care and tuition remission, rental costs of offsite facilities, scholarships, fellowships, and vessel (ship) charges as well as the portion of each subcontract in excess of \$25,000 shall be excluded from the modified total direct costs. A copy of our Negotiation agreement with the Office of Naval Research can be found at <http://www.udel.edu/research/pdf/UD-FY16-18-Ext-Agree-Signed.pdf>

*"DIScovery: The Discover Delaware – Interdisciplinary STEM Citizen Science Project"*

**UD/9-12 Science/Math Teachers/Schools**

### DISCOVERY Timeline

**July & August, 2016:** Interdisciplinary STEM lessons implemented at the June 2016 Student Summer STEM Academy will be entered with artifacts including teacher notes, student work, photos and video vignettes, into the project Schoology website.

**September-December, 2016:** Teachers in participating schools will implement both their own interdisciplinary lessons as well as other lessons experienced at the previous June's Summer Academy in their own classrooms.

**January, 2017:** The 2-day 2017 Winter ISE Workshop will take place in UD's Interdisciplinary Science & Engineering Lab at which ISE Lab faculty and preceptors will present challenging new Interdisciplinary Problem-Based Lessons for high school teacher teams to experience.

**February-May, 2017:** School teams will develop or adapt new lessons to be implemented at the Student Summer STEM Academy with assistance from project personnel.

**June, 2017:** The week-long fourth annual Student Summer STEM Academy featuring new iSTEM lessons taught by participating high school STEM teams will take place in the ISE Lab and welcome another cohort of students recruited from participating high schools.



## State of Delaware Department of Education Federal Funds Budget Form

Federal Grant: Delaware Mathematics & Science Partnership (MSF) Program LEA/Agency: University of Delaware  
 Project Title: DISCOVERY: The Delaware Delaware Middle/High School STEM Cluster Science Project Project  
 Project Start Date: 7/1/2016 Project End Date: 6/30/2017

Expense Types and Account Codes: Salaries (5100) and Other Employee Costs (5120)						
Employee's Name	Title	FTE Percentage		Federal Funds Requested	Matching Funds	Total Funds
<b>PROFESSIONAL:</b>						
<u>Amy Trauth-Nare</u>	Director For Center for Educators			\$6,738.00		
<u>Mark Baillie</u>	UD Faculty			\$2,000.00		
<u>JacquelineHilsenbeck-Fajardo</u>	UD Faculty			\$2,000.00		
<u>Alenka Hlousek-Radojic</u>	UD Faculty			\$2,000.00		
<u>Adebanjo Oriade</u>	UD Faculty			\$2,000.00		
<u>John Jungck</u>	Director ISE Labs			\$4,000.00		
<u>Engineers</u>	TBD					\$0.00
Subtotal				\$18,738.00	\$0.00	\$18,738.00
<b>SUBSTITUTES:</b>						
SUBSTITUTE	\$100 per day for a mean of 42 participating teachers					\$0.00
Teacher Compensation	42 project teachers compensated at \$155 for 5-day			\$32,550.00		\$32,550.00
Subtotal				\$32,550.00	\$0.00	\$32,550.00
<b>SUPPORT STAFF:</b>						
	Clerical Support			\$613.00		\$613.00
Subtotal				\$613.00	\$0.00	\$33,163.00
<b>STUDENTS:</b>						
	Undergraduate			\$1,000.00		\$1,000.00
Subtotal				\$1,000.00	\$0.00	\$34,163.00
<b>TOTAL SALARIES:</b>				<b>\$52,901.00</b>	<b>\$0.00</b>	<b>\$118,614.00</b>
<b>OTHER EMPLOYEE COSTS:</b>						
<b>Total of Fringe Benefits</b>				\$7,114.00		
	FICA			\$0.00	\$0.00	\$0.00
	Medicaid			\$0.00	\$0.00	\$0.00
	Pension			\$0.00	\$0.00	\$0.00
	Workman's Comp			\$0.00	\$0.00	\$0.00
	Unemployment Insurance			\$0.00	\$0.00	\$0.00
	Health Insurance/Other Non-Taxed Benefits		Estimate	\$0.00	\$0.00	\$0.00
Subtotal				\$7,114.00	\$0.00	\$7,114.00
<b>TOTAL SALARY &amp; EMPLOYEE COSTS</b>				<b>\$60,015.00</b>	<b>\$0.00</b>	<b>\$60,015.00</b>

Expense Types and Account Codes: Travel (5400)					
Destination	Purpose	# of Travelers	Federal Funds Requested	Matching Funds	Total Funds
In State Travel	Driving to the eight participating school sites in the spring and fall including registration costs.		\$4,350.00		\$4,350.00
					\$0.00
					\$0.00
<b>TOTAL TRAVEL COSTS</b>			<b>\$4,350.00</b>	<b>\$0.00</b>	<b>\$4,350.00</b>

Expense Types and Account Codes: Contractual Services (5500)					
Vendor Name	Service Provided		Federal Funds Requested	Matching Funds	Total Funds
Research for Better Schools (RBS)	Evaluator		\$16,000.00		\$16,000.00
					\$0.00
					\$0.00
<b>TOTAL CONTRACTUAL SERVICES COSTS</b>			<b>\$16,000.00</b>	<b>\$0.00</b>	<b>\$16,000.00</b>

### Appendix A - Scope of Work

Expense Types and Account Codes: Indirect Cost (5560)				
Modified Total Direct Cost	Approved Indirect Cost Rate for grant period	Federal Funds Requested	Matching Funds	Total Funds
\$84,815.00	8.00000%	\$6,785.20	N/A	\$6,785.20
<b>TOTAL INDIRECT COSTS</b>		\$6,785.20		\$6,785.20

Expense Types and Account Codes: Supplies and Materials (5600)					
Item Description	Quantity	Unit Price	Federal Funds Requested	Matching Funds	Total Funds
Software, Eppendorf tubes, gels, chemicals, petri, plates			\$2,500.00		\$2,500.00
Food			\$1,000.00		\$1,000.00
Printing and Postages			\$950.00		
Teacher Stipends			\$8,400.00		
					\$0.00
<b>TOTAL SUPPLIES AND MATERIALS COSTS</b>			\$12,850.00	\$0.00	\$12,850.00

Expense Types and Account Codes: Capital Outlay (5700)					
Item Description	Quantity	Unit Price	Federal Funds Requested	Matching Funds	Total Funds
<b>Replacement Equipment</b>					
<b>New Equipment</b>					\$0.00
					\$0.00
<b>TOTAL SUPPLIES AND MATERIALS COSTS</b>			\$0.00	\$0.00	\$0.00

<b>GRAND TOTAL</b>			<b>Federal Funds Requested</b>	<b>Matching Funds</b>	<b>Total Funds</b>
			\$100,000.20	\$0.00	\$100,000.20



**STATE OF DELAWARE  
DEPARTMENT OF EDUCATION**

**BUDGET SUMMARY OF FEDERAL FUNDS**

LEA/Agency Name: University of Delaware Project Title: DISCOVERY: The Discover Delaware Inter  
 Federal Grant Title: Delaware Mathematics & Science Partnership (MSP) Program

Account Code	5100	5120	5400	5500	5550	5600	5700	Total
Account Code Name	Salaries	OFC's	Travel	Contracted Services	Indirect	Supplies & Materials	Capital Outlay	Budget
	\$52,901.00	\$7,114.00	\$4,350.00	\$16,000.00	\$6,785.20	\$12,850.00	\$0.00	\$100,000.20
<b>ACTIVITY</b>								
<b>Total Budget</b>	<b>\$52,901.00</b>	<b>\$7,114.00</b>	<b>\$4,350.00</b>	<b>\$16,000.00</b>	<b>\$6,785.20</b>	<b>\$12,850.00</b>	<b>\$0.00</b>	<b>\$100,000.20</b>

Completed By: \_\_\_\_\_ Date: 6/28/2016  
 Chief Financial Officer or Business Manager: Clarissa Rote, Contract & Grant Specialist Date: \_\_\_\_\_



**State of Delaware  
Department of Education  
Subgrant Application**

**LEA/Agency/Organization Information**

Name: University of Delaware Date: 06/08/2016

Address 1: 210 Hullihen Hall  
Street Address P.O. Box

Address 2: Newark DE 19716-0099  
City State Zip Code

DUNS # 05-900-7500

DEPT ID: \_\_\_\_\_

Amount of Funding Requested: \$100,000 Total Cost of Project: \$100,000

Coordinator's Name: John Jungck Email: jungck@udel.edu Telephone: 302-831-6400

Proposed Sub-Grant Project Title: DIScovery: The Discover Delaware Interdisciplinary STEM Citizen Science Project

For FSF users, indicate department number under which funds should be loaded: \_\_\_\_\_

**Description of Project:**

In the DIScovery project, interdisciplinary teacher teams will attend a two-day Winter ISE Workshop in the University of Delaware's ISE lab where they will experience a range of new Interdisciplinary lessons. They will then return to their own schools to implement and refine versions of these lessons or other new interdisciplinary lessons of their own devising in their own classrooms. During June, these school-based STEM teams will implement these laboratory lessons at an annual Student Summer STEM Academy in the ISE Lab for as many as 80 high school students from participating schools with an emphasis on recruiting HUGS for this unique experience. Evaluation will assess teacher development of professional pedagogical expertise, incorporation of more quantitative reasoning in their classrooms, maintenance of interdisciplinary teams of science and math teachers within and between their participating high schools, and their strategies to enact these practices for students in Delaware classrooms.

**Objectives and Goals of the Project (How will this sub-grant strengthen organization, make improvement, or achieve success?):**

The primary goal is to build upon the success of our previous MSP funded project, Practicing the STEM Practices in an Interdisciplinary Laboratory Setting, by: (1) sustaining the progress of within-school interdisciplinary teams of teachers of in building, vetting, and implementing interdisciplinary, collaborative, investigative activities; (2) adding new school teams and expanding the existing teams by including an arts teacher; (3) incorporating state-wide Citizen Science projects that involve remote sensing, place-based learning, sustainability, and health issues; and (4) address the need for greater success, perseverance, and interest in STEM of students from historically underrepresented groups (HUGs).

**Specific Activities (Include information about service delivery and timeline):**

July 1, 2016 - June 30, 2017. January 2017 Winter ISE Workshop; June 2017 Summer STEM Academy. Detailed timeline attached.

Original On File +

Signature of Chief School Officer/Agency Head: \_\_\_\_\_

Printed Name: Robin W. Morgan Date: 6/27/2016  
Original On File

Signature of Business Manager: \_\_\_\_\_

Printed Name: Clarissa Roth, Contract & Grant Specialist Date: 6/27/2016

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13. Partner Funding Requests: NA
14. Food: Although the cost to provide lunch for our 42 teachers plus guests for two days during the Winter STEM Workshop and Student STEM Summer Academy exceeds the allotted amount, the grant guidelines limit

*"DISCOVERY: The Discover Delaware – Interdisciplinary STEM Citizen Science Project"*

**UD/9-12 Science/Math Teachers/Schools**

expenditures of grant funds to at most 1% of the total budget. This limits our food request to \$1,000.

15. Indirect Costs: The University of Delaware's predetermined rate of 56% for FY17, effective 07/01/2015 was not used; rather, the 8% sponsor cap was implemented. The University of Delaware's Facilities and Administrative (F&A) rates are approved by the Department of Defense, Office of Naval Research. The distribution base for the F&A rate is MTDC. Equipment, capital expenditures, charges for patient care and tuition remission, rental costs of offsite facilities, scholarships, fellowships, and vessel (ship) charges as well as the portion of each subcontract in excess of \$25,000 shall be excluded from the modified total direct costs. A copy of our Negotiation agreement with the Office of Naval Research can be found at <http://www.udel.edu/research/pdf/UD-FY16-18-Ext-Agree-Signed.pdf>

*"DIScovery: The Discover Delaware – Interdisciplinary STEM Citizen Science Project"*

**UD/9-12 Science/Math Teachers/Schools**

**DIScovery: The Discovery DE Interdisciplinary STEM Citizen Science Project**  
**Math and Science Partnership Grant**  
**Appendix B - Payment Schedule**

<b>Date Range</b>	<b>Scope of Work</b>	<b>Amount</b>	<b>DOE Deliverables</b>
<b>July 1, 2016 – September 30, 2016</b>	Interdisciplinary STEM lessons implemented at the June 2016 Student Summer STEM Academy will be entered with artifacts including teacher notes, student work, photos and video vignettes, into the project Schoology website.	<b>\$5,000.00</b>	Schoolology documents, lesson plans, etc. Staff hours/dates
<b>October 1, 2016 – December 31, 2016</b>	Teachers in participating schools will implement both their own interdisciplinary lessons as well as other lessons experienced at the previous June's Summer Academy in their own classrooms.	<b>\$ 10,000.00</b>	School lesson plans Staff hours/dates
<b>January 1, 2017 – January 31, 2017</b>	The 2-day 2017 Winter ISE Workshop will take place in UD's Interdisciplinary Science & Engineering Lab at which ISE Lab faculty and preceptors will present challenging new Interdisciplinary Problem-Based Lessons for high school teacher teams to experience.	<b>\$40,000.00</b>	Winter ISE sign-in sheets and new lessons Staff hours/dates
<b>February 1, 2017 – May 30, 2017</b>	School teams will develop or adapt new lessons to be implemented at the Student Summer STEM Academy with assistance from project personnel.	<b>\$10,000.00</b>	School lesson plans Staff hours/dates
<b>June 1, 2017 – June 30, 2017</b>	The week-long fourth annual Student Summer STEM Academy featuring new iSTEM lessons taught by participating high school STEM teams will take place in the ISE Lab and welcome another cohort of students recruited from participating high schools.	<b>\$35,000.00</b>	Attendance records and sign-in sheets, iSTEM lesson plans Staff hours/dates
<b>TOTAL</b>		<b>\$100,000.00</b>	

**Delaware Department of Education  
University of Delaware Contract**

Math Science Partnership Grant  
Conceptual Teaching & Real Time Coaching in Mathematics Laboratory Classrooms  
(CTRTC)

This Agreement, which is effective only upon the execution of a State of Delaware Purchase Order, and will end on **September 30, 2017**, is between the State of Delaware, Department of Education, hereafter referred to as DDOE, and **University of Delaware**, hereafter referred to as UD.

WHEREAS, DDOE desires to obtain certain services to **have UD provide services specified in the Statement of Work attached hereto and identified as Appendix A**; and

WHEREAS, UD desires to provide such services to DDOE on the terms set forth below;

WHEREAS, DDOE and UD represent and warrant that each party has full right, power and authority to enter into and perform under this Agreement;

FOR AND IN CONSIDERATION OF the premises and mutual agreements herein, DDOE and UD agree as follows:

**1. Services.**

1.1 UD shall perform for DDOE the services specified in the Appendices to this Agreement, attached hereto and made a part hereof.

1.2 Any conflict or inconsistency between the provisions of the following documents shall be resolved by giving precedence to such documents in the following order: (a) this Agreement, including the Statement of Work (including any amendments or modifications thereto); (b) DDOE's request for proposals, attached hereto as Appendix C; and (c) UD's response to the request for proposals, attached hereto as Exhibit D. The aforementioned documents are specifically incorporated into this Agreement and made a part hereof.

1.3 DDOE may, at any time, by written order, make changes in the scope of this Agreement and in the services or work to be performed. No services for which additional compensation may be charged by UD shall be furnished without the written authorization of DDOE. When DDOE desires any addition or deletion to the deliverables or a change in the Services to be provided under this Agreement, it shall notify UD, who shall then submit to DDOE a "Change Order" for approval authorizing said change. The Change Order shall state whether the change shall cause an alteration in the price or the time required by UD for any aspect of its performance under this Agreement. Pricing of changes shall be consistent with

those established within this Agreement.

1.4 UD will not be required to make changes to its scope of work that result in UD's costs exceeding the current unencumbered budgeted appropriations for the services. Any claim of either party for an adjustment under Section 1 of this Agreement shall be asserted in the manner specified in the writing that authorizes the adjustment.

## **2. Payment for Services and Expenses.**

2.1 The term of the initial contract shall be from July 1, 2016 through September 30, 2017.

2.2 DDOE will pay UD for the performance of services described in Appendix A, Statement of Work. The fee will be paid in accordance with the payment schedule attached hereto as part of Appendix B.

2.3 DDOE's obligation to pay UD for the performance of services described in Appendix A, Statement of Work will not exceed the fixed fee amount of \$400,000. It is expressly understood that the work defined in the appendices to this Agreement must be completed by UD and it shall be UD's responsibility to ensure that hours and tasks are properly budgeted so that all services are completed for the agreed upon fixed fee. DDOE's total liability for all charges for services that may become due under this Agreement is limited to the total maximum expenditure(s) authorized in DDOE's purchase order(s) to UD.

2.4 UD shall submit invoices in accordance with Statement of Work; Appendix A. DDOE agrees to pay those invoices within thirty (30) days of receipt. In the event DDOE disputes a portion of an invoice, DDOE agrees to pay the undisputed portion of the invoice within thirty (30) days of receipt and to provide UD a detailed statement of DDOE's position on the disputed portion of the invoice within thirty (30) days of receipt. DDOE's failure to pay any amount of an invoice that is not the subject of a good-faith dispute within thirty (30) days of receipt shall entitle UD to charge interest on the overdue portion at no more than 1.0% per month or 12% per annum. All payments should be sent to UD, Cashier's Office, 30 Lovett Avenue, 116 Student Services Building, Newark, DE 19716 Attn: Dr. Faith Muirhead.

2.5 Unless provided otherwise in an Appendix, all expenses incurred in the performance of the services are to be paid by UD. If an Appendix specifically provides for expense reimbursement, UD shall be reimbursed only for reasonable expenses incurred by UD in the performance of the services, including, but not necessarily limited to, travel and lodging expenses, communications charges, and computer time and supplies.

2.6 DDOE is a sovereign entity, and shall not be liable for the payment of federal, state and local sales, use and excise taxes, including any interest and penalties from any related deficiency, which may become due and payable as a consequence of this Agreement.

2.7 DDOE shall subtract from any payment made to UD all damages, costs and expenses caused by UD's negligence, resulting from or arising out of errors or omissions in UD's work products, which have not been previously paid to UD.

2.8 Invoices shall be submitted to:

John Epstein, Education Associate  
Curriculum, Instruction & Professional Development  
Delaware Department of Education  
401 Federal Street  
Suite 2  
Dover, DE 19901

### **3. Responsibilities of UD.**

3.1 UD shall be responsible for the professional quality, technical accuracy, timely completion, and coordination of all services furnished by UD, its subcontractors and its principals, officers, employees and agents under this Agreement. In performing the specified services, UD shall follow practices consistent with generally accepted professional and technical standards. UD shall be responsible for ensuring that all services, products and deliverables furnished pursuant to this Agreement comply with the standards promulgated by the Department of Technology and Information ("DTI") published at <http://dti.delaware.gov/>, and as modified from time to time by DTI during the term of this Agreement. If any service, product or deliverable furnished pursuant to this Agreement does not conform with DTI standards, UD shall, at its expense and option either (1) replace it with a conforming equivalent or (2) modify it to conform with DTI standards. UD shall be and remain liable in accordance with the terms of this Agreement and applicable law for all damages to DDOE directly caused by UD's failure to ensure compliance with DTI standards.

3.2 It shall be the duty of the UD to assure that all products of its effort are technically sound and in conformance with all pertinent Federal, State and Local statutes, codes, ordinances, resolutions and other regulations. UD will not produce a work product that violates or infringes on any copyright or patent rights. If deficiencies in the services specified in the Statement of Work require revisions or corrections, UD and DDOE will work together in good faith to establish a remediation plan whereby vendor will correct any deficiencies.

3.3 Permitted or required approval by DDOE of any products or services furnished by UD shall not in any way relieve UD of responsibility for the

professional and technical accuracy and adequacy of its work. DDOE's review, approval, acceptance, or payment for any of UD's services herein shall not be construed to operate as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement, and UD shall be and remain liable in accordance with the terms of this Agreement and applicable law for all damages to DDOE caused by UD's performance or failure to perform under this Agreement.

3.4 UD shall appoint Key Personnel and a Project Manager who will manage the performance of services. All of the services specified by this Agreement shall be performed by the Project Manager, or by UD's associates and employees under the personal supervision of the Project Manager.

Project	Team	Title	% of Project Involvement
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As mutually agreed by the parties, the individuals listed above shall be designated Key Personnel and be subject to Section 3.5 below.

3.5 Performance of Key Personnel assigned by UD will be monitored by DDOE, who will provide documented quarterly assessments of the progress of the work to UD to ensure that the work, as specified in the attached Statement of Work, is being performed according to DDOE standards. Upon a documented determination by DDOE that Key Personnel assigned by UD are ineffective in the performance of the work enumerated in the Statement of Work, the parties will communicate in good faith to reassign Key Personnel to perform other services and develop a mutually acceptable replacement plan. Should the parties mutually agree that Key Personnel need to be diverted off the project for what are now unforeseeable circumstances, the parties will work out a mutually agreeable transition plan to replace said personnel.

3.6 UD shall furnish to DDOE's designated representative copies of all correspondence to regulatory agencies for review prior to mailing such correspondence.

3.7 UD agrees that its officers and employees will cooperate with DDOE in the performance of services under this Agreement and will be available for consultation with DDOE at such reasonable times with advance notice as to not conflict with their other responsibilities.

3.8 UD has or will retain such employees as it may need to perform the services required by this Agreement.

3.9 UD will not use DDOE's name, either express or implied, in any of its advertising or sales materials without DDOE's express written consent.

3.10 The rights and remedies of DDOE provided for in this Agreement are in addition to any other rights and remedies provided by law.

**4. Time Schedule.**

4.1 A project schedule is included in Appendix B.

4.2 Any delay of services or change in sequence of tasks must be approved in writing by DDOE.

4.3 In the event that UD fails to complete the project or any phase thereof within the time specified in the Contract, or with such additional time as may be granted in writing by DDOE, or fails to prosecute the work, or any separable part thereof, with such diligence as will insure its completion within the time specified in this Agreement or any extensions thereof, DDOE shall suspend the payments scheduled as set forth in Appendix A.

**5. State Responsibilities.**

5.1 In connection with UD's provision of the Services, DDOE shall perform those tasks and fulfill those responsibilities specified in the appropriate Appendices.

5.2 DDOE agrees that its officers and employees will cooperate with UD in the performance of services under this Agreement and will be available for consultation with UD at such reasonable times with advance notice as to not conflict with their other responsibilities.

5.3 The services performed by UD under this Agreement shall be subject to review for compliance with the terms of this Agreement by DDOE's designated representatives. DDOE representatives may delegate any or all responsibilities under the Agreement to appropriate staff members, and shall so inform UD by written notice before the effective date of each such delegation.

5.4 The review comments of DDOE's designated representatives may be reported in writing as needed to UD. It is understood that DDOE's representatives' review comments do not relieve UD from the responsibility for the professional and technical accuracy of all work delivered under this Agreement.

5.5 DDOE shall, without charge, furnish to or make available for examination or use by UD as it may request, any data which DDOE has available, including as examples only and not as a limitation:

- a. Copies of reports, surveys, records, and other pertinent documents;
- b. Copies of previously prepared reports, job specifications, surveys,

records, ordinances, codes, regulations, other document, and information related to the services specified by this Agreement.

UD shall return any original data provided by DDOE.

5.6 DDOE shall assist UD in obtaining data on documents from public officers or agencies and from private citizens and business firms whenever such material is necessary for the completion of the services specified by this Agreement.

5.7 UD will not be responsible for accuracy of information or data supplied by DDOE or other sources to the extent such information or data would be relied upon by a reasonably prudent contractor.

5.8 DDOE agrees not to use UD's name, either express or implied, in any of its advertising or sales materials. UD reserves the right to reuse the nonproprietary data and the analysis of industry-related information in its continuing analysis of the industries covered.

## **6. Work Product.**

6.1 All materials, information, documents, and reports, whether finished, unfinished, or draft, developed, prepared, completed, or acquired by UD for DDOE relating to the services to be performed hereunder shall become the property of DDOE and shall be delivered to DDOE's designated representative upon completion or termination of this Agreement, whichever comes first. UD shall not be liable for damages, claims, and losses arising out of any reuse of any work products on any other project conducted by DDOE. DDOE shall have the right to reproduce all documentation supplied pursuant to this Agreement.

6.2 UD retains all title and interest to the data it furnished and/or generated pursuant to this Agreement. Retention of such title and interest does not conflict with DDOE's rights to the materials, information and documents developed in performing the project. Upon final payment, DDOE shall have a perpetual, nontransferable, non-exclusive paid-up right and license to use, copy, modify and prepare derivative works of all materials in which UD retains title, whether individually by UD or jointly with DDOE. Any and all source code developed in connection with the services provided will be provided to DDOE, and the aforementioned right and license shall apply to source code. The parties will cooperate with each other and execute such other documents as may be reasonably deemed necessary to achieve the objectives of this Section.

6.3 In no event shall UD be precluded from developing for itself, or for others, materials that are competitive with the Deliverables, irrespective of their similarity to the Deliverables. In addition, UD shall be free to use its general knowledge, skills and experience, and any ideas, concepts, know-how, and techniques within the

scope of its consulting practice that are used in the course of providing the services.

6.4 Notwithstanding anything to the contrary contained herein or in any attachment hereto, any and all intellectual property or other proprietary data owned by UD prior to the effective date of this Agreement (“Preexisting Information”) shall remain the exclusive property of UD even if such Preexisting Information is embedded or otherwise incorporated into materials or products first produced as a result of this Agreement or used to develop such materials or products. DDOE’s rights under this section shall not apply to any Preexisting Information or any component thereof regardless of form or media.

**7. Confidential Information.**

To the extent permissible under 29 *Del. C.* § 10001, et seq., the parties to this Agreement shall preserve in strict confidence any information, reports or documents obtained, assembled or prepared in connection with the performance of this Agreement.

**8. Warranty.**

8.1 UD warrants that its services to be provided pursuant to the Statement of Work will be performed in a good and workmanlike manner. UD agrees to re-perform any work not in compliance with the Statement of Work brought to its attention within a reasonable time after that work is performed.

8.2 Third-party products within the scope of this Agreement are warranted solely under the terms and conditions of the licenses or other agreements by which such products are governed. With respect to all third-party products and services purchased by UD for DDOE in connection with the provision of the Services, UD shall pass through or assign to DDOE the rights UD obtains from the manufacturers and/or vendors of such products and services (including warranty and indemnification rights), all to the extent that such rights are assignable.

**9. Indemnification; Limitation of Liability.**

9.1 UD shall indemnify and hold harmless the State, its agents and employees, from any and all liability, suits, actions or claims, together with all reasonable costs and expenses (including attorneys’ fees) directly arising out of (A) the negligence or other wrongful conduct of the UD, its agents or employees, or (B) UD’s breach of any material provision of this Agreement not cured after due notice and opportunity to cure, provided as to (A) or (B) that (i) UD shall have been notified promptly in writing by DDOE of any notice of such claim; and (ii) UD shall have the sole control of the defense of any action on such claim and all negotiations for its settlement or compromise.

9.2 If DDOE promptly notifies UD in writing of a third party claim against DDOE that any Deliverable infringes a copyright or a trade secret of any third party, UD will defend such claim at its expense and will pay any costs or damages that may be finally awarded against DDOE. UD will not indemnify DDOE, however, if the claim of infringement is caused by (1) DDOE's misuse or modification of the Deliverable; (2) DDOE's failure to use corrections or enhancements made available by UD; (3) DDOE's use of the Deliverable in combination with any product or information not owned or developed by UD; (4) DDOE's distribution, marketing or use for the benefit of third parties of the Deliverable or (5) information, direction, specification or materials provided by Client or any third party. If any Deliverable is, or in UD's opinion is likely to be, held to be infringing, UD shall at its expense and option either (a) procure the right for DDOE to continue using it, (b) replace it with a noninfringing equivalent, (c) modify it to make it noninfringing. The foregoing remedies constitute DDOE's sole and exclusive remedies and UD's entire liability with respect to infringement.

9.3 DDOE agrees that UD' total liability to DDOE for any and all damages whatsoever arising out of or in any way related to this Agreement from any cause, including but not limited to contract liability or UD negligence, errors, omissions, strict liability, breach of contract or breach of warranty shall not, in the aggregate, exceed fees paid to UD.

In no event shall UD be liable for special, indirect, incidental, economic, consequential or punitive damages, including but not limited to lost revenue, lost profits, replacement goods, loss of technology rights or services, loss of data, or interruption or loss of use of software or any portion thereof regardless of the legal theory under which such damages are sought, and even if UD has been advised of the likelihood of such damages.

## **10. Employees.**

10.1 UD has and shall retain the right to exercise full control over the employment, direction, compensation and discharge of all persons employed by UD in the performance of the services hereunder; provided, however, that it will, subject to scheduling and staffing considerations, attempt to honor DDOE's request for specific individuals.

10.2 Except as the other party expressly authorizes in writing in advance, neither party shall solicit, offer work to, employ, or contract with, whether as a partner, employee or independent contractor, directly or indirectly, any of the other party's involved, significant Personnel during their participation in the services or during the twelve (12) months thereafter. For purposes of this Section 10.2, "Personnel" includes any individual or company a party employs as a partner, employee or independent contractor and with which a party comes into direct contact in the

course of the services contemplated in this Agreement.

10.3 Possession of a Security Clearance, as issued by the Delaware Department of Safety and Homeland Security, may be required of any employee of UD who will be assigned to this project.

## **11. Independent Contractor.**

11.1 It is understood that in the performance of the services herein provided for, UD shall be, and is, an independent contractor, and is not an agent or employee of DDOE and shall furnish such services in its own manner and method except as required by this Agreement. UD shall be solely responsible for, and shall indemnify, defend and save DDOE harmless from all matters relating to the payment of its employees, including compliance with social security, withholding and all other wages, salaries, benefits, taxes, exactions, and regulations of any nature whatsoever.

11.2 UD acknowledges that UD and any subcontractors, agents or employees employed by UD shall not, under any circumstances, be considered employees of DDOE, and that they shall not be entitled to any of the benefits or rights afforded employees of DDOE, including, but not limited to, sick leave, vacation leave, holiday pay, Public Employees Retirement System benefits, or health, life, dental, long-term disability or workers' compensation insurance benefits. DDOE will not provide or pay for any liability or medical insurance, retirement contributions or any other benefits for or on behalf of DDOE or any of its officers, employees or other agents.

11.3 UD shall be responsible for providing liability insurance for its personnel.

11.4 As an independent contractor, UD has no authority to bind or commit DDOE. Nothing herein shall be deemed or construed to create a joint venture, partnership, fiduciary or agency relationship between the parties for any purpose.

## **12. Suspension.**

12.1 DDOE may suspend performance by UD under this Agreement for such period of time as DDOE, at its sole discretion, may prescribe by providing written notice to UD at least 30 working days prior to the date on which DDOE wishes to suspend. Upon such suspension, DDOE shall pay UD its compensation, based on the percentage of the project completed and earned until the effective date of suspension, less all previous payments. UD shall not perform further work under this Agreement after the effective date of suspension. UD shall not perform further work under this Agreement after the effective date of suspension until receipt of written notice from DDOE to resume performance.

12.2 In the event DDOE suspends performance by UD for any cause other than the error or omission of the UD, for an aggregate period in excess of 30 days, UD shall be entitled to an equitable adjustment of the compensation payable to UD under this Agreement to reimburse UD for additional costs occasioned as a result of such suspension of performance by DDOE based on appropriated funds and approval by DDOE.

**13. Termination.**

13.1 This Agreement may be terminated in whole or in part by either party in the event of substantial failure of the other party to fulfill its obligations under this Agreement through no fault of the terminating party; but only after the other party is given:

- a. Not less than 30 calendar days written notice of intent to terminate; and
- b. An opportunity for consultation with the terminating party prior to termination.

13.2 This Agreement may be terminated in whole or in part by DDOE for its convenience, but only after UD is given:

- a. Not less than 30 calendar days written notice of intent to terminate; and
- b. An opportunity for consultation with DDOE prior to termination.

13.3 If termination for default is effected by DDOE, DDOE will pay UD that portion of the compensation which has been earned as of the effective date of termination but:

- a. No amount shall be allowed for anticipated profit on performed or unperformed services or other work, and
- b. Any payment due to UD at the time of termination may be adjusted to the extent of any additional costs occasioned to DDOE by reason of UD's default.
- c. Upon termination for default, DDOE may take over the work and prosecute the same to completion by agreement with another party or otherwise. In the event UD shall cease conducting business, DDOE shall have the right to make an unsolicited offer of employment to any employees of UD assigned to the performance of the Agreement, notwithstanding the provisions of Section 10.2.

13.4 If after termination for failure of UD to fulfill contractual obligations it is determined that UD has not so failed, the termination shall be deemed to have been effected for the convenience of DDOE.

13.5 The rights and remedies of DDOE and UD provided in this section are in addition to any other rights and remedies provided by law or under this Agreement.

13.6 Gratuities.

13.6.1 DDOE may, by written notice to UD, terminate this Agreement if it is found after notice and hearing by DDOE that gratuities (in the form of entertainment, gifts, or otherwise) were offered or given by UD or any agent or representative of UD to any officer or employee of DDOE with a view toward securing a contract or securing favorable treatment with respect to the awarding or amending or making of any determinations with respect to the performance of this Agreement.

13.6.2 In the event this Agreement is terminated as provided in 13.6.1 hereof, DDOE shall be entitled to pursue the same remedies against UD it could pursue in the event of a breach of this Agreement by UD.

13.6.3 The rights and remedies of DDOE provided in Section 13.6 shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Agreement.

**14. Severability.**

If any term or provision of this Agreement is found by a court of competent jurisdiction to be invalid, illegal or otherwise unenforceable, the same shall not affect the other terms or provisions hereof or the whole of this Agreement, but such term or provision shall be deemed modified to the extent necessary in the court's opinion to render such term or provision enforceable, and the rights and obligations of the parties shall be construed and enforced accordingly, preserving to the fullest permissible extent the intent and agreements of the parties herein set forth.

**15. Assignment; Subcontracts.**

15.1 Any attempt by UD to assign or otherwise transfer any interest in this Agreement without the prior written consent of DDOE shall be void. Such consent shall not be unreasonably withheld.

15.2 Services specified by this Agreement shall not be subcontracted by UD, without prior written approval of DDOE.

15.3 Approval by DDOE of UD's request to subcontract or acceptance of or payment for subcontracted work by DDOE shall not in any way relieve UD of

responsibility for the professional and technical accuracy and adequacy of the work. All subcontractors shall adhere to all applicable provisions of this Agreement.

15.4 UD shall be and remain liable for all damages to DDOE caused by negligent performance or non-performance of work under this Agreement by UD, its subcontractor or its sub-subcontractor.

15.5 The compensation due shall not be affected by DDOE's approval of the UD's request to subcontract.

**16. Force Majeure.**

Neither party shall be liable for any delays or failures in performance due to circumstances beyond its reasonable control.

**17. Non-Appropriation of Funds.**

17.1 Validity and enforcement of this Agreement is subject to appropriations by the General Assembly of the specific funds necessary for contract performance. Should such funds not be so appropriated DDOE may immediately terminate this Agreement, and absent such action this Agreement shall be terminated as to any obligation of the State requiring the expenditure of money for which no specific appropriation is available, at the end of the last fiscal year for which no appropriation is available or upon the exhaustion of funds.

17.2 Notwithstanding any other provisions of this Agreement, this Agreement shall terminate and DDOE's obligations under it shall be extinguished at the end of the fiscal year in which the State of Delaware fails to appropriate monies for the ensuing fiscal year sufficient for the payment of all amounts which will then become due.

**18. State of Delaware Business License.**

UD and all subcontractors represent that they are properly licensed and authorized to transact business in the State of Delaware as provided in 30 *Del. C.* § 2301.

**19. Complete Agreement.**

19.1 This agreement and its Appendices shall constitute the entire agreement between DDOE and UD with respect to the subject matter of this Agreement and shall not be modified or changed without the express written consent of the parties. The provisions of this agreement supersede all prior oral and written quotations, communications, agreements and understandings of the parties with respect to the subject matter of this Agreement.

19.2 If the scope of any provision of this Agreement is too broad in any respect whatsoever to permit enforcement to its full extent, then such provision shall be enforced to the maximum extent permitted by law, and the parties hereto consent and agree that such scope may be judicially modified accordingly and that the whole of such provisions of the Agreement shall not thereby fail, but the scope of such provision shall be curtailed only to the extent necessary to conform to the law.

19.3 UD may not order any product requiring a purchase order prior to DDOE's issuance of such order. Each Appendix, except as its terms otherwise expressly provide, shall be a complete statement of its subject matter and shall supplement and modify the terms and conditions of this Agreement for the purposes of that engagement only. No other agreements, representations, warranties or other matters, whether oral or written, shall be deemed to bind the parties hereto with respect to the subject matter hereof.

## **20. Miscellaneous Provisions.**

20.1 In performance of this Agreement, UD shall comply with all applicable federal, state and local laws, ordinances, codes and regulations. UD shall solely bear the costs of permits and other relevant costs required in the performance of this Agreement.

20.2 Neither this Agreement nor any appendix may be modified or amended except by the mutual written agreement of the parties. No waiver of any provision of this Agreement shall be effective unless it is in writing and signed by the party against which it is sought to be enforced.

20.3 The delay or failure by either party to exercise or enforce any of its rights under this Agreement shall not constitute or be deemed a waiver of that party's right thereafter to enforce those rights, nor shall any single or partial exercise of any such right preclude any other or further exercise thereof or the exercise of any other right.

20.4 UD covenants that it presently has no interest and that it will not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of services required to be performed under this Agreement. UD further covenants, to its knowledge and ability, that in the performance of said services no person having any such interest shall be employed.

20.5 UD acknowledges that DDOE has an obligation to ensure that public funds are not used to subsidize private discrimination. UD recognizes that if they refuse to hire or do business with an individual or company due to reasons of race, color, gender, ethnicity, disability, national origin, age, or any other protected status, DDOE may declare UD in breach of the Agreement, terminate the Agreement, and designate UD as non-responsible.

20.6 UD warrants that no person or selling agency has been employed or retained to solicit or secure this Agreement upon an agreement or understanding for a commission, or a percentage, brokerage or contingent fee. For breach or violation of this warranty, DDOE shall have the right to annul this contract without liability or at its discretion deduct from the contract price or otherwise recover the full amount of such commission, percentage, brokerage or contingent fee.

20.7 This Agreement was drafted with the joint participation of both parties and shall be construed neither against nor in favor of either, but rather in accordance with the fair meaning thereof.

20.8 UD shall maintain all public records, as defined by 29 *Del. C.* § 502(7), relating to this Agreement and its deliverables for the time and in the manner specified by the Delaware Division of Archives, pursuant to the Delaware Public Records Law, 29 *Del. C.* Ch. 5. During the term of this Agreement, upon reasonable notice, authorized representatives of DDOE may inspect or audit UD's performance and records pertaining to this Agreement at the UD business office during normal business hours.

## **21. Insurance.**

21.1 UD shall maintain the following insurance during the term of this Agreement:

- A. Worker's Compensation and Employer's Liability Insurance in accordance with applicable law, **and**
- B. Comprehensive General Liability - \$1,000,000.00 per person/\$3,000,000 per occurrence, **and**
- C. Medical/Professional Liability - \$1,000,000.00 per person/\$3,000,000 per occurrence; or
- D. Miscellaneous Errors and Omissions - \$1,000,000.00 per person/\$3,000,000 per occurrence, or
- E. Automotive Liability Insurance covering all automotive units used in the work with limits of not less than \$100,000 each person and \$300,000 each accident as to bodily injury and \$25,000 as to property damage to others.

21.2. UD shall provide forty-five (45) days written notice of cancellation or material change of any policies.

21.3. Before any work is done pursuant to this Agreement, the Certificate of

Insurance and/or copies of the insurance policies, referencing the contract number stated herein, shall be filed with the State. The certificate holder is as follows:

Delaware Department of Education  
401 Federal Street, Suite 2  
Dover, DE 19901

21.4. In no event shall the State of Delaware be named as an additional insured on any policy required under this agreement.

**22. Assignment of Antitrust Claims.**

As consideration for the award and execution of this contract by the State, UD hereby grants, conveys, sells, assigns, and transfers to DDOE all of its right, title and interest in and to all known or unknown causes of action it presently has or may now or hereafter acquire under the antitrust laws of the United States and the State of Delaware, relating to the particular goods or services purchased or acquired by the State pursuant to this contract.

**23. Governing Law.**

This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware, except where Federal Law has precedence. UD consents to jurisdiction venue in the State of Delaware.

**24. Notices,**

Any and all notices required by the provisions of this Agreement shall be in writing and shall be mailed, certified or registered mail, return receipt requested. All notices shall be sent to the following addresses:

CONTRACTOR: Dr. Faith Muirhead, Project Director  
Conceptual Teaching and Real Time Coaching in  
Mathematics Laboratory Classrooms  
200 Academy Street, Rm 205  
Newark, DE 19716  
Phone: (302) 831-4490  
Email: muirhead@udel.edu

DDOE: David Blowman, Associate Secretary  
Financial Management and Operations  
Delaware Department of Education  
John G. Townsend Building  
401 Federal Street, Suite 2  
Dover, DE 19901

Phone No. (302) 735-4040

Fax No. (302) 739-7768

DOE Certificated Staff coordinating activity:

John Epstein, Education Associate

IN WITNESS THEREOF, the Parties hereto have caused this Agreement to be duly executed as of the date and year first above written.

University of Delaware

Original On File

Authorized Official

Jeanne Galvin-Clarke  
Associate Director, Prewood

8/16/14

Date

Original On File

Principal Investigator

Faith Muirhead

Date

8/7/16

Delaware Department of Education

Original On File

David Blowman (or Designee)

Associate Secretary,  
Financial Management and Operations

Original On File

7/29/14

Date

Finance Director

Initials

Original On File

Branch Associate Secretary

Original On File

7/14/16

Date

Workgroup Director

Initials

## **Appendix A: Scope of Work**

### **Conceptual Teaching and Real Time Coaching in Mathematics Laboratory Classrooms (CTRTC)**

#### **Project Description:**

Conceptual Teaching and Real Time Coaching in Mathematics Laboratory Classrooms (CTRTC) project is a professional development partnership for administrators, mathematics specialists, and coaches of teachers of children in grades 7-11 between the University of Delaware's Professional Development Center for Educators (PDCE), the University of Delaware's Department of Mathematical Sciences, The Delaware Academy for School Leadership at the University of Delaware, Red Clay, Brandywine, Laurel, and Colonial School Districts. The project focuses on building capacity within districts by providing professional development to increase deep conceptual and procedural knowledge of all participants and students and ensure access to rich mathematics for all students.

#### **Project Goals**

As a consequence of the Needs Assessment, we have established the following goals for the project:

1. Develop teachers' conceptual content knowledge, their conceptual and procedural schemas of knowledge, and their understanding of the research-based differences between conceptual and procedural knowledge
2. Provide concrete research-based strategies in every professional development setting to attend to issues of access and equity—including relationship-building, and how to elicit and build on the strengths of individual students and groups of students from cultural, socio-economic, and dis/ability perspectives
3. Support teachers in their classrooms through Real Time Coaching to design opportunities for students to build both conceptual and procedural knowledge concurrently and integrate this knowledge for deeper student understanding leading to increased student achievement for all populations of students with particular attention to typically underserved populations
4. Support administrators in their buildings to identify and notice research-based "look fors" of both conceptual and procedural learning, and provide coaching for administrators as they provide instructional support to mathematics teachers with particular attention to typically underserved populations
5. Immerse specialists in experiences designed to support their learning of Real Time Coaching

#### **Overview of the Professional Development**

Using a cohort model, this professional development program focuses on building capacity within districts to support teachers, specialists, coaches, and administrators of students in grades 7-11 as they work to deepen both their conceptual and procedural understanding algebra and geometry. Each of these groups will follow a similar Laboratory Model that includes instruction, rehearsals (Lampert, et.al, 2013), feedback, and Real Time Coaching—a model of coaching developed by the PI that takes place during teaching. In addition, during every face-to-face professional development—both intensive and coaching sessions—project staff will provide specific strategies for teachers to increase their cultural, socio-economic, and dis/ability awareness and competence. The Learning Forward Standards for Professional Learning are exemplified by the CTRTC. At the foundation of our learning community are cycles of continuous improvement through reflective inquiry into our own practice—at every level. As a

## **Appendix A: Scope of Work**

### **Conceptual Teaching and Real Time Coaching in Mathematics Laboratory Classrooms (CTRTC)**

community we will participate in regular reflection on individual and community practice. Together we will analyze student performance data, classroom engagement data and teacher practice data to improve practice and outcomes in classrooms. The long term follow-up in classrooms through Real Time Coaching with targeted feedback will ensure the integration of new learning into routine classroom behaviors. Professional development sessions will model the practices necessary to support student engagement and make these practices explicit to teachers through opportunities for discussion, reflection, metacognition, co-construction of knowledge, practice with feedback and problem solving. Through these collaborative practices our community will actively co-construct, analyze, evaluate, and synthesize our knowledge and practices.

#### **Project Timeline**

In year one the mathematical theme will focus on algebra, algebraic reasoning, and algebraic thinking appropriate for teachers and students across grades 7-9. Working with teachers and administrators from both middle and high schools within and across districts we will work to build a strong sense of community and a bank of shared knowledge to develop a trajectory about how content understanding in algebra grows from middle school into high school.

**On-Line Modules:** In a pre-summer session for teachers, a series of four two-hour online modules will give teachers a head start on developing their own conceptual understanding of algebra and algebraic thinking and begin to tackle some of the crucial access and equity concerns.

Two online modules on algebra and algebraic thinking will take teachers through a trajectory of tiered activities to strengthen their schemas of conceptual and procedural knowledge in algebra and algebraic thinking. Key features of these modules will be task types where research studies have shown increases in procedural knowledge (Rittle-Johnson & Star, 2007; Rittle-Johnson, Star, & Durkin, 2009) as well as conceptual knowledge (Rittle-Johnson & Star, 2009; Rittle-Johnson et al., 2009; Star & Rittle-Johnson, 2009). These tasks intentionally target both conceptual and procedural knowledge and the connections between them.

Two additional modules will launch our Schoology module series on access and equity. These first two modules will delve deeply into the impacts of rural poverty, urban poverty, and generational poverty on student achievement. Teachers will be introduced to rich resources to help them understand the lived experiences of people impacted by poverty. Time will be set aside for written reflection on their experiences and how these ideas will impact their teaching.

#### **District Leads, building administration, district specialists and building Coaches:**

Building and district level administrators together with district math specialists and coaches will learn to identify the differences between weak and strong schemas of both conceptual and procedural knowledge in mathematics. Participants will use project-developed tools to analyze classroom video and capture important features of student and teacher talk/work that are earmarks of intentionally working to develop deeper conceptual and procedural learning.

Professional development for district specialists and coaches will continue for two more days as they become familiar with the theory and practice of Real Time Coaching. Intensive sessions focused on Instructional Coaching (Knight, 2007), Content-Focused Mathematics Coaching

## **Appendix A: Scope of Work**

### **Conceptual Teaching and Real Time Coaching in Mathematics Laboratory Classrooms (CTRTC)**

(West & Staub, 2003), and Cognitive Coaching, (Costa, Garmston, Ellison, & Hayes, 2002) will round out the third day. Participants will make the connections among and between these perspectives that serve as the foundation of Real Time Coaching. Participants will learn how to implement Real Time Coaching through a series of role plays and rehearsals.

**Mathematics Laboratory Classroom (MLC):** In the summer of 2016 we will launch our Mathematics Laboratory Classroom with approximately 50 teachers from partner schools, and 25-50 rising 8<sup>th</sup> and 9<sup>th</sup> grade students. On the first day of the MLC we will do two follow-up sessions on the online modules. The first session will be two activities related to the impact of poverty on learning, the second morning session will follow-up on the algebra and algebraic thinking module. In the afternoon we will break into two groups and select a series of lessons from each of the partner school districts' curriculum materials and collaboratively analyze and modify them using the Thinking Through a Lesson Protocol (Smith, Bill, & Hughes, 2008) and the 5 Practices framework (Stein & Smith, 2011) to plan two 8<sup>th</sup> grade lessons and two 9<sup>th</sup> grade lessons to intentionally foster bi-directional integrated conceptual and procedural learning. Central to this effort is understanding what is entailed in the work of teaching mathematics by eliciting and responding to children's mathematical thinking in ways that advance the learning of key ideas in mathematics and cultivate productive disciplinary dispositions. These lessons will be taught the following day when rising 8<sup>th</sup> and 9<sup>th</sup> grade students will be brought to the summer camp for four-day, eight lesson units on algebra and algebraic thinking. The schedule for Tuesday through Friday will remain consistent: In the morning we will rehearse the lessons while providing coaching and giving feedback. When students arrive two teachers will teach each lesson with coaching from specialists who have just spent several days learning how to do Real Time Coaching, while the coaches and specialists are themselves being coached. The remaining participants will have different foci for data collection using project-designed tools: student talk, teacher talk, and coach-teacher talk. In the afternoon we will debrief the lessons, our data collection, and then prepare lessons for the following day.

**On-Line Modules:** Following the MLC teachers will participate in two follow-up modules where they will collaboratively analyze materials and plan lessons modified to intentionally connect procedural and conceptual understandings of algebra. Teachers will have completed at least two lessons for the beginning of the school year through these modules. Teachers will then work through the third module from our access and equity series on race and ethnicity. Research from Ladson-Billings (1992, 1994, 1995, 2000, 2006, 2009) about culturally relevant teaching strategies will be combined with Tatum's (1992) work around whiteness, and Waddell's (2014) work about culturally ambitious teaching practices in mathematics to provide teachers with concrete strategies that will help them reach students of all races and students impacted by poverty.

### **Academic Year**

During the academic year, using a cycle of job-embedded observations, rehearsals, and feedback through Real Time coaching, we will work to increase district administrators' and specialists' capacity to identify and notice research-based "look fors" of deep conceptual and procedural schemas at work in mathematics classrooms. We will follow this with coaching cycles using live observations of classrooms followed by rehearsals of feedback sessions to support leaders' capacity to provide instructional feedback to mathematics teachers as they work to incorporate

## **Appendix A: Scope of Work**

### **Conceptual Teaching and Real Time Coaching in Mathematics Laboratory Classrooms (CTRTC)**

more deep conceptual learning opportunities for their students.

**Real Time Coaching:** Teachers will have coaches in their buildings either one week each month or one day each week depending on school-based scheduling decisions. During these coaching days the dedicated mathematics coach will work with teachers using the Real Time Coaching model, plan with teachers during prep or PLC time (school-based decision), co-teach lessons in classrooms, or analyze student work with teachers. Using a catalog of project-selected teaching strategies, the coaches will work to incorporate teachers' learning or refining their practice of at least one of these strategies during each face-to-face session. Documentation about the transfer of these strategies will be maintained and communicated with project staff and principals.

**One District-wide PD day** will be used to introduce our work to a broader district audience which will include our project teachers. Project teachers and coaches will have opportunities to take part in facilitating sessions, sharing experiences from their own classrooms, or leading small group discussions. The topics for these PD days will be determined in collaboration with district leads and specialists—but will support teachers' to deepen conceptual and procedural knowledge and/or address issues of access and equity.

**On-Line Modules:** Over the course of the academic year, teachers will participate in a series of four modules on Schoology. The first two modules take the learning from the summer on the impacts of poverty and race and support teachers to intentionally plan to address these in their classes through their selection of tasks, use of questions, grouping scenarios, or differentiation practices (e.g. Tomlinson & Imbeau, 2014). The second two modules will focus on practices of formative assessment to inform learning (Black and Wiliam 1998a, 1998b; Marzano, 2006).

### **Description of Colonial Coaching Project**

#### **Description:**

The additional funding for the CTRTC will be used for two initiatives: instructional support for Colonial Mathematics Coaches through a *Real Time Coaching Course* and follow-up, and a research study on the current coaching practices in the Colonial School District.

#### *Real Time Coaching Course*

During the 2016-17 academic year, PDCE staff will work with Crystal Lancour, Supervisor of Mathematics, to present a course of study on instructional coaching that includes the underlying theory of learning for teachers, role play and rehearsal, and site-based problem solving and support.

#### *Research study*

This study will investigate the the inception of the program and its sustainability; specifically, we intend to investigate the financial, human and organizational resources leveraged for the purpose of instructional coaching at each grade band, clarify the goals of Colonial's coaching program, and determine the extent to which these goals are met within schools and across the district. In addition, we will use statistical modeling to determine the impact of the instructional coaching program on factors related to teaching practice and student performance.

## **Appendix A: Scope of Work**

### Conceptual Teaching and Real Time Coaching in Mathematics Laboratory Classrooms (CTRTC)

#### Research Questions

- 1) How is CSD's coaching program structured and what are its goals?
  - a. What is the ontology of the program?
  - b. To what extent does current structure of the program mirror this ontology?
  - c. To what extent have programmatic goals changed over time?
- 2) What financial, human, and organizational resources are used to support the instructional coaching program?
  - a. How has the district sustained these resources over time?
  - b. To what extent has the use of these resources changed over time?
- 3) What variability within the district, if any, exists among coaches and the services they provide within their respective buildings?
  - a. If variability exists, what is the nature of the variability?
  - b. How does this variability influence the quality of professional development received by teachers across the district?
- 4) To what extent, if any, does instructional coaching influence teacher practice? Student outcomes?

#### **Goals:**

*Real Time Coaching Course:* To increase the quantity and quality of instructional coaching support provided for teachers K-12 in the Colonial School District.

*Research study:* To investigate the origins, structure, efficacy, and impact of the instructional coaching program used in all grade bands (elementary, middle, and high) at Colonial School District (CSD).

#### **Timeline**

*Real Time Coaching Course:* There are nine face-to-face meetings with all of Colonial coaches which will be held on: Sept 16, Oct 14, Nov 18, Dec 9, Jan 6, Feb 10, March 10, April 7, and May 19. Additionally, PDCE staff will follow-up with monthly building-level follow-up to support coaches as they maximize the time and improve the efficacy of their classroom coaching.

#### *Research Study:*

Research will begin in late August 2016 through interviews, surveys, and data collection. Site visits, surveys, and interviews will be on-going throughout the 2016-17 academic year to establish the nature of the coaching work as it plays out in each of the K-12 buildings.

#### **Project Evaluation**

Paragon Applied Research and Evaluation (Paragon-ARE) proposes to conduct both a process and an outcome evaluation of the CTRTC project. The proposed evaluation is designed as a mixed-methods evaluation to examine project operations, implementation, and service delivery, and the associated outcomes and impact of the delivery of services on project participants—both teachers and students. In order to assess impact, a quasi-experimental Nonequivalent-Groups Design (NEGD) will be used. The guiding question for the impact evaluation is: *To what extent has participation in the CTRTC program led to increased content and conceptual knowledge in mathematics for program teachers versus comparison teachers?*

**Appendix A: Scope of Work**  
 Conceptual Teaching and Real Time Coaching in  
 Mathematics Laboratory Classrooms (CTRTC)

**Timeline**

<p style="text-align: center;"><b>Planning</b></p>	<p><b>Online Modules on algebra and algebraic thinking (Jinfa, Faith)</b></p> <p><b>Online Modules for Equity (Faith)</b></p> <p><b>Specialist/Administration PD on Conceptual Teaching and Learning (Faith, Michelle, Jinfa)</b></p> <p><b>Specialist PD on Coaching (Faith)</b></p> <p><b>Mathematics Laboratory Classroom (Faith, Jinfa, Michelle)</b>  <b>Online Modules: For coaches and Teachers grades 7-9</b></p> <ul style="list-style-type: none"> <li>• Two modules on conceptual understanding of algebra and algebraic thinking</li> <li>• Two modules on the impacts of poverty on student achievement.</li> </ul> <p><b>Conceptual Teaching and Learning: Workshop for School Administration, Specialists and Coaches (possible facilitation with Jinfa and Michelle)</b></p> <p><b>Real Time Coaching Instruction for Specialists and coaches</b></p> <p><b>Week-long Mathematics Laboratory Classroom Professional Development for Teachers grades 7-9 (Monday, Jinfa and Michelle)</b></p> <p><b>Online Modules: For coaches and Teachers grades 7-9</b></p> <ul style="list-style-type: none"> <li>• Analyzing tasks and instructional materials for opportunities to access conceptual and procedural understandings</li> <li>• Planning lessons modified to intentionally connect procedural and conceptual understandings of algebra.</li> <li>• Two modules on culturally ambitious teaching practices in mathematics to provide teachers with concrete strategies to help reach students of all races and students impacted by poverty.</li> </ul>	<p style="text-align: center;">Summer 2016</p>
<p style="text-align: center;"><b>Academic Year 2016-17</b></p>	<p><b>Coaching support in classrooms</b>—one week each month for each partner school</p> <p><b>Online Modules: For coaches and Teachers grades 7-9</b></p> <p><b>One District Professional Development Day</b>        Brandywine School District        Laurel School District        Red Clay Consolidated School District</p> <p><b>Colonial Coaching Project</b> Colwyck Center</p>	<p style="text-align: center;">September 2016-May 2017</p> <p style="text-align: center;">October 2016-April 2017</p> <p style="text-align: center;">August 24, 2016        September 13, 2016        September 13, 2016</p> <p style="text-align: center;">Sept 16, Oct 14, Nov 18, Dec 9, Jan 6, Feb 10, March 10, April 7, and May 19</p>

STATE OF DELAWARE  
DEPARTMENT OF EDUCATION

**Narrative for Comprehensive Project Budget Request**

**BUDGET JUSTIFICATION:** Conceptual Teaching and Real Time Coaching in Mathematics Laboratory Classrooms

**SENIOR PERSONNEL**

Dr. Faith Muirhead, PI, will serve as Project Director and will oversee the entire project. She will devote 9.23% effort to project oversight in Years 1 and 2. In addition, she will devote 29.69% effort in year 1 and 30% in year 2 to design and deliver professional development activities for the project.

**OTHER PERSONNEL**

PDCE staff will support this project by designing and delivering professional development activities. He will devote 30% effort in years 1 and 2.

Faculty members from the Math Department, Michelle Cirillo (summer effort 6.08% in year 1 and 5.99% in year 2) and Jinfa Cai (summer effort of 3.83% in year 1 and 3.74% in year 2) will serve as expert speakers for professional development activities, both in person and through online modules.

A leadership coach will provide professional development and coaching to principals and assistant principals whose teachers are involved in this project. S/he will provide 10% effort in year 1 and 6.92% effort in year 2.

Dr. Amy Trauth-Nare will complete a Colonial School District Coaching study. She will devote 9.11% effort in Year 1.

Funding is requested to support 50% of 1 Graduate Student in the College of Education and Human Development in years 1 and 2. The Graduate Student will support professional development activities including research and planning, online module development support, and data collection.

Funds are requested to summer Graduate Student summer labor at an hourly rate of \$25. S/he will work 80 hours in years 1 and 2.

Salaries are escalated by 3% annually.

**FRINGE BENEFITS**

According to University policy, fringe benefits are calculated as 35.9% for faculty and professional Employees and 7.5% for graduate students. A copy of the agreement can be found at <http://www.udel.edu/research/pdf/FY16-Fringe.pdf>

**TRAVEL DOMESTIC**

Domestic travel funds are requested for mileage (126 miles per round trip at .54/per mile), tolls (\$24 per round trip) hotel (\$332 per night), per diem (\$104), and incidentals including parking (\$100) for the PI and one other staff member to attend a regional MSP conference, as required by the grant. Based on the 2016 Baltimore location, \$2,530 is requested for years 1 and 2.

Funds are requested for mileage to travel to multiple school districts for planning, instructional rehearsals and real time coaching at a rate of .54 per mile. \$9,706 is requested in year 1 and \$6,831 is requested in year 2.

### **MATERIALS AND SUPPLIES**

Funds are requested for professional development supplies for Cohort I (50 teachers and 5 math specialists) at \$75 per person for a total of \$4,125 in year 1. In year 2 funds are requested for professional development supplies for Cohort I (50 teachers and 5 math specialists) at \$50/teacher and Cohort II (50 teachers and 5 math specialists) at \$75/teacher for a total of \$6,875 in year 2.

In year 1, funds totaling \$78,275 are requested for teacher and specialist honoraria to complete professional development and online modules. 50 teachers and five math specialists will complete three days of online modules (\$155 per day for three days). 50 teachers will complete five days of in person professional development (\$155 per day for five days). In addition, ten specialists (including five specialists from Colonial School District) will attend professional development for nine days (\$155 per day for nine days).

In year 2, funds totaling \$142,600 are requested for teachers and specialists in Cohorts I and II to receive honoraria to complete professional development and online modules.

Cohort I: 50 teachers and five math specialists will complete 3 days of online modules (\$155 per day for three days). 50 teachers and five specialists will complete five days of in person professional development (\$155 per day for five days).

Cohort II: 50 teachers and 10 math specialists will complete three days of online modules (\$155 per day for three days). 50 teachers will complete five days of in person professional development (\$155 per day for five days). In addition, 10 specialists will attend professional development for nine days (\$155 per day for nine days).

Funds are requested for program evaluation. \$32,000 is requested in year 1 and \$34,400 is requested in year 2.

\$4,000 in year 1 and \$4,300 in year 2 is requested for food costs for professional development activities.

Parking costs are requested for participants to attend professional development sessions at the University of Delaware at a rate of 7.50/day. Total funds requested are \$2,550 in year 1 and \$4,275 in year 2.

Funds are requested for online module development technical support at a rate of \$75/hour for a total of \$2,000 in years 1 and 2.

#### **OTHER DIRECT COSTS**

Funds are requested to support district-employed "math teachers on loan" for this project. \$105,000 is requested in year 1 and \$75,000 in year 2 to build capacity for professional development and coaching support in districts.

\$4,500 is requested for space rental for professional development workshops in years 1 and 2.

#### **INDIRECT COSTS**

The University of Delaware's predetermined rate of 24.9% for FY16, effective 07/01/2015 was not used; rather, the 8% sponsor cap was implemented. The University of Delaware's Facilities and Administrative (F&A) rates are approved by the Department of Defense, Office of Naval Research. The distribution base for the F&A rate is MTDC. Equipment, capital expenditures, charges for patient care and tuition remission, rental costs of offsite facilities, scholarships, fellowships, and vessel (ship) charges as well as the portion of each subcontract in excess of \$25,000 shall be excluded from the modified total direct costs. A copy of our Negotiation agreement with the Office of Naval Research can be found at <http://www.udel.edu/research/pdf/UD-FY16-18-Ext-Agree-Signed.pdf>.

*The University of Delaware will consider the costs and requests in the justification approved if an award is made and no contrary guidance from the agency is included in the award notice.*

Updated 5/18/16

STATE OF DELAWARE  
DEPARTMENT OF EDUCATION

**Comprehensive Project Budget Summary**

*Funding Request*

**Project Title:** Conceptual Teaching and Real Time Coaching in Mathematics  
Laboratory Classrooms  
**Project Director:** Faith Muirhead  
**LEA Partner Representative, Title:**  
**IHE Partner Representative, Title:** Fiscal Agent University of Delaware

<b>Direct Cost Requested</b>	<b>Year 1</b>	<b>Year 2</b>
<b>Salaries and Other Employee Costs</b>		
• Professional	114,342	
• Substitutes	0	
• Teacher Stipends	78,275	
• Tuition, if applicable	--	--
• Support Staff	--	--
• Students	11,675	
• Other Employee Costs- Teacher on Loan	105,000	
<b>Consultants &amp; Contracted Services (List separately)</b>	--	--
• Evaluator	32,000	
• Tech Support	2,000	
<b>Partner Funding Request(s) if Given as a Sub-award(s) (List separately)</b>	--	--
<b>In State Travel (Include registration costs)</b>	9,706	
<b>Out of State Travel (Include registration costs)</b>	2,530	
<b>Materials and Supplies</b>	6,675	
• Food (must not exceed 1% of total request)	4,000	
<b>Indirect Costs *</b>	29,296	
<b>Other - Space Rental for PD</b>	4,500	
<b>Total</b>	<b>\$400,000</b>	
<b>Cost per Teacher per Contact Hour</b>	<b>\$85</b>	

\$85/teacher contact hour does not include Colonial Pilot Study

\* The indirect cost rate for the fiscal agent shall not exceed 8% of direct costs.



## State of Delaware Department of Education Federal Funds Budget Form

**Federal Grant:** \_\_\_\_\_ **LEA/Agency:** University of Delaware  
**Project Title:** MSP Math CTRTC  
**Project Start Date:** 5/1/2016 **Project End Date:** 5/31/2017

Expense Types and Account Codes: Salaries (5100) and Other Employee Costs (5120)						
Employee's Name	Title	FTE Percentage		Federal Funds Requested	Matching Funds	Total Funds
<b>PROFESSIONAL:</b>						
F. Muirhead	Project PI	9.23		\$7,696.00		\$7,696.00
F. Muirhead	Project PD Coach/	29.69		\$24,753.00		\$24,753.00
A. Trauth-Nare	Colonial Coaching study	9.11		\$7,560.00		\$7,560.00
	Other coaching & leadership					
LTR - other coaches	support	40.00		\$29,128.00		\$29,128.00
Faculty	Advisory -Math Dept.	10		\$15,000.00		\$15,000.00
<b>Subtotal</b>				<b>\$84,137.00</b>		<b>\$84,137.00</b>
<b>SUBSTITUTES:</b>						
						\$0.00
						\$0.00
						\$0.00
<b>Subtotal</b>				<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
<b>SUPPORT STAFF:</b>						
						\$0.00
						\$0.00
<b>Subtotal</b>				<b>\$0.00</b>	<b>\$0.00</b>	<b>\$0.00</b>
<b>STUDENTS:</b>						
Grad Labor				\$2,000.00		
Grad on Contract				\$9,000.00		\$9,000.00
<b>Subtotal</b>				<b>\$11,000.00</b>	<b>\$0.00</b>	<b>\$9,000.00</b>
<b>TOTAL SALARIES:</b>				<b>\$95,137.00</b>	<b>\$0.00</b>	<b>\$93,137.00</b>
<b>OTHER EMPLOYEE COSTS:</b>						
Fringe - Professional/Faculty		35.90%		\$30,205.18	\$0.00	\$30,205.18
Fringe - Grad student		7.50%		\$675.00	\$0.00	\$675.00
		0.00%		\$0.00	\$0.00	\$0.00
		0.00%		\$0.00	\$0.00	\$0.00
		0.00%		\$0.00	\$0.00	\$0.00
<b>Subtotal</b>				<b>\$30,880.18</b>	<b>\$0.00</b>	<b>\$30,880.18</b>
<b>TOTAL SALARY &amp; EMPLOYEE COSTS</b>				<b>\$126,017.18</b>	<b>\$0.00</b>	<b>\$126,017.18</b>

Expense Types and Account Codes: Travel (5400)					
Destination	Purpose	# of Travelers	Federal Funds Requested	Matching Funds	Total Funds
BSD,LaurelSD,Red Clay Conference travel	from Georgetown		\$9,706.00		\$9,706.00
			\$2,530.00		\$2,530.00
					\$0.00
					\$0.00
<b>TOTAL TRAVEL COSTS</b>			<b>\$12,236.00</b>	<b>\$0.00</b>	<b>\$12,236.00</b>

Expense Types and Account Codes: Contractual Services (5500)				
Vendor Name	Service Provided	Federal Funds Requested	Matching Funds	Total Funds

TBD	Evaluator	\$32,000.00		\$32,000.00
TBD	Teacher on Loan	\$105,000.00		\$105,000.00
TOTAL CONTRACTUAL SERVICES COSTS		\$137,000.00	\$0.00	\$137,000.00

Expense Types and Account Codes: Indirect Cost (5560)				
Total Direct Cost	Approved Indirect Cost Rate for grant period	Federal Funds Requested	Matching Funds	Total Funds
\$366,203.18	8.00%	\$29,296.25	N/A	\$29,296.25
<b>TOTAL INDIRECT COSTS</b>		\$29,296.25		\$29,296.25

Expense Types and Account Codes: Supplies and Materials (5600)					
Item Description	Quantity	Unit Price	Federal Funds Requested	Matching Funds	Total Funds
Tech support, Materials, Food, Parking			\$12,675.00		\$12,675.00
Teacher PD stipends			\$78,275.00		\$78,275.00
Space Rental - no overhead			\$4,500.00		\$4,500.00
<b>TOTAL SUPPLIES AND MATERIALS COSTS</b>			\$95,450.00	\$0.00	\$95,450.00

Expense Types and Account Codes: Capital Outlay (5700)					
Item Description	Quantity	Unit Price	Federal Funds Requested	Matching Funds	Total Funds
<u>Replacement Equipment</u>					\$0.00
<u>New Equipment</u>					\$0.00
<b>TOTAL SUPPLIES AND MATERIALS COSTS</b>			\$0.00	\$0.00	\$0.00

GRAND TOTAL	Federal Funds Requested	Matching Funds	Total Funds
	\$399,999.44	\$0.00	\$399,999.44

## Appendix B: Payment Schedule

### Payment Schedule for CTRTC MSP Grant Project

Date Range	Scope of Work	Amount	DOE Deliverables
***Summer 2016	<ul style="list-style-type: none"> <li>• Online Modules on algebra and algebraic thinking</li> <li>• Online Modules for Equity</li> <li>• Specialist/Administration PD Conceptual/Procedural Teaching</li> <li>• Specialist Coaching PD on Coaching</li> <li>• Mathematics Laboratory Classroom Pilot in Laurel</li> <li>• PD days for each district on Conceptual and Procedural Teaching in Algebra</li> <li>• Colonial Coaching Project – research survey and interview protocol design</li> </ul>	65,750	Online modules – algebra/equity  Sign-in sheets – specialists/administration, Laurel math lab, and collateral material  PD sign-in sheets  Colonial survey/interview
Sept 1-Nov 30, 2016	<ul style="list-style-type: none"> <li>• Coaching support in classrooms—one week each month for each partner school</li> <li>• Online Modules: For coaches and Teachers grades 7-9</li> <li>• Colonial Coaching Project – research implementation and professional development for coaches</li> </ul>	133,750	Coaching hours/dates/data* (*instructional changes & student improvements)  Online modules grades 7-9  Colonial progress report
Dec 1-Feb 28, 2017	<ul style="list-style-type: none"> <li>• Coaching support in classrooms—one week each month for each partner school</li> <li>• Colonial Coaching Project – research implementation and professional development for coaches</li> </ul>	98,750	Coaching hours/dates/data*  Colonial progress report
Mar 1-May 31 2017	<ul style="list-style-type: none"> <li>• Coaching support in classrooms—one week each month for each partner school</li> <li>• Colonial Coaching Project – research implementation and professional development for coaches</li> </ul>	101,750	Coaching hours/dates/data*  Colonial final report
			<b>Total Year One: \$400,00</b>

# Delaware Department of Education Contract

## Math Science Partnership Tru-Math Project RFP# 2016-07

This Agreement ("Agreement") is effective only upon the execution of a State of Delaware Purchase Order and will end on September 30, 2017, by and between the State of Delaware, Department of Education, hereafter referred to as DDOE, and DE Math Coalition, hereafter referred to as VENDOR.

WHEREAS, DDOE desires to obtain certain services to have the DE Math Coalition provide services specified in the Statement of Work attached hereto and identified as Appendix A; and

WHEREAS, DE Math Coalition desires to provide such services to DDOE on the terms set forth below;

WHEREAS, DDOE and DE Math Coalition represent and warrant that each party has full right, power and authority to enter into and perform under this Agreement;

FOR AND IN CONSIDERATION OF the premises and mutual agreements herein, DDOE and DE Math Coalition agree as follows:

### **1. Services.**

1.1 DE Math Coalition shall perform for DDOE the services specified in the Appendices to this Agreement, attached hereto and made a part hereof.

1.2 Any conflict or inconsistency between the provisions of the following documents shall be resolved by giving precedence to such documents in the following order: (a) this Agreement (including any amendments or modifications thereto); (b) DDOE's request for proposals, attached hereto as Appendix C; and (c) DE Math Coalition's response to the request for proposals, attached hereto as Appendix D. The aforementioned documents are specifically incorporated into this Agreement and made a part hereof.

1.3 DDOE may, at any time, by written order, make changes in the scope of this Agreement and in the services or work to be performed. No services for which additional compensation may be charged by DE Math Coalition shall be furnished without the written authorization of DDOE. When DDOE desires any addition or deletion to the deliverables or a change in the Services to be provided under this Agreement, it shall notify DE Math Coalition, who shall then submit to DDOE a "Change Order" for approval authorizing said change. The Change Order shall state whether the change shall cause an alteration in the price or the time required by DE Math Coalition for any aspect of its performance under this Agreement. Pricing of changes shall be consistent with those established within this Agreement.

1.4 DE Math Coalition will not be required to make changes to its scope of work that result in DE Math Coalition's costs exceeding the current unencumbered budgeted appropriations for the services. Any claim of either party for an adjustment under Section 1 of this Agreement shall be asserted in the manner specified in the writing that authorizes the adjustment.

## **2. Payment for Services and Expenses.**

2.1 The term of the initial contract shall be from the execution of this agreement and a State of Delaware Purchase Order through September 30, 2017.

2.2 DDOE will pay DE Math Coalition for the performance of services described in Appendix A, Statement of Work. The fee will be paid in accordance with the payment schedule attached hereto as part of Appendix B.

2.3 DDOE's obligation to pay DE Math Coalition for the performance of services described in Appendix A, Statement of Work will not exceed the fixed fee amount of \$232,183.00. It is expressly understood that the work defined in the appendices to this Agreement must be completed by DE Math Coalition and it shall be DE Math Coalition's responsibility to ensure that hours and tasks are properly budgeted so that all services are completed for the agreed upon fixed fee. DDOE's total liability for all charges for services that may become due under this Agreement is limited to the total maximum expenditure(s) authorized in DDOE's purchase order(s) to \$232,183.00.

2.4 DE Math Coalition shall submit monthly invoices to DDOE in sufficient detail to support the services provided during the previous month. DDOE agrees to pay those invoices within thirty (30) days of receipt. In the event DDOE disputes a portion of an invoice, DDOE agrees to pay the undisputed portion of the invoice within thirty (30) days of receipt and to provide DE Math Coalition a detailed statement of DDOE's position on the disputed portion of the invoice within thirty (30) days of receipt. DDOE's failure to pay any amount of an invoice that is not the subject of a good-faith dispute within thirty (30) days of receipt shall entitle DE Math Coalition to charge interest on the overdue portion at no more than 1.0% per month or 12% per annum. All payments should be sent to DE Math Coalition, Attn: Jamila Riser, 122 North DuPont Highway, Dover, DE 19901.

2.5 Unless provided otherwise in an Appendix, all expenses incurred in the performance of the services are to be paid by DE Math Coalition. If an Appendix specifically provides for expense reimbursement, DE Math Coalition shall be reimbursed only for reasonable expenses incurred by DE Math Coalition in the performance of the services, including, but not necessarily limited to, travel and lodging expenses, communications charges, and computer time and supplies.

2.6 DDOE is a sovereign entity, and shall not be liable for the payment of federal, state and local sales, use and excise taxes, including any interest and penalties from any related deficiency, which may become due and payable as a consequence of this Agreement.

2.7 DDOE shall subtract from any payment made to DE Math Coalition all damages, costs and expenses caused by DE Math Coalition's negligence, resulting from or arising out of errors or omissions in DE Math Coalition's work products, which have not been previously paid to DE Math Coalition.

2.8 Invoices shall be submitted to:

John Epstein, Education Associate  
Curriculum, Instruction & Professional Development  
401 Federal Street  
Suite 2  
Dover, DE 19901

### **3. Responsibilities of DE Math Coalition.**

3.1 DE Math Coalition shall be responsible for the professional quality, technical accuracy, timely completion, and coordination of all services furnished by DE Math Coalition, its subcontractors and its and their principals, officers, employees and agents under this Agreement. In performing the specified services, DE Math Coalition shall follow practices consistent with generally accepted professional and technical standards. DE Math Coalition shall be responsible for ensuring that all services, products and deliverables furnished pursuant to this Agreement comply with the standards promulgated by the Department of Technology and Information ("DTI") published at <http://dti.delaware.gov/>, and as modified from time to time by DTI during the term of this Agreement. If any service, product or deliverable furnished pursuant to this Agreement does not conform with DTI standards, DE Math Coalition shall, at its expense and option either (1) replace it with a conforming equivalent or (2) modify it to conform with DTI standards. DE Math Coalition shall be and remain liable in accordance with the terms of this Agreement and applicable law for all damages to DDOE caused by DE Math Coalition's failure to ensure compliance with DTI standards.

3.2 It shall be the duty of the DE Math Coalition to assure that all products of its effort are technically sound and in conformance with all pertinent Federal, State and Local statutes, codes, ordinances, resolutions and other regulations. DE Math Coalition will not produce a work product that violates or infringes on any copyright or patent rights. DE Math Coalition shall, without additional compensation, correct or revise any errors or omissions in its work products.

3.3 Permitted or required approval by DDOE of any products or services furnished by DE Math Coalition shall not in any way relieve DE Math Coalition of responsibility for the professional and technical accuracy and adequacy of its work. DDOE's review, approval, acceptance, or payment for any of DE Math Coalition's services herein shall not be construed to operate as a waiver of any rights under this Agreement or of any cause of action arising out of the performance of this Agreement, and DE Math Coalition shall be and remain liable in accordance with the terms of this Agreement and applicable law for all damages to DDOE caused by DE Math Coalition's performance or failure to perform under this Agreement.

3.4 DE Math Coalition shall appoint a Project Manager who will manage the performance of services. All of the services specified by this Agreement shall be performed by the Project Manager, or by DE Math Coalition's associates and employees under the personal supervision of the Project Manager. The positions anticipated include:

Project	Team	Title	% of Project Involvement
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3.5 Designation of persons for each position is subject to review and approval by DDOE. Should the staff need to be diverted off the project for what are now unforeseeable circumstances, DE Math Coalition will notify DDOE immediately and work out a transition plan that is acceptable to both parties, as well as agree to an acceptable replacement plan to fill or complete the work assigned to this project staff position. Replacement staff persons are subject to review and approval by DDOE. If DE Math Coalition fails to make a required replacement within 30 days, DDOE may terminate this Agreement for default. Upon receipt of written notice from DDOE that an employee of DE Math Coalition is unsuitable to DDOE for good cause, DE Math Coalition shall remove such employee from the performance of services and substitute in his/her place a suitable employee.

3.6 DE Math Coalition shall furnish to DDOE's designated representative copies of all correspondence to regulatory agencies for review prior to mailing such correspondence.

3.7 DE Math Coalition agrees that its officers and employees will cooperate with DDOE in the performance of services under this Agreement and will be available for consultation with DDOE at such reasonable times with advance notice as to not conflict with their other responsibilities.

3.8 DE Math Coalition has or will retain such employees as it may need to perform the services required by this Agreement. Such employees shall not be employed by the State of Delaware or any other political subdivision of the State.

3.9 DE Math Coalition will not use DDOE's name, either express or implied, in any of its advertising or sales materials without DDOE's express written consent.

3.10 The rights and remedies of DDOE provided for in this Agreement are in addition to any other rights and remedies provided by law.

**4. Time Schedule.**

4.1 A project schedule is included in Appendix B.

4.2 Any delay of services or change in sequence of tasks must be approved in writing by DDOE.

4.3 In the event that DE Math Coalition fails to complete the project or any phase thereof within the time specified in the Contract, or with such additional time as may be granted in writing by DDOE, or fails to prosecute the work, or any separable part thereof, with such diligence as will insure its completion within the time specified in this Agreement or any extensions thereof, DDOE shall suspend the payments scheduled as set forth in Appendix B.

**5. State Responsibilities.**

5.1 In connection with DE Math Coalition's provision of the Services, DDOE shall perform those tasks and fulfill those responsibilities specified in the appropriate Appendices.

5.2 DDOE agrees that its officers and employees will cooperate with DE Math Coalition in the performance of services under this Agreement and will be available for consultation with DE Math Coalition at such reasonable times with advance notice as to not conflict with their other responsibilities.

5.3 The services performed by DE Math Coalition under this Agreement shall be subject to review for compliance with the terms of this Agreement by DDOE's designated representatives. DDOE representatives may delegate any or all responsibilities under the Agreement to appropriate staff members, and shall so inform DE Math Coalition by written notice before the effective date of each such delegation.

5.4 The review comments of DDOE's designated representatives may be reported in writing as needed to DE Math Coalition. It is understood that DDOE's representatives' review comments do not relieve DE Math Coalition from the responsibility for the professional and technical accuracy of all work delivered under this Agreement.

5.5 DDOE shall, without charge, furnish to or make available for examination or use by DE Math Coalition as it may request, any data which DDOE has available, including as examples only and not as a limitation:

- a. Copies of reports, surveys, records, and other pertinent documents;
- b. Copies of previously prepared reports, job specifications, surveys, records, ordinances, codes, regulations, other document, and information related to the services specified by this Agreement.

DE Math Coalition shall return any original data provided by DDOE.

5.6 DDOE shall assist DE Math Coalition in obtaining data on documents from public officers or agencies and from private citizens and business firms whenever such material is necessary for the completion of the services specified by this Agreement.

5.7 DE Math Coalition will not be responsible for accuracy of information or data supplied by DDOE or other sources to the extent such information or data would be relied upon by a reasonably prudent contractor.

5.8 DDOE agrees not to use DE Math Coalition's name, either express or implied, in any of its advertising or sales materials. DE Math Coalition reserves the right to reuse the nonproprietary data and the analysis of industry-related information in its continuing analysis of the industries covered.

## **6. Work Product.**

6.1 All materials, information, documents, and reports, whether finished, unfinished, or draft, developed, prepared, completed, or acquired by DE Math Coalition for DDOE relating to the services to be performed hereunder shall become the property of DDOE and shall be delivered to DDOE's designated representative upon completion or termination of this Agreement, whichever comes first. DE Math Coalition shall not be liable for damages, claims, and losses arising out of any reuse of any work products on any other project conducted by DDOE. DDOE shall have the right to reproduce all documentation supplied pursuant to this Agreement.

6.2 DE Math Coalition retains all title and interest to the data it furnished and/or generated pursuant to this Agreement. Retention of such title and interest does not conflict with DDOE's rights to the materials, information and documents developed in performing the project. Upon final payment, DDOE shall have a perpetual, nontransferable, non-exclusive paid-up right and license to use, copy, modify and prepare derivative works of all materials in which DE Math Coalition retains title, whether individually by DE Math Coalition or jointly with DDOE. Any and all source code developed in connection with the services provided will be provided to DDOE, and the aforementioned right and license shall apply to source code. The parties will cooperate with each other and execute such other documents as may be reasonably deemed necessary to achieve the objectives of this

Section.

6.3 In no event shall DE Math Coalition be precluded from developing for itself, or for others, materials that are competitive with the Deliverables, irrespective of their similarity to the Deliverables. In addition, DE Math Coalition shall be free to use its general knowledge, skills and experience, and any ideas, concepts, know-how, and techniques within the scope of its consulting practice that are used in the course of providing the services.

6.4 Notwithstanding anything to the contrary contained herein or in any attachment hereto, any and all intellectual property or other proprietary data owned by DE Math Coalition prior to the effective date of this Agreement (“Preexisting Information”) shall remain the exclusive property of DE Math Coalition even if such Preexisting Information is embedded or otherwise incorporated into materials or products first produced as a result of this Agreement or used to develop such materials or products. DDOE’s rights under this section shall not apply to any Preexisting Information or any component thereof regardless of form or media.

**7. Confidential Information.**

To the extent permissible under 29 *Del. C.* § 10001, et seq., the parties to this Agreement shall preserve in strict confidence any information, reports or documents obtained, assembled or prepared in connection with the performance of this Agreement.

**8. Warranty.**

8.1 DE Math Coalition warrants that its services will be performed in a good and workmanlike manner. DE Math Coalition agrees to re-perform any work not in compliance with this warranty brought to its attention within a reasonable time after that work is performed.

8.2 Third-party products within the scope of this Agreement are warranted solely under the terms and conditions of the licenses or other agreements by which such products are governed. With respect to all third-party products and services purchased by DE Math Coalition for DDOE in connection with the provision of the Services, DE Math Coalition shall pass through or assign to DDOE the rights DE Math Coalition obtains from the manufacturers and/or vendors of such products and services (including warranty and indemnification rights), all to the extent that such rights are assignable.

**9. Indemnification; Limitation of Liability.**

9.1 DE Math Coalition shall indemnify and hold harmless the State, its agents and employees, from any and all liability, suits, actions or claims, together with all reasonable costs and expenses (including attorneys' fees) directly arising out of (A) the negligence or other wrongful conduct of the DE Math Coalition, its agents or employees, or (B) DE Math Coalition's breach of any material provision of this Agreement not cured after due notice and opportunity to cure, provided as to (A) or (B) that (i) DE Math Coalition shall have been notified promptly in writing by DDOE of any notice of such claim; and (ii) DE Math Coalition shall have the sole control of the defense of any action on such claim and all negotiations for its settlement or compromise.

9.2 If DDOE promptly notifies DE Math Coalition in writing of a third party claim against DDOE that any Deliverable infringes a copyright or a trade secret of any third party, DE Math Coalition will defend such claim at its expense and will pay any costs or damages that may be finally awarded against DDOE. DE Math Coalition will not indemnify DDOE, however, if the claim of infringement is caused by (1) DDOE's misuse or modification of the Deliverable; (2) DDOE's failure to use corrections or enhancements made available by DE Math Coalition; (3) DDOE's use of the Deliverable in combination with any product or information not owned or developed by DE Math Coalition; (4) DDOE's distribution, marketing or use for the benefit of third parties of the Deliverable or (5) information, direction, specification or materials provided by Client or any third party. If any Deliverable is, or in DE Math Coalition's opinion is likely to be, held to be infringing, DE Math Coalition shall at its expense and option either (a) procure the right for DDOE to continue using it, (b) replace it with a noninfringing equivalent, (c) modify it to make it noninfringing. The foregoing remedies constitute DDOE's sole and exclusive remedies and DE Math Coalition's entire liability with respect to infringement.

9.3 DDOE agrees that DE Math Coalition's total liability to DDOE for any and all damages whatsoever arising out of or in any way related to this Agreement from any cause, including but not limited to contract liability or DE Math Coalition negligence, errors, omissions, strict liability, breach of contract or breach of warranty shall not, in the aggregate, exceed fees paid to DE Math Coalition.

In no event shall DE Math Coalition be liable for special, indirect, incidental, economic, consequential or punitive damages, including but not limited to lost revenue, lost profits, replacement goods, loss of technology rights or services, loss of data, or interruption or loss of use of software or any portion thereof regardless of the legal theory under which such damages are sought, and even if DE Math Coalition has been advised of the likelihood of such damages.

## **10. Employees.**

10.1 DE Math Coalition has and shall retain the right to exercise full control over

the employment, direction, compensation and discharge of all persons employed by DE Math Coalition in the performance of the services hereunder; provided, however, that it will, subject to scheduling and staffing considerations, attempt to honor DDOE's request for specific individuals.

10.2 Except as the other party expressly authorizes in writing in advance, neither party shall solicit, offer work to, employ, or contract with, whether as a partner, employee or independent contractor, directly or indirectly, any of the other party's Personnel during their participation in the services or during the twelve (12) months thereafter. For purposes of this Section 10.2, "Personnel" includes any individual or company a party employs as a partner, employee or independent contractor and with which a party comes into direct contact in the course of the services.

10.3 Possession of a Security Clearance, as issued by the Delaware Department of Public Safety, may be required of any employee of DE Math Coalition who will be assigned to this project.

## **11. Independent Contractor.**

11.1 It is understood that in the performance of the services herein provided for, DE Math Coalition shall be, and is, an independent contractor, and is not an agent or employee of DDOE and shall furnish such services in its own manner and method except as required by this Agreement. DE Math Coalition shall be solely responsible for, and shall indemnify, defend and save DDOE harmless from all matters relating to the payment of its employees, including compliance with social security, withholding and all other wages, salaries, benefits, taxes, exactions, and regulations of any nature whatsoever.

11.2 DE Math Coalition acknowledges that DE Math Coalition and any subcontractors, agents or employees employed by DE Math Coalition shall not, under any circumstances, be considered employees of DDOE, and that they shall not be entitled to any of the benefits or rights afforded employees of DDOE, including, but not limited to, sick leave, vacation leave, holiday pay, Public Employees Retirement System benefits, or health, life, dental, long-term disability or workers' compensation insurance benefits. DDOE will not provide or pay for any liability or medical insurance, retirement contributions or any other benefits for or on behalf of DDOE or any of its officers, employees or other agents.

11.3 DE Math Coalition shall be responsible for providing liability insurance for its personnel.

11.4 As an independent contractor, DE Math Coalition has no authority to bind or commit DDOE. Nothing herein shall be deemed or construed to create a joint venture, partnership, fiduciary or agency relationship between the parties for any purpose.

**12. Suspension.**

12.1 DDOE may suspend performance by DE Math Coalition under this Agreement for such period of time as DDOE, at its sole discretion, may prescribe by providing written notice to DE Math Coalition at least 30 working days prior to the date on which DDOE wishes to suspend. Upon such suspension, DDOE shall pay DE Math Coalition its compensation, based on the percentage of the project completed and earned until the effective date of suspension, less all previous payments. DE Math Coalition shall not perform further work under this Agreement after the effective date of suspension. DE Math Coalition shall not perform further work under this Agreement after the effective date of suspension until receipt of written notice from DDOE to resume performance.

12.2 In the event DDOE suspends performance by DE Math Coalition for any cause other than the error or omission of the DE Math Coalition, for an aggregate period in excess of 30 days, DE Math Coalition shall be entitled to an equitable adjustment of the compensation payable to DE Math Coalition under this Agreement to reimburse DE Math Coalition for additional costs occasioned as a result of such suspension of performance by DDOE based on appropriated funds and approval by DDOE.

**13. Termination.**

13.1 This Agreement may be terminated in whole or in part by either party in the event of substantial failure of the other party to fulfill its obligations under this Agreement through no fault of the terminating party; but only after the other party is given:

- a. Not less than 30 calendar days written notice of intent to terminate; and
- b. An opportunity for consultation with the terminating party prior to termination.

13.2 This Agreement may be terminated in whole or in part by DDOE for its convenience, but only after DE Math Coalition is given:

- a. Not less than 30 calendar days written notice of intent to terminate; and
- b. An opportunity for consultation with DDOE prior to termination.

13.3 If termination for default is effected by DDOE, DDOE will pay DE Math Coalition that portion of the compensation which has been earned as of the effective date of termination but:

- a. No amount shall be allowed for anticipated profit on performed or unperformed services or other work, and
- b. Any payment due to DE Math Coalition at the time of termination may be adjusted to the extent of any additional costs occasioned to DDOE by reason of DE Math Coalition's default.
- c. Upon termination for default, DDOE may take over the work and prosecute the same to completion by agreement with another party or otherwise. In the event DE Math Coalition shall cease conducting business, DDOE shall have the right to make an unsolicited offer of employment to any employees of DE Math Coalition assigned to the performance of the Agreement, notwithstanding the provisions of Section 10.2.

13.4 If after termination for failure of DE Math Coalition to fulfill contractual obligations it is determined that DE Math Coalition has not so failed, the termination shall be deemed to have been effected for the convenience of DDOE.

13.5 The rights and remedies of DDOE and DE Math Coalition provided in this section are in addition to any other rights and remedies provided by law or under this Agreement.

#### 13.6 Gratuities.

13.6.1 DDOE may, by written notice to DE Math Coalition, terminate this Agreement if it is found after notice and hearing by DDOE that gratuities (in the form of entertainment, gifts, or otherwise) were offered or given by DE Math Coalition or any agent or representative of DE Math Coalition to any officer or employee of DDOE with a view toward securing a contract or securing favorable treatment with respect to the awarding or amending or making of any determinations with respect to the performance of this Agreement.

13.6.2 In the event this Agreement is terminated as provided in 13.6.1 hereof, DDOE shall be entitled to pursue the same remedies against DE Math Coalition it could pursue in the event of a breach of this Agreement by DE Math Coalition.

13.6.3 The rights and remedies of DDOE provided in Section 13.6 shall not be exclusive and are in addition to any other rights and remedies provided by law or under this Agreement.

#### **14. Severability.**

If any term or provision of this Agreement is found by a court of competent

jurisdiction to be invalid, illegal or otherwise unenforceable, the same shall not affect the other terms or provisions hereof or the whole of this Agreement, but such term or provision shall be deemed modified to the extent necessary in the court's opinion to render such term or provision enforceable, and the rights and obligations of the parties shall be construed and enforced accordingly, preserving to the fullest permissible extent the intent and agreements of the parties herein set forth.

**15. Assignment; Subcontracts.**

15.1 Any attempt by DE Math Coalition to assign or otherwise transfer any interest in this Agreement without the prior written consent of DDOE shall be void. Such consent shall not be unreasonably withheld.

15.2 Services specified by this Agreement shall not be subcontracted by DE Math Coalition, without prior written approval of DDOE.

15.3 Approval by DDOE of DE Math Coalition's request to subcontract or acceptance of or payment for subcontracted work by DDOE shall not in any way relieve DE Math Coalition of responsibility for the professional and technical accuracy and adequacy of the work. All subcontractors shall adhere to all applicable provisions of this Agreement.

15.4 DE Math Coalition shall be and remain liable for all damages to DDOE caused by negligent performance or non-performance of work under this Agreement by DE Math Coalition, its subcontractor or its sub-subcontractor.

15.5 The compensation due shall not be affected by DDOE's approval of DE Math Coalition's request to subcontract.

**16. Force Majeure.**

Neither party shall be liable for any delays or failures in performance due to circumstances beyond its reasonable control.

**17. Non-Appropriation of Funds.**

17.1 Validity and enforcement of this Agreement is subject to appropriations by the General Assembly of the specific funds necessary for contract performance. Should such funds not be so appropriated DDOE may immediately terminate this Agreement, and absent such action this Agreement shall be terminated as to any obligation of the State requiring the expenditure of money for which no specific appropriation is available, at the end of the last fiscal year for which no appropriation is available or upon the exhaustion of funds.

17.2 Notwithstanding any other provisions of this Agreement, this Agreement

shall terminate and DDOE's obligations under it shall be extinguished at the end of the fiscal year in which the State of Delaware fails to appropriate monies for the ensuing fiscal year sufficient for the payment of all amounts which will then become due.

**18. State of Delaware Business License.**

DE Math Coalition and all subcontractors represent that they are properly licensed and authorized to transact business in the State of Delaware as provided in 30 *Del. C.* § 2301.

**19. Complete Agreement.**

19.1 This agreement and its Appendices shall constitute the entire agreement between DDOE and DE Math Coalition with respect to the subject matter of this Agreement and shall not be modified or changed without the express written consent of the parties. The provisions of this agreement supersede all prior oral and written quotations, communications, agreements and understandings of the parties with respect to the subject matter of this Agreement.

19.2 If the scope of any provision of this Agreement is too broad in any respect whatsoever to permit enforcement to its full extent, then such provision shall be enforced to the maximum extent permitted by law, and the parties hereto consent and agree that such scope may be judicially modified accordingly and that the whole of such provisions of the Agreement shall not thereby fail, but the scope of such provision shall be curtailed only to the extent necessary to conform to the law.

19.3 DE Math Coalition may not order any product requiring a purchase order prior to DDOE's issuance of such order. Each Appendix, except as its terms otherwise expressly provide, shall be a complete statement of its subject matter and shall supplement and modify the terms and conditions of this Agreement for the purposes of that engagement only. No other agreements, representations, warranties or other matters, whether oral or written, shall be deemed to bind the parties hereto with respect to the subject matter hereof.

**20. Miscellaneous Provisions.**

20.1 In performance of this Agreement, DE Math Coalition shall comply with all applicable federal, state and local laws, ordinances, codes and regulations. DE Math Coalition shall solely bear the costs of permits and other relevant costs required in the performance of this Agreement.

20.2 Neither this Agreement nor any appendix may be modified or amended except by the mutual written agreement of the parties. No waiver of any provision of this Agreement shall be effective unless it is in writing and signed by the party

against which it is sought to be enforced.

20.3 The delay or failure by either party to exercise or enforce any of its rights under this Agreement shall not constitute or be deemed a waiver of that party's right thereafter to enforce those rights, nor shall any single or partial exercise of any such right preclude any other or further exercise thereof or the exercise of any other right.

20.4 DE Math Coalition covenants that it presently has no interest and that it will not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of services required to be performed under this Agreement. DE Math Coalition further covenants, to its knowledge and ability, that in the performance of said services no person having any such interest shall be employed.

20.5 DE Math Coalition acknowledges that DDOE has an obligation to ensure that public funds are not used to subsidize private discrimination. DE Math Coalition recognizes that if they refuse to hire or do business with an individual or company due to reasons of race, color, gender, ethnicity, disability, national origin, age, or any other protected status, DDOE may declare DE Math Coalition in breach of the Agreement, terminate the Agreement, and designate DE Math Coalition as non-responsible.

20.6 DE Math Coalition warrants that no person or selling agency has been employed or retained to solicit or secure this Agreement upon an agreement or understanding for a commission, or a percentage, brokerage or contingent fee. For breach or violation of this warranty, DDOE shall have the right to annul this contract without liability or at its discretion deduct from the contract price or otherwise recover the full amount of such commission, percentage, brokerage or contingent fee.

20.7 This Agreement was drafted with the joint participation of both parties and shall be construed neither against nor in favor of either, but rather in accordance with the fair meaning thereof.

20.8 DE Math Coalition shall maintain all public records, as defined by 29 *Del. C.* § 502(7), relating to this Agreement and its deliverables for the time and in the manner specified by the Delaware Division of Archives, pursuant to the Delaware Public Records Law, 29 *Del. C.* Ch. 5. During the term of this Agreement, authorized representatives of DDOE may inspect or audit DE Math Coalition's performance and records pertaining to this Agreement at the DE Math Coalition business office during normal business hours.

## **21. Insurance.**

21.1 DE Math Coalition shall maintain the following insurance during the term

of this Agreement:

- A. Worker's Compensation and Employer's Liability Insurance in accordance with applicable law, **and**
- B. Comprehensive General Liability - \$1,000,000.00 per person/\$3,000,000 per occurrence, **and**
- C. Medical/Professional Liability - \$1,000,000.00 per person/\$3,000,000 per occurrence; or
- D. Miscellaneous Errors and Omissions - \$1,000,000.00 per person/\$3,000,000 per occurrence, or
- E. Automotive Liability Insurance covering all automotive units used in the work with limits of not less than \$100,000 each person and \$300,000 each accident as to bodily injury and \$25,000 as to property damage to others.

21.2. DE Math Coalition shall provide forty-five (45) days written notice of cancellation or material change of any policies.

21.3. Before any work is done pursuant to this Agreement, the Certificate of Insurance and/or copies of the insurance policies, referencing the contract number stated herein, shall be filed with the State. The certificate holder is as follows:

Delaware Department of Education  
401 Federal Street, Suite 2  
Dover, DE 19901

21.4. In no event shall the State of Delaware be named as an additional insured on any policy required under this agreement.

**22. Assignment of Antitrust Claims.**

As consideration for the award and execution of this contract by the State, DE Math Coalition hereby grants, conveys, sells, assigns, and transfers to DDOE all of its right, title and interest in and to all known or unknown causes of action it presently has or may now or hereafter acquire under the antitrust laws of the United States and the State of Delaware, relating to the particular goods or services purchased or acquired by the State pursuant to this contract.

**23. Surviving Clauses**

The following clauses survive the termination of this Contract: Section 9.

**24. Governing Law.**

This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware, except where Federal Law has precedence. DE Math Coalition consents to jurisdiction venue in the State of Delaware.

**25. Notices.**

Any and all notices required by the provisions of this Agreement shall be in writing and shall be mailed, certified or registered mail, return receipt requested. All notices shall be sent to the following addresses:

CONTRACTOR: DE Math Coalition,  
Jamila Riser, Project Coordinator  
Tru-Math Project  
1200 North DuPont Highway  
Dover, DE 199041  
Phone: (302) 857-7917  
Email: [jqriser@gmail.com](mailto:jqriser@gmail.com)

DDOE: David Blowman  
Associate Secretary, Financial Management and Operations  
Delaware Department of Education  
John G. Townsend Building  
401 Federal Street, Suite 2  
Dover, DE 19901  
Phone No. (302) 735-4040  
Fax No. (302) 739-7768

DOE Certificated Staff coordinating activity:

John Epstein, Education Associate

Next Page for Signatures.

IN WITNESS THEREOF, the Parties hereto have caused this Agreement to be duly executed as of the date and year first above written.

*James G. Risi*

Original On File

Delaware Department of Education  
Original On File

(Official of Vendor)  
Project Manager

David Blöwman (or Designee)  
Associate Secretary,  
Financial Management and Operations

Original On File

7/27/2016  
Date

7/26/16  
Date Initial Finance Director

Original On File

(Official of Vendor)  
Principal Investigator

Branch Associate Secretary

Original On File

Date

7/20/16  
Date Initial Work Group Director

## Appendix A - Scope of Work

### TRU-Math Project Timeline, Goals, & Deliverables

**Description of Project Participants, Focus, & Goals:** The *TRU-Math Project* will address the following organizational goals identified by the DMC: 1) increase the mathematics leadership capacity of 60 grades 2-5 elementary master and novice teachers and coaches, 30 secondary teacher leaders, and 30 or more administrators, 2) provide a content-focused induction program that supports identified new teachers ( $\leq 5$  years in their schools) in teaching for conceptual understanding. Using a video-based *mathematics Leadership Induction Curriculum*, facilitators will immerse the project teachers in grade level clusters and smaller subgroups to study identified mathematics strands and to analyze strategies that support conceptually-focused mathematics learning. Additional training and support for new teachers will be provided within onsite, and online study teams who use classroom video clips for discussion and analysis. Measurable outcomes for *TRU-Math* include demonstrating: 1) increases in teachers' *usable* content knowledge as measured by pre-post video-based measures; 2) growth in teachers' ability to engage students in teaching for conceptual understanding as measured by Hiebert & Berk's video analysis rubric; 3) annual increases in student performance outcomes for claims 1 and 3 of the Smarter Balanced Assessment; 4) annual growth in the percentage of students performing at proficient and above levels on the new SAT exam; and 5) improved statistics on new teacher satisfaction and retention.

**Project Structure:** The *TRU-Math* professional development program will focus on teaching mathematics for conceptual understanding and will include: 4 days of differentiated summer academy work for master teachers and for new teachers (30), three-six release days during the academic year (21-36 hours), an Equity Conference (6 hours) and approximately 20 hours of onsite school-based work in PLCs and with online study groups. Project leaders including university mathematicians and mathematics educators, and internationally, nationally and locally recognized mathematics experts will work within their areas of expertise to: 1) promote a deep understanding of identified mathematics concepts; 2) support master teachers, coaches and their identified study group teams in the use of content-centered video-analysis protocols, and measurement tools (Hiebert & Berk, UD). These video-based analysis tools are grounded in empirical research on teaching for conceptual understanding (Hiebert & Grouws, 2007) and demonstrated strong linkages between teachers' content-based teaching practices, and increases in student achievement (Kersting 2010, 2012).

## Appendix A - Scope of Work

Research for Better Schools (*RBS*), a nationally recognized evaluation team celebrated for the rigorous nature of their MSP project studies will use a mixed-methods design to conduct formative and summative evaluations of the *TRU-Math* project. Implementation data that offer insight into the degree to which teachers, connectors, and others achieve project goals will be collected through surveys, interviews, document reviews, and observations of the professional development. *RBS* will measure changes in teachers' *usable* knowledge using the validated classroom video analysis (CVA) assessment tool described in the top-rated *American Educational Research Journal* developed by Kersting et al (2012) and further refined by researchers Hiebert & Berk in their studies related to teaching for conceptual understanding. The quasi-experimental study will compare the extent to which the MSP treatment (*TRU-Math*) correlates with changes in the pre post scores for a stratified sample of MSP teachers (experimental group) and a comparable group of teachers not in the project (control group). Using a linear regression model, *RBS* will also analyze how these measures correlate with changes in the achievement of students in teachers' classrooms.

### **ADDRESSING THE IDENTIFIED ORGANIZATIONAL CHALLENGES**

The *TRU-Math* project is designed to prepare new teachers to meet the challenge of teaching the Common Core State Standards and to improve new teacher satisfaction and retention by enlisting a growing numbers of committed *master teachers* and training them to:

1. Participate in and ultimately lead school-based collaborations based on understanding and applying appropriate, concepts-based math lessons that meet the criteria for student learning (Hiebert & Grouws, 2007).
2. Play a key role in new teacher induction and professional development using classroom videos and face-to face support from teacher leaders and project staff to impact new teachers' instructional strategies and sense of efficacy.
3. Collect classroom videos that demonstrate concept-based learning and, working with other lead teachers, prepare these videos for use in onsite and online collaborations with new teachers and in PLCs.

## Appendix A - Scope of Work

Priorities for our mathematics content include training *new teachers* to:

1. Teach for conceptual understanding using the two research based principles with empirical research for improving student achievement (Hiebert & Grouws, 2007)
2. Analyze classroom videos with an eye to the pedagogical strategies that promote students' conceptual understanding of mathematics.
3. Choose rich, conceptually-based mathematics tasks that promote students' success in problem solving and reasoning.

### **Measurable outcomes**

Measures of success for teacher inductees and the teacher leaders in the project will include:

- 1) Growth in *usable content knowledge* as measured by the CVA video assessment tool.
- 2) Growth on the CVA measure of teaching effectiveness (Kersting 2010, 2012).
- 3) Improved student performance outcomes for claims 1 and 3 of the Smarter Balanced Assessment, and scores (baseline scores in appendix) on the new SAT exam (for targeted population) with a focus on gap-closing targets for the participating schools in Year 2.
- 4) Statistics on new teacher satisfaction and retention (using state survey results).

Appendix A - Scope of Work

**TRU-Math Project Timeline**

<b>Time Frame</b>	<b>Project-Based Activities</b>	<b>Outputs/Deliverables</b>
<b>Summer-2016</b>	<ul style="list-style-type: none"> <li>• Ongoing communication with project teams and district contacts (Project Director)</li> <li>• Meet with site-based connectors to develop goals for summer and onsite work (Project Leadership Team, Site-Based Connectors)</li> <li>• Establish goals and plans for for content-focused and pedagogically grounded professional development for Elementary Math Leaders (EMTL) Program &amp; Leadership Coaching Lab (Project Leadership Team)</li> <li>• Select video for CVA and paper-and-pencil assessments (Project Leadership Team including IHE Thought Partners)</li> <li>• Finalize plans for summer observations, survey administration, and collection of baseline data (Project Director, RBS)</li> <li>• Finalize plans for summer academies (Project Leadership Team, IHE Thought Partners)</li> <li>• Review potential sources for book study for summer and in-year work and order materials for summer academy (Project Leadership Team, DFSME)</li> <li>• Meet with RBS Director and staff (Project Leads)</li> <li>• Set-up Schoology groups (Project Director)</li> </ul>	<ul style="list-style-type: none"> <li>• E-mail communications to district stakeholders</li> <li>• Professional Development Flyers</li> <li>• Registration forms (online/paper)</li> <li>• Meeting agendas and notes</li> <li>• Planning meetings and identified targets</li> <li>• Use Smarter Balanced/SAT to establish baseline data and annual targets</li> <li>• Summer Academy Schedules</li> <li>• Pre-Assessment Tool(s)</li> <li>• Evaluation plan and surveys from RBS</li> <li>• Selection of book study resources</li> <li>• Schoology groups/courses activated</li> <li>• DMC Website updated and links activated</li> </ul>
<b>Summer-2016</b>	<ul style="list-style-type: none"> <li>• Conduct/deliver 4 days of face-to-face content-focused professional learning grounded in the two teaching principles for promoting conceptual understanding for EMTL teachers, coaches, mathematics specialists, SMTL teachers, and administrators (Target 60 grades 2-5 teachers and 30 secondary teacher leaders; 28 hours of professional learning) (Project Facilitators)</li> <li>• Collect baseline video-based assessment and survey data (Project Facilitators, RBS)</li> <li>• Administer paper-and-pencil assessment of identified content-based objectives (Project Facilitators)</li> <li>• Process summer stipends (DFSME)</li> </ul>	<ul style="list-style-type: none"> <li>• Summer Academy Agendas &amp; Plans</li> <li>• Online discussions via Schoology</li> <li>• Collection of CVA (video-based) Data</li> <li>• Artifacts from summer work with teachers, coaches, and administrators</li> </ul>

Appendix A - Scope of Work

<p><b>August/Sept 2016</b></p>	<ul style="list-style-type: none"> <li>• Use teacher participant profile to identify and recruit comparison group candidates (Project Leads)</li> <li>• Administer CVA to comparison group (RBS)</li> <li>• Planning meeting to develop details for in-year professional development (Leadership Induction Curriculum) (Project Leadership Team)</li> <li>• Survey data analyzed and shared with partners (Project Leads, Project partners, RBS)</li> <li>• Meet with site-based connectors to plan for follow-up onsite work (Project Leadership Team)</li> <li>• Site-based connectors meet with school teams to focus on video-based assessment work, collection of video, support for ongoing reflection and analysis (Project Leads, Site-Based Connectors)</li> </ul>	<ul style="list-style-type: none"> <li>• Baseline data analysis</li> <li>• Fall Newsletter</li> <li>• Presentation to DMC, DFSME</li> <li>• Meetings with site-based teams (documented with notes related to ongoing progress, goals, etc.)</li> <li>• Teacher assessment data</li> <li>• Plans, presentations for PD (includes targets and use of Schoology)</li> <li>• Development of conceptually-focused video segments for site-based communities (Leadership Induction Curriculum)</li> </ul>
<p><b>September 2016 - June 2017</b></p>	<ul style="list-style-type: none"> <li>• Ongoing-Planning meetings to support monthly face-to-face session (Target 3 additional days for EMTL participants and 6 additional days for Leadership Coaching Lab participants) (Project Leadership Team)</li> <li>• Ongoing meetings to support site-based connector work (Project Leads, Site-Based Connectors)</li> <li>• Onsite site-based connectors meetings (Target 20 more hours) (District teams, Site-Based Connectors, Project Leads)</li> <li>• Develop of formative assessment tools for ongoing onsite and face-to-face sessions (Project Leadership Team)</li> <li>• Ongoing (quarterly) meeting with RBS Director and staff (Project Leads)</li> <li>• Recruit line-up and develop goals and plans for Equity Conference (February 2017) (Project Leads)</li> <li>• Analysis and summary of formative and summative assessment measures (Project Leads, RBS)</li> <li>• Administer CVA to participant pool and comparison group (June 2017) (Project Leads)</li> <li>• Administer end-of-year survey (RBS)</li> </ul>	<ul style="list-style-type: none"> <li>• Archived notes, goals, and identified deliverables</li> <li>• Summary of Schoology and video-based tool data</li> <li>• Development/Refinement of conceptually-focused video segments for site-based communities (Leadership Induction Curriculum)</li> <li>• Winter and Spring Newsletter</li> <li>• Quarterly Reports/Presentations to Project Partners</li> <li>• Annual Report to DOE, FEDS</li> </ul>
<p><b>July 2017</b></p>	<ul style="list-style-type: none"> <li>• Pending funding, begin cycle for year 2</li> </ul>	

## Appendix A - Scope of Work

### TRU-Math Budget Narrative

Total Y1 Grant Request: \$ 232,183

#### Salaries & OECs: \$ 94,939 Dr. Jamila Riser

Planning and implementation of professional development onsite support for teacher leaders and inductees.

- Liaison with planning teams and higher education partners
- Oversight of the project professional development content teams (elementary (Grades 2-5); K-12 Leadership).
- Oversight of the Leadership Coaching Lab professional development team
- Oversight of the project "connectors".
- Regular meetings with the evaluation team.
- Project paperwork, administration, and reporting.
- Liaison with Delaware Math Coalition professional development advisors.

#### Honoraria for Higher Ed Partners: \$ 4000

Dr. Dawn Berk and Dr. Amanda Jansen

- Dr. Dawn Berk will provide guidance for the planning and implementation of the segments on the use of video based analysis tools for classroom teachers. She will also do "kick off" presentations for the summer academies (planning & providing kick-off, thought partner work- \$ 1500).
- Dr. Amanda Jansen will provide guidance for the planning and implementation of the segments on the use of exploratory talk for classroom teachers. She will serve as a study group course leader working with master teachers to enhance their knowledge of exploratory talk (plan and facilitate online course \$ 2500).

#### Community Events: Sponsored by DSU: Funded by Delaware Community

- Dr. Alan Schoenfeld will provide guidance for the planning and implementation of the segments based on the components of his TRU-Math framework in sessions with administrators. He will play a role in presenting the TRU-Math framework for K-12 Community Events (funded outside of the grant using registration for event)
- Dr. Nicola Edwards-Omolewa will work with TRU-Math team to plan and facilitate the K-12 Community Events and Administrator Series (Events partially funded through DSU Center for Teaching & Learning and supplemental funds (outside of grant))

#### Consulting Costs for PD Facilitators: \$ 28,440

Maxwell: 6 cycles as elementary lead (\$ 405/cycle=\$ 2430); 6 half days of Leadership Coaching Lab (\$ 405/half day=\$ 2430). The facilitation/planning day rate is 2:1 (\$ 540:\$ 270).

Maxwell: 8 days of administrative support (\$ 500/day=\$ 4000)

Parsons: 6 days of elementary lead (\$ 810/cycle=\$ 4860); 6 half days of Leadership Coaching Lab (\$ 405/half day=\$ 2430). The facilitation/planning day rate is 2:1 (\$ 540:\$ 270).

Thornburg: 6 days of elementary lead (\$ 810/cycle=\$ 4860); 6 half days of Leadership Coaching Lab (\$ 405/half day=\$ 2430). The facilitation/planning day rate is 2:1 (\$ 540:\$ 270)

## Appendix A - Scope of Work

Ray-Riek: 6 half days of Leadership Coaching Lab (\$ 500/half day=\$ 3000). The facilitation/planning day rate is 2:1 (\$ 66.67:\$ 333.33.). Statewide equity conference speaker: \$2000.

### **Honoraria for Project Connectors: \$ 24,000**

20 days of support for each of 4 site-based connectors (\$ 300/day)(20 days)=\$ 24,000. A description of their work is included in the grant and in documents that we have produced as part of our structural support schema.

### **Incentives for Project Participants: \$ 27,000**

60 Grades 2-5 novice and teacher leaders each receive (\$ 100/day)(3days)=\$ 18,000  
30 K-12 lead teachers and school-based peer coaches each receive (\$ 100/day)(3days)=\$ 9000

### **Project Evaluation: \$ 25,000**

Research for Better Schools (RBS) will serve as our project evaluators. Please see the grant narrative for a description of their work and the grant appendix for a break-down of the evaluation budget.

### **Incentives for Comparison Tests: \$ 2,000**

### **Materials & Supplies: \$ 3,073**

This includes chart paper, composition books, paper and printing supplies, resource books for teachers and presenters.

### **Facility Usage: \$ 500**

These funds support a portion of the cost of the facilities for the PD. Additional funding will be provided by the districts (through a registration fee).

### **Travel: \$ 6,000 (\$ 4000 in-state; \$ 2000 out-of-state)**

These funds support in-state travel for the Project Director (\$ 200/month for 12 months) and \$ 50/round trip to Dover for the members of the professional development and coaching staff. \$ 1000 is allocated for both Dr. Riser and Dr. Maxwell for travel to the MSP conference (should one be held) and to national conferences to share the work (pending approval by the DDOE).

### **Total Indirect Costs: \$ 17,231**

Indirect costs are 8% of the project's direct costs of **\$ 214,952**

### **Total Grant Request: \$ 232,183**

**Appendix A – Scope of Work**

**Comprehensive Project Budget Summary**

**Project Title: *Teaching for A Robust Conceptual Understanding of Math (TRU-Math) Project***

**Project Director: Dr. Jamila Riser**

LEA Partner Representative, Title: Delaware Mathematics Coalition (A Consortium of Districts)

IHE Partner Representatives, Titles: University of DE (Dr. Louis Rossi, Mathematical Sciences Department Chair), Delaware State University (Dr. Nicola Edwards-Omolewa, Mathematical Sciences Department Chair), Delaware Technical & Community College (Dr. John Buckley), & Wilmington University (Ms. Diane Bansbach, Mathematics Department Chair)

**Fiscal Agent (Institution Name): Delaware Foundation for Science and Math Education**

<b>Direct Cost Requested</b>	<b>Year 1</b>
<b>Salaries and Other Employee Costs</b>	
<input type="checkbox"/> Professional	\$72,000
<input type="checkbox"/> Other Employee Costs (for Project Director)	\$22,939
<b>Consultants &amp; Contracted Services (List separately)</b>	
<input type="checkbox"/> Substitutes	Contributed by district
<input type="checkbox"/> Teacher Incentive (Summer & In-Year Work, & Control Group Incentives)	\$29,000
<input type="checkbox"/> Tuition, if applicable	
Project Facilitators (includes Keynote for K-20 event)	\$29,655
<input type="checkbox"/> Higher Ed Honorariums	\$4000
Project Onsite Support	\$24,000
<input type="checkbox"/> Evaluator (Required)	\$25,000
<b>In State Travel (Include registration costs)</b>	\$4000
<b>Out of State Travel (Include registration costs)</b>	\$2000
<b>Materials and Supplies</b>	\$3073
<input type="checkbox"/> Food/facility usage (must not exceed 1% of total request)	\$500
<b>Indirect Costs *</b>	\$17,231
<b>Total</b>	\$232,183
<b><i>Cost per Teacher per Contact Hour (90 participants; 80 hours)</i></b>	\$32.24/teacher/h

\* The indirect cost rate for the fiscal agent shall not exceed 8% of direct costs.

Delaware Mathematics Coalition: TRU-Math Project (Grades K-4, 5-7, & 8-12 Mathematics)

## Appendix B: Payment Schedule

### TRU-Math Project Payment Schedule (2016-2017)

Date Range	Scope of Work	Amount	Doe Deliverables
<b>Summer 2016</b>	<ul style="list-style-type: none"> <li>TRU-Math staff meet to support summer and long-range planning</li> <li>TRU-Math connectors meet to establish and goals, vision, and scope-of-work for face-to-face PD and "boots-on-the ground" work</li> <li>Project Director works with district leads to finalize participant list, coordinate financial work with DFSME, and develop project timeline and related paperwork for Delaware Department of Education</li> <li>Project Director and staff work with IHE partners to develop video-based assessment measures and potential video clips for ongoing for Leadership Induction Curriculum for Mathematics Educators</li> <li>Project Leads meet with Ruth Parker to anticipate and determine follow-up for TRU-Math Academy</li> <li>Conduct TRU-Math Project Academy (July 12-14); Participants receive first round of face-to-face professional learning</li> <li>Connectors meet with school-based teams to support expectations for follow-up onsite work</li> <li>Collect and begin to analyze baseline data for video-based content knowledge test</li> <li>Project Director works with fiscal manager (DFSME) to process summer incentive pay for TRU-Math Academy</li> <li>Ongoing: Project Director communicates with district and school-based leads, participants, holds planning meetings with staff, meets with partners (district, IHE, RBS, DFSME), and collects and manages project-based data and artifacts including content in Schoology</li> </ul>	\$39,238	<p>Invoice with # of people, dates, and hours.</p> <p>Video-based assessment measures</p> <p>Invoice with sign-in sheets, copies of professional learning collateral materials</p> <p>Invoice with # of people, dates, and hours.</p>
	<ul style="list-style-type: none"> <li>Continue to work with DFSME manager to process summer incentive payments (academy participation)</li> <li>Meeting with IHE partners (Schoenfeld, Pelesko, Jansen) regarding Equity series. Establish goals, activities, and vision for the year's work.</li> <li>Prepare summary including highlights for summer work to share with DMC members.</li> <li>TRU-Math sharing groups prepare content to support onsite meetings in the fall.</li> <li>Plan for September professional development sessions (EMTL, LCL)</li> <li>Meet with identified administrators to plan for administrator series during the year</li> <li>Work with IHE partners (Hiebert, Berk) and RBS to support analysis of TRU-Math video-based assessment</li> <li>Coordinate work with RBS for fall observation of stratified sample of TRU-Math teachers</li> </ul>	\$13,621	<p>Summary of goals and activities set for year's work</p> <p>DMC Summary</p> <p>IHE and RBS update of work</p>

## Appendix B: Payment Schedule

### TRU-Math Project Payment Schedule (2016-2017)

	<ul style="list-style-type: none"> <li>• Work with team (including IHE partners) to continue to develop content for ongoing Leadership Induction Curriculum for Mathematics Educators</li> <li>• Update district partners regarding attendance and expectations for school year work</li> <li>• Ongoing administrative work to support collection and managements of grant metrics</li> <li>• Manage Leadership Induction Curriculum in Schoology</li> <li>• Ongoing administrator work including communication with district partners, coordination of meetings, and research related to ongoing work with project</li> <li>• Matched comparison control group participants identified and video-based assessment is administered</li> <li>• Ongoing: Project Director communicates with district and school-based leads, participants, holds planning meetings with staff, meets with partners (district, IHE, RBS, DFSME), and collects and manages project-based data and artifacts including content in Schoology</li> </ul>		<p>Schoology Leadership Induction Curriculum</p>
<p><b>September 2016</b></p>	<ul style="list-style-type: none"> <li>• Conduct September sessions of the TRU-Math Project (EMTL; Leadership Coaching Lab)</li> <li>• Connectors conduct onsite visits and meet with teams to support ongoing Leadership Induction Curriculum work</li> <li>• Connectors meet with "sharing groups" during September PD sessions to support Leadership Induction Curriculum for Mathematics Educators development and follow-up onsite work</li> <li>• Max Ray-Riek meets with Leadership Coaching Lab teams to develop mechanism for broadening their sphere of influence</li> <li>• RBS conducts onsite visits and works with IHE and project team to support analysis of baseline video-based assessment</li> <li>• Debrief September PD and meet with team to support goals and refinement of plans for October sessions</li> <li>• Ongoing administrative work including communication with district stakeholders, analysis of data, creation of summary reports, and work on fall newsletter</li> <li>• Planning meeting with Schoenfeld and thought partners at UD, DSU, and WU to support development of administrator series</li> <li>• Work with identified administrators to refine plans for administrator series</li> <li>• Ongoing: Project Director communicates with district and school-based leads, participants, holds planning meetings with staff, meets with partners (district, IHE, RBS, DFSME), and collects and manages project-based data and artifacts including content in Schoology</li> </ul>	<p>\$18,956</p>	<p>Sign-in sheets</p> <p>Connectors days/hours/data* (*instructional changes and student improvement)</p> <p>Sign-in sheets</p> <p>RBS update</p> <p>Invoice with # of people, dates, and hours.</p>

## Appendix B: Payment Schedule

### TRU-Math Project Payment Schedule (2016-2017)

<b>October 2016</b>	<ul style="list-style-type: none"> <li>• Conduct October sessions of the TRU-Math Project (see schedule)</li> <li>• Connectors conduct onsite visits and meet with teams to support ongoing Leadership Induction Curriculum work</li> <li>• Connectors meet with "sharing groups" during October session to support ongoing Leadership Induction Curriculum for Mathematics Educators development and follow-up support in the teachers' schools</li> <li>• Max meets with Leadership Coaching Lab participants to develop mechanism for broadening their sphere of influence</li> <li>• RBS conducts onsite visits and analysis of video-based assessment</li> <li>• Debrief September PD and meet with team to support goals and refinement of plans for October sessions</li> <li>• Host the fall Equity Conference (Schoenfeld, Pelesko, etc.)</li> <li>• Ongoing: Project Director communicates with district and school-based leads, participants, holds planning meetings with staff, meets with partners (district, IHE, RBS, DFSME), and collects and manages project-based data and artifacts including content in Schoology</li> <li>• Production and dissemination of fall newsletter</li> </ul>	<b>\$18,956</b>	<p>Sign-in sheets</p> <p>Connectors days/hours/data*</p> <p>LCL sign-in sheets</p> <p>RBS update</p> <p>Equity Conference Sign-in sheets</p> <p>Invoice with # of people, dates, and hours.</p>
<b>November 2016</b>	<ul style="list-style-type: none"> <li>• Connectors conduct onsite visits and meet with teams to support ongoing Leadership Induction Curriculum work</li> <li>• Connectors visit schools to support onsite work related to Leadership Induction Curriculum</li> <li>• Max has "sharing groups" report out @ Leadership Coaching Lab, employing structures for broadening their sphere of influence</li> <li>• Debrief October PD and October administrator series launch and meet with team to support goals and refinement of plans for December-May sessions</li> <li>• Project Director meets with administrative team to debrief October Administrator Series kick-off and plan for sessions to be held in February and May</li> <li>• Ongoing: Project Director communicates with district and school-based leads, participants, holds planning meetings with staff, meets with partners (district, IHE, RBS, DFSME), and collects and manages project-based data and artifacts including content in Schoology</li> </ul>	<b>\$26,473</b>	<p>Connector days/hours/data*</p> <p>LCL sign-in sheets and update</p> <p>Invoice with # of people, dates, and hours.</p>

## Appendix B: Payment Schedule

### TRU-Math Project Payment Schedule (2016-2017)

<b>December 2016</b>	<ul style="list-style-type: none"> <li>• Conduct December sessions of the TRU-Math Project</li> <li>• Connectors conduct onsite visits and meet with teams to support ongoing Leadership Induction Curriculum work</li> <li>• Connectors meet with "sharing groups" during December session to support ongoing Leadership Induction Curriculum for Mathematics Educators development</li> <li>• Max has sharing groups engage participants in the ongoing development of the Leadership Induction Curriculum content</li> <li>• RBS conducts onsite visits and analysis of video-based assessment</li> <li>• Ongoing administrative work including communication with district stakeholders, analysis of data, create summary reports, and work on fall newsletter</li> <li>• Ongoing: Project Director communicates with district and school-based leads, participants, holds planning meetings with staff, meets with partners (district, IHE, RBS, DFSME), and collects and manages project-based data and artifacts including content in Schoology</li> </ul>	<b>\$18,956</b>	<p>Sign-in sheets</p> <p>Connectors days/hours/data*</p> <p>Sign-in sheets, LCL update</p> <p>RBS update</p> <p>Invoice with # of people, dates, and hours.</p>
<b>January 2017</b>	<ul style="list-style-type: none"> <li>• Max engages Leadership Coaching Lab participants in the ongoing development and dissemination of the Leadership Induction Curriculum content</li> <li>• Debrief December PD and meet with team to support goals and refinement of plans for February sessions including equity conference at DSU</li> <li>• Ongoing: Project Director communicates with district and school-based leads, participants, holds planning meetings with staff, meets with partners (district, IHE, RBS, DFSME), and collects and manages project-based data and artifacts including content in Schoology</li> <li>• Project Team collect and generate articles for winter newsletter</li> </ul>	<b>\$9,119</b>	<p>Sign-in sheets</p> <p>Invoice with # of people, dates, and hours.</p> <p>Copies of articles</p> <p>Annual Performance Report</p>
<b>February 2017</b>	<ul style="list-style-type: none"> <li>• Conduct February sessions of the TRU-Math Project</li> <li>• Connectors conduct onsite visits and meet with teams to support ongoing Leadership Induction Curriculum work</li> <li>• Connectors meet with "sharing groups" during February session to support ongoing Leadership Induction Curriculum for Mathematics Educators development</li> <li>• Max engage Leadership Coaching Lab participants in the ongoing development and dissemination of the Leadership Induction Curriculum content</li> </ul>	<b>\$13, 313</b>	<p>Sign-in sheets</p> <p>Connectors days/hours/data*</p> <p>Sign-in sheets, LCL update</p>

## Appendix B: Payment Schedule

### TRU-Math Project Payment Schedule (2016-2017)

	<ul style="list-style-type: none"> <li>• Meet with RBS to support project-based formative evaluation checks Debrief February PD and meet with team to support goals and refinement of plans for March sessions</li> <li>• Host Equity Conference at DSU</li> <li>• Ongoing: Project Director communicates with district and school-based leads, participants, holds planning meetings with staff, meets with partners (district, IHE, RBS, DFSME), and collects and manages project-based data and artifacts including content in Schoology</li> <li>• Disseminate winter newsletter</li> </ul>		<p>RBS update</p> <p>Equity sign-in sheets</p> <p>Invoice with # of people, dates, and hours.</p>
<b>March 2017</b>	<ul style="list-style-type: none"> <li>• Conduct March sessions of the TRU-Math Project</li> <li>• Connectors conduct onsite visits and meet with teams to support ongoing Leadership Induction Curriculum work</li> <li>• Connectors meet with "sharing groups" during March session to support ongoing Leadership Induction Curriculum for Mathematics Educators development</li> <li>• Max provides time for LCL participants to get feedback regarding the next instantiation of the content for the Leadership Induction Curriculum for Math Educators artifacts</li> <li>• RBS conducts onsite visits and analysis of video-based assessment</li> <li>• Debrief February LCL PD and meet with team to support goals and meet with NCSM teams to plan for April presentations</li> <li>• Administrative work including communication with district stakeholders, analysis of data, create summary reports, and work on spring newsletter</li> <li>• Ongoing: Project Director communicates with district and school-based leads, participants, holds planning meetings with staff, meets with partners (district, IHE, RBS, DFSME), and collects and manages project-based data and artifacts including content in Schoology, and work on spring newsletter</li> </ul>	<b>\$12,244</b>	<p>Sign-in sheets</p> <p>Connectors days/hours/data*</p> <p>Sign-in sheets, LCL update</p> <p>RBS update</p> <p>Support sign-in sheets</p> <p>Invoice with # of people, dates, and hours.</p>

## Appendix B: Payment Schedule

### TRU-Math Project Payment Schedule (2016-2017)

<b>April 2017</b>	<ul style="list-style-type: none"> <li>• Conduct April sessions of the TRU-Math Project including April NCSM presentation</li> <li>• Connectors conduct onsite visits and meet with teams to support ongoing Leadership Induction Curriculum work</li> <li>• Connectors meet with "sharing groups" during April session to support ongoing Leadership Induction Curriculum for Mathematics Educators development</li> <li>• Max provides time for LCL participants to get feedback regarding the next instantiation of the content for the Leadership Induction Curriculum for Math Educators artifacts</li> <li>• Debrief March PD and meet with team to support goals and refinement of plans for May PD sessions</li> <li>• Ongoing: Project Director communicates with district and school-based leads, participants, holds planning meetings with staff, meets with partners (district, IHE, RBS, DFSME), and collects and manages project-based data and artifacts including content in Schoology</li> <li>• Ongoing administrative work including communication with district stakeholders, analysis of data, &amp; create summary reports</li> <li>• Disseminate spring newsletter</li> </ul>	<b>\$22,493</b>	<p>Sign-in sheets &amp; April NCSM presentation</p> <p>Connectors days/hours/data*</p> <p>Sign-in sheets, LCL update</p> <p>Planning sign-in sheets</p> <p>Invoice with # of people, dates, and hours.</p>
<b>May 2017</b>	<ul style="list-style-type: none"> <li>• Conduct May sessions of the TRU-Math Project</li> <li>• Connectors conduct onsite visits and meet with teams to support ongoing Leadership Induction Curriculum work</li> <li>• Connectors meet with "sharing groups" during May session to support ongoing Leadership Induction Curriculum for Mathematics Educators development</li> <li>• Max provides time for LCL participants to get feedback regarding the next instantiation of the content for the Leadership Induction Curriculum for Math Educators artifacts</li> <li>• Debrief May PD and meet with team to support goals and refinement of plans for June and summer sessions</li> <li>• Ongoing administrative work including communication with district stakeholders, analysis of data, create summary reports, and work on summer flyers and newsletters</li> <li>• Ongoing: Project Director communicates with district and school-based leads, participants, holds planning meetings with staff, meets with partners (district, IHE, RBS, DFSME), and collects and manages project-based data and artifacts including content in Schoology</li> </ul>	<b>\$24,421</b>	<p>Sign-in sheets</p> <p>Connectors days/hours/data*</p> <p>Sign-in sheets, LCL update</p> <p>Support sign-in sheets</p> <p>Invoice with # of people, dates, and hours.</p>

## Appendix B: Payment Schedule

### TRU-Math Project Payment Schedule (2016-2017)

<b>June 2017</b>	<ul style="list-style-type: none"> <li>• Connectors collect and present summative data and anticipate work for the 2017-2018 year</li> <li>• Max engages LCL participants in review of Leadership Induction Curriculum content for publication submission (LIC includes vignettes and video related to teaching for conceptual understanding as well content regarding structures to support successful leadership induction programs in schools)</li> <li>• RBS conducts onsite visits and analysis of video-based assessment</li> <li>• Debrief May PD and meet with team to support goals and plans for summer and 2017-2018 sessions</li> <li>• Ongoing administrative work including communication with district stakeholders, analysis of data, create summary reports, and work on and disseminate summer newsletter</li> <li>• Ongoing: Project Director communicates with district and school-based leads, participants, holds planning meetings with staff, meets with partners (district, IHE, RBS, DFSME), and collects and manages project-based data and artifacts including content in Schoology</li> </ul>	<b>\$14,393</b>	<p>Sign-in sheets</p> <p>Connectors days/hours/data*</p> <p>Sign-in sheets, LCL update</p> <p>RBS update</p> <p>Support sign-in sheets</p> <p>Invoice with # of people, dates, and hours.</p>
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