

Oklahoma Department of Career and Technology Education
Perkins Reserve Fund Supplemental Funding
Gateway Middle School Transition Grant Application 2019-2020
Due Date February 8, 2019

Each Perkins Reserve Fund Supplemental Grant Application is unique. Please read this document entirely and follow the instructions below. This document contains the following information:

Overview of Gateway
Eligible Applicants
Expectations
Criteria for Grant Application
Budget Section
Purchase of Equipment
Application Evaluation and Award
Process
Site Development Response Form
Activity Goal
Support of Academic and Technical Achievement
Plan for Implementation
Key Personnel
Evaluation
Budget Narrative
Scoring Rubric

Overview of Gateway

Oklahoma Career and Technology Education (ODCTE) supports school improvement efforts aimed at middle school transitions and increasing academic rigor and student achievement. The Gateway curriculum provides project-based learning for the full range of students in grades six, seven and eight classrooms. The curriculum relates technology to students' daily lives and promotes communication and collaboration by emphasizing a teaming approach in the instructional units. Gateway incorporates the national standards of the following professional organizations in the content of its program:

- The National Academy of Sciences
- The National Council of Teachers of Mathematics;
- The International Technology Engineering Education Association
- The National Council of Teachers of English.

Eligible Applicants

Eligible applicants who successfully complete the Carl Perkins application under the current Perkins IV Act are invited to participate in the Reserve Fund Grants process by:

- Meeting the criteria designated in the Local Application for Carl Perkins Funding,
- Meeting the criteria in the Overview section for the desired Reserve Fund Grant,
- Successfully completing the Reserve Fund Grant Application, and
- Documenting the human, financial, and time commitment required for meeting the intent of the focused grant.

Perkins secondary school districts (LEAs) meeting the \$15,000 minimum requirement are eligible to complete the grant application. Additionally, applications from rural LEAs that do not meet the \$15,000 minimum, but are eligible using the Special Consideration criteria below, will be considered. Successful applicants will receive one-time funding, assistance with teacher training, and start-up costs for awards for up to \$25,000.

Special Consideration: Rural Partnerships provides opportunities for rural communities to partner with their local technology centers to implement Gateway programs.

- Rural districts, *as defined by the Oklahoma State Department of Education*, that do not meet the Perkins LEAs \$15,000 minimum requirement may coordinate with their local technology center to apply for Gateway funds **when the local technology center operates an ODCTE approved Pre-Engineering program or related career major and the Gateway program at the LEA leads students into the technology center program.** In these instances, the technology center will submit the application. If approved, awarded funds must be managed and processed through the local technology center. The Technology Center must do all the purchasing and are required to maintain inventory records on any equipment or supplies per the awarded Technology Center's Fixed Asset Policy. The Gateway program must be implemented at the rural partner district's middle school.

Expectations

The goal of the Gateway Site Development grant is to provide funding to support the development of Gateway sites that:

1. Support a technology center or high school with a STEM program, when possible;
2. Increase student's ability to use scientific processes, mathematical analysis, and engineering design to pose questions, seek answers, and develop solutions; and
3. Provide students with an opportunity to explore engineering, science, and technology career opportunities (particularly females and minorities).
4. Acquire and maintain ODCTE approved program status, by submitting all required forms, reports, and abiding by all CareerTech rules and program regulations.

The Gateway program addresses the interest and energy of middle school students, while incorporating national standards in science, technology, engineering and mathematics (STEM). Gateway is "activity oriented" to show students how technology is used in engineering to solve everyday problems. The instructional units excite and motivate students to use their imaginations and teach them to be creative and innovative, while gaining the skills they need to develop, produce, and use products and services. The Gateway science, technology, engineering and mathematics (STEM) exploratory program consists of ten independent courses. Each course may be taught for *up to* one semester. Funding will be provided for instructional offerings in grades six (6), seven (7), and eight (8).

The purpose of the Gateway Grant is to provide funding to support the development of Gateway sites in middle and Junior High schools (grades six, seven and eight) that feed into Career Tech STEM sites, when possible. The Gateway program must be implemented in a middle or Junior High school that will feed into a technology center or high school STEM program, when possible.

Criteria For Gateway Grant Application

To be eligible for a Gateway Grant, schools must meet and agree to the following minimum criteria by documenting the requested information in the Career Tech CTIMS grant management system.

1. Identify an existing computer lab with at least 20 stations **OR** identify classroom space to house a **dedicated lab** for the Gateway program. (may be a part of the Gateway classroom)
2. Select qualified teacher(s) with knowledge in Mathematics, Science, and Technology (please see CareerTech Rules for certification requirements.)
3. Commit to fully implement **three (3)** of the ten Gateway courses throughout grades six through eight: Design and Modeling, Automation and Robotics, The Magic of Electrons, The Science of Technology, Energy and Environment, Green Architecture, Medical Detectives, Flight and Space, Innovators and Makers and App Creators. The school must agree to offer additional Gateway courses in the second year, as enrollment allows. Enough additional courses must be added to afford students different coursework for each year they enroll in the Gateway program.
4. Agree to send counselor/administrator to STEM Mid-Winter Conference each year.
5. Agree to work with school counselors to encourage students to continue PLTW courses at the local high school if they exist, or the partnering technology center as they transition into high school.
6. Ensure that middle school key stakeholders are aware of the terms of the PLTW School District Agreement. You may view PLTW Steps to Starting a Gateway program here: <https://www.pltw.org/get-started> .
7. Agree to abide by all state requirements to be an unfunded *CareerTech* STEM Program, including, state regulation 780:20-3-5 and submitting a [Form 2](#) (e.g., principal, guidance, and Gateway teachers) if required. Career Tech state program requirements/rules can be found at <https://www.okcareertech.org/about/state-agency/rules-for-careertech/rules-9-14-18>

Budget Section

All applicants will submit a budget narrative and an itemized budget listing all expenses for the proposed project. In the budget narrative section information on how the specific items purchased will be used in the instruction of students must be included.

When completing the itemized budget items should be listed to show estimated cost of each line item. Each line item description must be detailed and specific. General expenses should be broken down into specific line items as shown in the example below:

Gateway – Flight and Space – Science of Flight Classroom DVD

You may use the PLTW Investment Tool to help determine items needed for the program and their respective costs: <https://www.pltw.org/our-programs/investment-tool>

Purchase of Equipment

Equipment purchased with supplemental grant funds will be surrendered to the ODCTE if such project no longer operates as awarded during the second or third year following the award.

Application Evaluation and Award

All Reserve Fund Grant Applications will be evaluated and awarded on a competitive basis. Applications will be reviewed and evaluated, **using a rubric**, by a team selected by state agency personnel. All reviewers' evaluations will be compiled for final scoring. If members of the ODCTE evaluating team have questions or require verification regarding the application, they will notify the grant contact person to provide the requested supplemental information.

Funds are made available on a **reimbursement basis**. Each applicant awarded funds will receive instructions for receiving such funds in the approval award letter.

Questions may be directed to:

Tonja Norwood, tonja.norwood@careertech.ok.gov 405-743-5187

Josh Miller, Josh.Miller@careertech.ok.gov 405-743-5401

Process

To ensure a comprehensive and expedient review, applicants must submit their application package as follows:

- Contact Tonja Norwood and Josh Miller through email by January 29, 2019, notifying them of your intent to apply.
- Applications must be submitted through the Career Tech Information Management System's grant module. The online system is located at the link below:
 - <https://ctims.okcareertech.org/CTBDSWeb/>
 - Our CTIMS guidebook on how to utilize the system is located at the following link: <https://www.okcareertech.org/about/state-agency/divisions/federal-legislation-assistance/carl-perkins/ctims-resources/ctims-carl-perkins-application-and-invoicing-process-guide-s>
 - You must use Internet Explorer 11.0 or better when accessing the CTIMS website.
- Make sure you apply under the correct fiscal year! The funding you are requesting with this application is for the 2019-2020 fiscal year, be sure to change the setting in CTIMS to match this before creating a new Gateway grant failure to do this will cause you to miss the funding opportunity.
- **Applications are due February 8th 2019.**

**A. Gateway (Gateway) SITE DEVELOPMENT RESPONSE FORM
(page 2 of application packet)**

Information Needed for Site Development Grants - Gateway Site Development grantees must complete and submit the answers to this form within the CTIMS grant application. Please describe your readiness level by responding to the following:

1. Does the school have a dedicated computer lab available for Gateway?	Yes	No
1a. Does the school have 20 stations equipped with PLTW computer specification	Yes	No
1b. If the answer to previous question is No, has the school identified space to create a lab for the Gateway to use? (may be part of Gateway classroom)	Yes	No
1c. Provide the name and address of the school where the Gateway program will be offered.		
2. How many qualified teachers with knowledge in Mathematics, Science and Technology are available to participate in the training institute and teach the curriculum?		
2a. If known, list the names of the teachers and their current certification area(s) below:		
Teacher's Name:	Certification Area:	Gateway Unit:
3. Is the grantee committed to following the Gateway curriculum guidelines?	Yes	No
4. Will this Gateway program be full-time or half-time?	Full-time	Half-time
5. Will the grantee conduct an annual follow-up survey as students transition to high school?	Yes	No
6. Are middle school key stakeholders aware of the terms of the PLTW School District Agreement (i.e., principal, guidance and Gateway teacher)?	Yes	No
7. List the partner technology center or high school with a STEM program and list the program:		

Please use this as a guide when providing written narrative responses in CTIMS to each (B – G).

B. Activity Goal

- Discuss the school’s readiness to implement Gateway. Be sure to explain the following:
 - B1.** The sequence in which the three of the eight Gateway units will be implemented in grades seven and eight. Explain how the Gateway courses will fit into your school schedule. You may address
 - Design and Modeling (required)
 - Automation and Robotics
 - Innovators and Makers
 - App Creators
 - Magic of Electrons
 - Science of Technology
 - Flight and Space
 - Energy and the Environment
 - Green Architecture
 - Medical Detectives

 - B2.** How the middle school program will align to the technology center or high school PLTW program

 - B3.** Strategies to ensure students’ successful transition to the PLTW program at the local high school or at the technology center

 - B4.** How the school’s academic and technical resources will be aligned to support the implementation of Gateway

 - B5.** How the Gateway program will be financially sustained in future years.

 - B6.** Include a letter of support that includes middle school principal and superintendent signatures with this application ensuring agreement to implement and sustain the Gateway program.

C. Support of Academic and Technical Achievement

- Explain how the implementation of the Gateway program will assist with the preparation of students both academically and technologically above and beyond traditional coursework for transition into high school.
- Describe how the implementation of the Gateway program will increase student’s ability to use scientific processes, mathematical analysis, and engineering design to pose questions, seek answers, and develop solutions.

D. Plan for Implementation

December 1, 2019 – November 1, 2020:

- Make sure to review ODCTE STEM program requirements and CareerTech rules which

can be found at <https://www.okcareertech.org/about/state-agency/rules-for-careertech/rules-9-14-18>

- Go online www.pltw.org to register the middle school under the established School/District Agreement.
- Grant funds may be used to send **only middle school counselors** to the Counselor Conference.
- Identify and select teachers to teach three of the eight Gateway units.
- If necessary, assist teachers in upgrading knowledge and skills in technology, computers, math and/or science.
- Work with the partner technology center / high school in forming an Advisory Committee composed of mentors/coaches/advisors from business/industry, colleges, and the community. Provide list of partners, names, emails, phone information for each known member.
- Register teacher(s) for the Core Training Institute. This proposal may include registration fees if the registration deadline occurs in this fiscal year. **Since the grant ends on June 30, 2020, travel costs and teacher stipends for this training can only be used if training is between July 1, 2019 - June 30, 2020.**
- Go to the web site and have teachers complete the online assessment. (www.pltw.org)
- Training must be accessed at a recognized regional training affiliate of PLTW.
- After July 1, 2019, order the needed equipment, supplies, and software based on the submitted budget narrative.
- Remit PLTW Participation Fee.

E. Evaluation

Describe how you will **evaluate** the Gateway program to determine if the proposed program meets the following goals of the Gateway Site Development grant.

1. Support a technology center or high school with a pre-engineering, computer science or biomedical PLTW program, when possible, by encouraging students to attend further PLTW courses.
2. Increase student's ability to use scientific processes, mathematical analysis, and engineering design to pose questions, seek answers, and develop solutions.
3. Provide students with an opportunity to explore engineering, science, and technology career opportunities (particularly females and minorities).

F. Budget Narrative

All applicants for Gateway Grants will provide a **detailed narrative** of the proposed budget with projected expenditures and rationales. Rationales should have descriptions of how the items will be used in a classroom to benefit students and help them complete their chosen program of study. The narrative needs to provide details of how the proposed expenditures will help the student obtain a certification, licensure, or degree at the post-secondary level.

G. Budget Itemized Worksheet

Within CTIMS you will also be required to complete the budget line items section which allows you to list the itemized expenses for the proposed project. The budget items should be listed to show estimated cost of each line item. Each line must be detailed and specific. General expenses should be broken down into specific line items. The quantity for each item on the PLTW Gateway web site is based on a session of twenty-five (25) students. **It is strongly recommended that the PLTW Purchasing Manual website (see link) be used when developing the budget.** <https://www.pltw.org/our-programs/investment-tool>

The submitted budget must be developed for your school and implementation plan.

Budget must follow these guidelines:

1. Incentive grant funds may support the following Gateway program requirements:
 - Gateway recommended equipment and supplies
 - Upgraded computers and a laptop for the teacher, limited computer upgrades
 - Reference material identified by Gateway
 - PLTW participation fee for Gateway (\$750)
 - Professional development:
 - Mileage for the OKACTE STEM Mid-Winter Conference.
 - Registration fees for the Gateway Summer Training Institute. Travel costs and teacher stipends for attending the Gateway Summer Training Institute may be included in this proposal.

1. Funds may **not** be used for:
 - Stipends, salaries, or tuition except as specified by the incentive grant;
 - Purchase of equipment or computers for any purpose except as specified by the incentive grant;
 - Technology Student Association (TSA)
 - Furniture to equip the labs;
 - Travel except as specified by the incentive grant;
 - Meals or light refreshment;
 - Administration, including indirect costs

H. Key Personnel

Designate the following (List names, titles and place of employment):

- A middle school program contact who will be a member of the Partnership Team to be involved in the development of the Gateway.
- Teacher(s) to deliver instruction take the online assessment and attend the training institutes.
- Middle school counselor(s) who will work with the counselor(s) from the feeder technology center/high schools.
- Technology Center Personnel and Title (such as PLTW instructor, counselor, recruiter, etc.)

GRANT SCORING RUBRIC – Gateway Middle School Transition

Using the following rubric, reviewers will assign numerical scores and prepare comments. The review team will meet to determine consensus.

	0 points	2 points	5 points	8 points	10 points
Itemized Budget Detail 10 pts	Budget is weakly aligned to proposed courses, items are not PLTW approved	Budget is aligned to proposed courses. Includes some itemized expenses, but does not list specific items purchased and uses vague descriptions such as "Classroom supplies"	Budget is well aligned to proposed courses. Budget has itemized line items with allowable item descriptions. Budget does not list PLTW course in description of proposed items	Budget is well aligned to proposed courses. Budget has itemized line items with good item descriptions with associated PLTW course in description of proposed purchases	Budget is strongly aligned to proposed courses. Budget has itemized line items with ideal item descriptions with grant type, PLTW course association and item type all listed in the description of the proposed item

	0 points	7 points	14 points	21 points	
Section 1: Gateway Site Development Form 21 pts	Only 2 questions are answered appropriately. Program may be half-time	3-5 questions are answered appropriately. Program may be half-time	At least 6 questions are answered appropriately. Program may be half-time	All 8 questions are answered appropriately. Program will be full-time	
	0 points	7 points	14 points	21 points	
Section 2: Activity Goal 21 pts	Little to no detail is provided and/or 2 or fewer of the following are outlined: Sequence of courses How MS program will align to HS/TC Strategies to transition students to PLTW at HS/TC How academic and technical resources support Gateway How Gateway program will be sustained Letter of support containing MS principal and superintendent signatures	Limited detail is provided and/or only 3-4 of the following are outlined: Sequence of courses How MS program will align to HS/TC Strategies to transition students to PLTW at HS/TC How academic and technical resources support Gateway How Gateway program will be sustained Letter of support containing MS principal and superintendent signatures	Sufficient detail is provided on at least 5* of the following: Sequence of courses How MS program will align to HS/TC Strategies to transition students to PLTW at HS/TC How academic and technical resources support Gateway *MUST ADDRESS How Gateway program will be sustained Letter of support containing MS principal and superintendent signature	Outstanding detail is provided on all of the following: Sequence of courses How MS program will align to HS/TC Strategies to transition students to PLTW at HS/TC How academic and technical resources support Gateway How Gateway program will be sustained Letter of support containing MS principal and superintendent signatures	

		0 points	3 points	5 points			
Section 3: Support of Academic and Technical Achievement	Little or no evidence the proposed activity supports academic and technical achievement of Gateway students	The application provides some evidence the proposed activity will support academic and technical achievement for Gateway students	The application clearly identifies how this activity will support academic and technical achievement for Gateway students				
5 pts							
		0 points	7 points	14 points	21 points		
Section 4: Plan for Implementation	No timeline is included. Strategies to implement are weak and do not support the program. 2 or fewer items are addressed:	Limited evidence of completion or plan to complete only some of the following:	Sufficient evidence of completion or plan to complete most, but not all of the following:	Outstanding evidence of completion or plan to complete ALL of the following:			
21 pts	<ul style="list-style-type: none"> PLTW registration Counselor conference Teacher selection Partnership team Register teacher for training Plan to order supplies Remit participation fee 	<ul style="list-style-type: none"> PLTW registration Counselor conference Teacher selection Partnership team Register teacher for training Plan to order supplies Remit participation fee 	<ul style="list-style-type: none"> PLTW registration Counselor conference Teacher selection Partnership team Register teacher for training Plan to order supplies Remit participation fee 	<ul style="list-style-type: none"> PLTW registration Counselor conference Teacher selection Partnership team Register teacher for training Plan to order supplies Remit participation fee 			

	0 points	5 points	10 points		
Section 5: Evaluation 10 pts	Evaluation plan provides little or no explanation of how the PLTW/Gateway program will be evaluated against the achievement of the goals stated in the proposal. Plan provides little or no support of student performance measures	Evaluation plan somewhat explains how the PLTW/FTT program will be evaluated against the achievement of the goals stated in the proposal. Plan somewhat explains how activity will support student performance measures	Evaluation plan clearly explains how the PLTW/Gateway program will be evaluated in meeting these goals: Encourage students to take further PLTW classes Increase student ability to use scientific processes, math analysis and engineering design Provide students with opportunity to explore STEM careers		

0 points	4 points	9 points	14 points	18 points
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<p>Section 6: Budget Narrative</p> <p>18 pts</p>	<p>Budget is weakly aligned to proposed courses, items are not PLTW approved, little to no narrative covering how purchases will be used is provided.</p>	<p>Budget is aligned to proposed courses. Narrative provides some information on how purchases will be utilized to complete grant objectives.</p>	<p>Budget is well aligned to proposed courses. Detailed narrative includes rationale for some purchases but is vague on individual items or activities. Budget is not just pasted from PLTW website. Narrative covers most itemized expenses</p>	<p>Budget is well aligned to proposed courses. Detailed narrative includes rationale for most purchases, providing some detailed information on each expense. Budget is not just pasted from PLTW website. Narrative covers all itemized expenses. Budget is totaled!</p>	<p>Budget is strongly aligned to proposed courses. Detailed narrative includes rationale for all purchases, providing specific information on use for each item or activity. Budget is not just pasted from PLTW website. Narrative covers all itemized expenses. Budget is totaled!</p>
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	0 points	2 points	4 points	6 points	8 points
<p>Section 7: Key Personnel</p> <p>8 pts</p>	<p>Limited to no detail provided for the following:</p> <p>MS program contact</p> <p>Teacher (may be TBD)</p> <p>MS counselor</p> <p>TC contact</p>	<p>Sufficient detail is provided for at least 2 of the following:</p> <p>MS program contact</p> <p>Teacher (may be TBD)</p> <p>MS counselor</p> <p>TC contact</p>	<p>Sufficient detail is provided for at least 3 of the following:</p> <p>MS program contact</p> <p>Teacher (may be TBD)</p> <p>MS counselor</p> <p>TC contact</p>	<p>Sufficient detail is provided and all personnel are identified:</p> <p>MS program contact</p> <p>Teacher (may be TBD)</p> <p>MS counselor</p> <p>TC contact</p>	<p>Outstanding detail is provided and all personnel are identified:</p> <p>MS program contact</p> <p>Teacher (may be TBD)</p> <p>MS counselor</p> <p>TC contact</p>