DESIGNING FOR IMPACT: NEXT LEVEL COMPUTER SCIENCE GRANT

Indiana Department of Education

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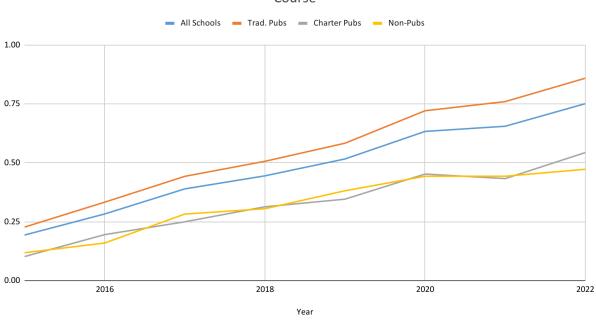
Grant Overview

Design for Impact: Next Level Computer Science Grant	
Grant Period	Monday, February 13, through Sunday, December 31
Application Release Date	Friday, January 6
Application Due Date	Friday, February 3
Submission Process	*Design for Impact: Next Level Computer Science Grant Application*
Eligibility	Applicants must meet one of the following eligibility criteria: 1. A postsecondary educational institution; or 2. Any organization that provides a nationally-recognized and high-quality professional development training program in computer science education.
Award	A total of $1.9 million has been allocated for this grant. Individual awards will be determined based on the intended outcomes resulting from the grant application and design.
Grant Award Notification	Friday, February 17

Grant Summary

The *Designing for Impact: Next Level Computer Science Grant* provides opportunities to expand access to engaging and empowering computer science education for all Indiana students. The number of Indiana high school students completing at least one computer science course has grown steadily over the last five years. Computer science plays a critical role in the future Indiana workforce, and preparing students for success through this grant will provide support for improved pedagogy and access to high-quality computer science resources.

Percentage of High Schools with Computer Science Course Completions in at Least One CS Course

All Schools   Trad. Pubs   Charter Pubs   Non-Pubs

Developing educators to design and deliver foundational computer science courses to meet the demands of increasing high school enrollment has been a focus during this time. Participation in computer science has simultaneously increased among Indiana's K-8 student population. While Indiana has made significant progress, there is increasing opportunity to expand access to and participation in computer science educational opportunities.

According to the Indiana Department of Workforce Development (DWD) (Indiana DWD, 2021), "The number of jobs in the computer science and mathematical sector in Indiana are expected to grow to nearly 69,000 by 2028, an increase of approximately 7,000 from its 2018 base of 61,344 jobs." Our education system can support efforts to prepare Indiana students for success in high-demand computer science post-secondary experiences by developing PK-12 teachers with skills to engage students in solving authentic community problems using computing.

To enhance and strengthen the impact of Indiana computer science learning opportunities for Indiana PK-12 students, the *Designing for Impact: Next Level Computer Science Grant* was developed to produce the following **key results**:

- Increase computer science pedagogical knowledge of in-service and pre-service teachers;
- Increase teacher understanding of and ability to implement authentic problem solving using computing to address or improve systems and circumstances in local communities; and
- Provide professional pathways for educators to access and be successful in acquiring transferable credentialing and licensing opportunities.

Grant Eligibility

To achieve these key results and outcomes outlined in the *Designing for Impact: Next Level Computer Science Grant,* PK-12 schools need targeted support. Pursuant to Indiana Code (IC) 20-20-45-1, applicants must meet one of the following eligibility criteria:

1. A postsecondary educational institution; or
2. Any organization that provides a nationally-recognized and high-quality professional development training program in computer science education.

Application Overview

Pursuant to IC-20-20-45, the *Designing for Impact: Next Level Computer Science Grant* funds may be used to support one or more of the following strands:

Strand 1: Develop and deliver regional K-12 computer science professional development opportunities that target demonstrated regional needs in all grade bands. An application may include but is not limited to:

- Results of a needs assessment completed by regional stakeholders who will engage in the proposed computer science professional development;
- A menu of professional development opportunities designed to address demonstrated needs; and/or
- An implementation timeline indicating multiple means of engaging educators throughout the grant cycle.

Strand 2: Develop and deliver K-12 computer science professional development opportunities specifically designed to prepare educators to integrate computer science/computational thinking within multiple disciplines in an effort to solve real-world problems in communities around the state. An application may include but is not limited to:

- A system to match educators with regional partners to identify real-world problems that can be solved using computers;
- A menu of intensive professional development opportunities for grades K-8 addressing multi-disciplinary approaches to integrating computer science core concepts and practices into real-world solutions; and/or
- Opportunities to highlight and promote multidisciplinary problem solving resulting in solutions to real-world problems identified in local communities using a "train the trainer" model where classroom teachers demonstrate strategies for successful implementation.

Strand 3: Design and deliver professional learning pathways for educators to access and be successful in acquiring transferable credentialing and licensing opportunities to elevate instructional design and expand computer science learning experiences for PK-12 students. An application may include but is not limited to:

- Professional learning opportunities to increase current pre-service and in-service computer science teacher capacity to lead/coach the development of systems to sustain opportunities for access to computer science learning opportunities;
- Regional sessions where computer science educators convene to turn best instructional practices and learning experiences into a strategic plan for recruiting underrepresented students and teachers in computer science; and/or
- Educator microcredentials for leading/teaching authentic problem-solving leveraging computer science content and practices.

The grant will provide funding for programs impacting the 2022-2023 and 2023-2024 school years and beyond. Funds may be used for teacher stipends, professional development/training, and the acquisition of instructional materials necessary to implement proposed grant activities. Funds are not to be used for any other purpose outside of support for the *Designing for Impact: Next Level Computer Science Grant* program.

The grant narrative and budget documentation must:

- Affirm the applicant's qualifications and experience in implementing proposed grant activities;
- Affirm the intended use of grant funds; and
- Affirm systems and processes are in place to monitor program implementation and submit relevant participation data depending on chosen strand(s).

In addition to the above requirements, applicants must clearly articulate a *Designing for Impact Plan* through the grant narrative and budget documentation that satisfies the evaluation criteria outlined below.

Domain 1: Computer Science Pedagogy Development

Successful grant applications will:

1.1: Identify the strand(s) you seek to address and explain how proposed activities will achieve key results of the grant.

1.2: Develop an implementation timeline along with a sustainability plan that will support this work after the grant cycle has ended.

1.3: Develop and describe a communication plan to promote opportunities created through this grant to in-service teachers, pre-service teachers, and regional stakeholders.

1.4: Identify support personnel within eligible organizations who will be responsible for implementing proposed grant activities and define the roles they will play in implementation and sustainability.

1.5: Create a system of collecting and reporting data to measure progress of implementation throughout the grant cycle.

Domain 2: Collaboration with Regional Stakeholders

Successful grant applications will:

2.1: Identify regional stakeholders who will assist in implementing proposed grant activity development and implementation.

2.2: Provide selection criteria or qualifications for selected regional stakeholders and explain role(s) and responsibilities in proposed grant activities.

2.3: Provide letters of support from regional stakeholders for engaging in a defined role in implementing proposed grant activities (including primary contact information).

Application Components

Applications including a grant narrative, budget summary (Excel format), and a budget narrative should only be submitted once after finalizing each component. The online form for submitting application materials can be found here. The sample scoring rubric for meeting grant criteria is outlined below.

Section	Points Possible
Grant Narrative	
a. Computer Science Pedagogy Development	15
b. Collaboration with Regional Stakeholders	9
Budget Narrative (Pass or Fail)	12
Budget Summary (Pass or Fail)	12
Total	50

When completing application components, please refer to the rubrics below which outline requested information and scoring criteria.

Grant Narrative

Domain 1: Computer Science Pedagogy Development

- Describe how proposed grant activities from one or more of the grant strands achieve the desired key results:
    - Increase computer science pedagogical knowledge of in-service and pre-service teachers;
    - Increase teacher understanding of and ability to implement authentic problem solving using computing to address or improve systems and circumstances in local communities; and
    - Provide professional pathways for educators to access and be successful in acquiring transferable credentialing and licensing opportunities.
- Develop and describe the timeline for implementing proposed grant activities to achieve key results.
- What action items are included during the grant period to ensure sustainability of proposed grant activities beyond the grant cycle?
- How will communication with in-service and pre-service teachers to promote participation in proposed grant activities occur?
- How does the grant narrative describe the support personnel within eligible organizations who will be responsible for implementing proposed grant activities and define the roles they will play in implementation and sustainability?
- What evidence is included in the grant narrative to show the creation of a system of collecting and reporting data to measure progress of implementation throughout the grant cycle?

Domain 2: Collaboration with Regional Stakeholders

- Does the grant narrative describe the regional stakeholders who have committed to assist in implementing proposed grant activity development and implementation?
- Does the grant narrative provide selection criteria or qualifications for selected regional stakeholders and explain role(s) and responsibilities in proposed grant activities?
- Does the grant narrative include letters of support from regional stakeholders for engaging in a defined role in implementing proposed grant activities (including primary contact information)?

Budget Narrative & Summary

1. Complete the budget narrative within the online application form.
2. Complete the budget summary template and upload it to the online application form.

The budget narrative and summary will be evaluated on a pass/fail basis based on the following criteria. Grant funds must be reasonable, allocable, and necessary to fulfill the objectives of the grant. Evaluators will cross reference the budget to the grant narrative. Any expenses listed on the budget narrative or summary that do not align with the described program may result in a fail.

In preparation for this grant opportunity, applicants should identify the strand(s) they seek to prioritize and determine the regional partner(s) that best meets those needs. After developing a strategy, estimated budget, timeline, and sustainability plan, the partnership can apply for the following reimbursable expenses:

- Personnel
- Travel
- Supplies/curriculum materials
- Contracted services
- Teacher stipends
- Software and technology
- Virtual programming

Grant funds may *not* be used for the following unallowable expenses:

- Non-academic entertainment
- Preparation of the initial grant application prior to February 13, 2023
- Pre-award costs incurred prior to February 13, 2023
- Decorative items
- Purchase of facilities or vehicles
- Land acquisition
- Capital improvements
- Permanent renovations
- Food
- Indirect costs (costs that cannot be easily parsed to a particular funding line, such as the cost of preparing payroll or paying utilities)

Reimbursement

The *Designing for Impact: Next Level Computer Science Grant* is a reimbursement grant and will be administered as follows:

- Funding will be reimbursed to grant recipients after the expenses have been incurred within the grant period;
- Grant recipients will submit an invoice with documentation to obtain reimbursement on a monthly basis; and
- Reimbursement forms and directions will be provided after the grant contracts have been fully executed.

Evaluation Rubrics

Designing for Impact Grant Narrative Scoring Rubric

Domain 1: Computer Science Pedagogy Development				
Criteria	**Investigating (0 points)**	**Developing (1 point)**	**Approaching (2 points)**	**High Impact (3 Points)**
1.1: Identify the strand(s) you seek to address and explain how proposed activities will achieve key results (see above) of the grant.	No specific grant strand or key results are referenced in the proposal.	Either grant stand(s) or key results are referenced, but not both.	Both grant strands and key results are explained with adequate detail.	Both grant strands and key results are explained with significant, well developed details.
1.2: Develop an implementation timeline along with a sustainability plan that will support this work after the grant cycle has ended.	No strategy, timeline, or sustainability plan of action is included.	A strategy and timeline are included, but there is no clear sustainability plan for after the grant period.	A clear strategy and timeline that align with grant requirements are included with a sustainability plan for after the grant period.	A comprehensive strategy is outlined with an implementation timeline that aligns with the grant spending deadline and showcases how work will be sustained after the grant period.
1.3: Develop and describe a communication plan to promote opportunities created through this grant to in-service teachers, pre-service teachers, and regional stakeholders.	No communication plan is included.	A communication plan is included, but it does not address all stakeholders.	A communication plan for in-service teachers, pre-service teachers, and regional stakeholders is included.	A comprehensive communication plan for in-service teachers, pre-service teachers, and regional stakeholders is included with multiple communication channels and a calendar of frequency.
1.4: Identify support personnel within eligible organizations who will be responsible for implementing proposed grant activities and define	No information regarding support personnel is provided.	Support personnel for implementation of some of the proposed grant activities are	Support personnel for implementation and sustainability of all proposed grant	Support personnel for implementation and sustainability of all proposed grant activities are included, and

the roles they will play in implementation and sustainability.		included.	activities are included, and roles are defined with some detail.	a comprehensive description of roles and responsibilities for implementation and sustainability are identified.
1.5: Create a system of collecting and reporting data to measure progress of implementation throughout the grant cycle.	No system for monitoring progress is included in the grant narrative.	A system is described but does not include baseline data for the purposes of monitoring regional progress.	A system of collecting and reporting data to monitor progress is included.	A comprehensive explanation of a system of collecting and reporting data to monitor progress is included with details describing how/when data will be used to inform potential modifications to proposed grant activities.

Domain 2: Collaboration with Regional Stakeholders				
Criteria	**Investigating (0 points)**	**Developing (1 point)**	**Approaching (2 points)**	**High Impact (3 Points)**
2.1: Identify regional stakeholders who will assist in implementing proposed grant activity development and implementation.	No regional stakeholders are identified.	At least one regional stakeholder is included, but their role is not specified in the proposed grant development or implementation.	At least one regional stakeholder is included and their role is clearly outlined in the proposed grant development and implementation.	Multiple regional stakeholders are included and their rolle is clearly outlined in the proposed grant development and implementation.
2.2: Provide selection criteria or qualifications for selected regional stakeholders and explain role(s) and responsibilities in proposed grant activities.	No selection criteria or qualifications of regional stakeholders is included.	Selection criteria and qualifications for selected regional stakeholders is included without an explanation of roles and responsibilities.	Selection criteria and qualifications for selected regional stakeholders is included with an explanation of roles and responsibilities in proposed grant	Selection criteria and qualifications for selected regional stakeholders is included with an explanation of roles and responsibilities in proposed grant activities indicating a comprehensive plan for sustaining regional support

				activities.	of PK-12 computer science educators beyond the grant period.
2.3: Provide letters of support from regional stakeholders for engaging in a defined role in implementing proposed grant activities (including primary contact information).	No letters of support from regional stakeholders are included.	Letters of support from regional stakeholders are included with minimal detail or commitment to a defined role in implementing proposed grant activities.	Letters of support from regional stakeholders are included with details of commitment to engaging in a defined role in implementing proposed grant activities.		Letters of support from regional stakeholders are included with details of commitment to engaging in a defined role in implementing proposed grant activities and includes concrete plans for sustaining regional support of PK-12 computer science educators and pre-service teachers beyond the grant period.
Total Points Possible: 24					

Budget Rubric

Criteria	Fail (0 points)	Pass (12 points)
Allowable expenditures	Budget includes one or more non-allowable expenditures.	All expenditures included in the budget are allowable.
Reasonable, allocable, and necessary to fulfill proposed grant activities	Budget is not reasonable, allocable, and/or necessary to fulfill proposed grant activities.	Budget is reasonable, allocable, and/or necessary to fulfill proposed grant activities.

State Contracting

The state of Indiana requires contract vendors to be registered with the state through three separate agencies: Secretary of State's Office, Indiana Department of Administration, and Auditor of State's Office. If you are currently not registered or not active with your registration, please see the information below for assistance.

Secretary of State's Office

Review Indiana's Secretary of State [website](#) or call 317-232-6581 to determine if your registration is required. Verify if your organization's registration is active [here](#). Please note that individuals are not required to register with the Secretary of State's Office.

Auditor of State's Office

Complete the [W-9](#) and [direct deposit](#) forms and submit to accounts payable with the Auditor of State's Office at accountspayable@doe.in.gov if you are not already registered as a vendor in Indiana. Direct deposit by electronic funds transfer is required by [IC 4-13-2-14.8](#) unless a waiver is obtained from the Auditor of State's Office.

Indiana Department of Administration

The Indiana Department of Administration has launched the Supplier Contract Management System (SCM) for the processing of state contract and grant agreements. On November 1, 2016, IDOE began utilizing SCM for contract and grant agreements between the state and vendors. To meet the requirements of SCM and accomplish this collaboration on your agreement(s), your organization must register to use the SCM system. Instructions for bidder profile registration are located [here](#). The Supplier Portal can be accessed [here](#).

Registrations may take several weeks to complete and are required for submission of the grant application. It is the lead applicant's responsibility to ensure registration with all three of the above agencies is completed prior to the grant deadline. Failure to register with the above will result in dismissal from the review process.

Submission

Submissions of the grant narrative, budget summary, and budget narrative for the *[Designing for Impact: Next Level Computer Science Grant Application](#)* are due by 11:59 p.m. ET on Friday, February 3. Grant notifications will be released on Friday, February 17. Contact IDOE's [Office of Teaching and Learning](#) with any questions regarding this grant.

References

- "2022 State of CS Report." *Code.org*, https://advocacy.code.org/stateofcs.
- Indiana DWD. (2021). Indiana Employment Outlook Projections, https://www.hoosierdata.in.gov/FD/landing.aspx