Kansas Project Lead The Way

Andrea Holzwarth
aholzwarth@pltw.org
(785) 332-0293
@andreaholzwarth

PLTW
UNLOCKING POTENTIAL





Transforming Learning and Teaching with PLTW



PLTW has really transformed what our students are doing. Our kids are engaged, focused, having collaborative conversations, problem-solving, preserving and learning what it means to fail forward.

Dr. Julie Cannizzo

Assistant Superintendent, Goddard Public Schools 2019-20 PLTW Administrator of the Year





PreK-12 Pathways



PreK-5

Elementary

- 43 Modules
- 10 hours / module
- 4-8 modules / grade
- Full coverage NGSS
- English / Spanish



Gateway 6-8

Middle School

- 10 Units
- 9 weeks or a semester
- 45 minutes / 45 sessions
- English / Spanish



Biomedical Science 9-12



Computer Science 9-12



Engineering 9-12

Biomedical Science

- 4 Courses
- Yearlong
- COVID-19 Module

Computer Science

- 4 Courses
- Yearlong
- Cybersecurity
- AP Aligned

Engineering

- 10 Courses
- Yearlong



Building Knowledge and Skills

Activity, Project, Problem Based Approach (APB) and Scaffolding



Learn more here!



Evidence Based Support

PLTW Provides PreK-12 Evidence Based Papers:

- Dive deeper into the structure of our evidence-based curriculum.
- Learn about our unique problem-based learning (PBL) approach.
- Review the research supporting the positive impact PLTW has on student achievement.

Download Here!

PLTW Launch



PLTW Biomedical Science,

Computer Science and Engineering:

Evidence-based Learning Solutions for High School Students

Project Lead The Way (PLTW) is the leading PreK-12 applied learning curriculum and teacher prof development provider with pathways in biomedical science, computer science, and engineering. PLTW provides engaging, high-quality activities and projects that encourage students to use what they learn in

the classroom to solve real-world problems. Developed by instructional designers, teachers, and industry experts, the PLTW curriculum enables students to gain mastery of important science standards and concepts, while building transportable skills that include problem-solving, critical and creative thinking,

PLTW's teaching and learning approach uses activities to build content knowledge, and incorporates projects and open-ended problems to achieve understanding, develop meaning, and reinforce

An Evidence-based Learning Solution

teach engin and p real-w enabl

provides en enables stud solving, critic

students ma that they mu

Backgroun

12 education skills (Krauss and how it n 235), PIBL is

11 PLTW.org

PLTW Gateway:



Introducti

Introduction

transportable skills.

11 PLTW.org



Now more than ever, schools are facing intense pressure to maximize every instructional minute to ensure students master essential content standards while developing transportable skills. Educational leaders

recognize the added value of new or existing programs reinforcing current priorities and cross-pollinating research-based strategies across district-wide initiatives. Additionally, high school educators recognize

that they must engage students in learning that allows for exploration of college and career pathways and

(Allen, 2000; Auler, 2020; Bowen & Peterson, 2019; Cole & Weinland, 2013; Jerzembek et al., 2013; Lee & Blanchard, 2019; Lucas Education Research, 2021; Miller & Krajcik, 2019; Nowrouziaan & Farewell, 2013; Sungar & Tekkaya, 2006; Wilder, 2015; Wirkala & Kuhn, 2011). Furthermore, we know that "social emotional, and academic development is an essential part of PreK-12 education that can transform schools into places that foster academic excellence, collaboration and communication, creativity and nnovation, empathy and respect, civic engagement, and other skills and dispositions needed for success in the 21st Century" (Jones, Kahn, & the Aspen Institute, 2017, p. 9). Research also demonstrate "a link between student perceptions of PBL and ultimate student interest in future STEM careers' (Laforce, Nobel, & Blackwell, 2017, p. 17).

PBL and PjBL overlap with learning experiences that "launch from an open-ended question, scenario, or challenge" that focuses on engaging students in solving open-ended, real-world situated problems while building content understanding and critical thinking and collaboration skills (Krauss & Boss, 2013, p. 10). With this approach, "students make sense of why content is useful and how it might be applied" (Lucas Education Research, 2021, p. 1). PBL has been described as "an instructional method in which students

PLTW





Kansas PLTW Grant Opportunities

PLTW
UNLOCKING POTENTIAL



Kansas PLTW Grant Opportunities

Industry Partner Grants:

- John Deere
- Lockheed Martin

PLTW Grants:

- Rural Implementation
- Title 1
- PK-12 Pathway Completion









KS PLTW Grant Opportunities

John Deere





December 17th



PLTW Launch (preK-5)

New programs: \$10,000

o 2022-23: \$7,500

o 2023-24: \$2,500

Expansion of existing programs: \$5,000

2022-23: \$5,000



PLTW Engineering (9-12)

New programs: \$35,000

o 2022-23: \$10,000

o 2023-24: \$15,000

o 2024-25: \$10,000

Expansion of existing programs: \$10,000

o 2022-23: \$10,000





PLTW Gateway (6-8)

New programs: \$20,000

o 2022-23: \$10,000

o 2023-24: \$10,000

Expansion of existing programs: \$10,000

o 2022-23: 10,000



PLTW Computer Science (9-12)

New programs: \$20,000

o 2022-23: \$10,000

o 2023-24: \$5,000

2024-25: \$5,000

Expansion of existing programs: \$10,000

o 2022-23: \$10,000



Eligible schools must be located within 40 miles of the following John Deere facilities: Kansas: Coffeyville

Learn more & apply here!



KS PLTW Grant Opportunities

Lockheed Martin



Deadline to Apply:November 19th





PLTW Computer Science Cybersecurity

Total Award: \$10,000

• 2022-23: \$10,000

• 2023-24: \$0

Public schools across the United States are invited to apply!

Learn more & apply here!



KS PLTW Grant Opportunities

Deadline to Apply:Rolling Deadline





Award Value: \$14,000 directly applied to cover:

- 2022-23 and 2023-24 participation fees;
- Up to 4 Online PLTW Biomedical Science Core Training registration fees.





PLTW Launch (preK-5)

Award Value: up to \$13,900 directly applied to cover:

- 2021-22 and 2022-23 participation fees;
- Up to 24 Online PLTW Launch Core Training registration fees.



PLTW Gateway (6-8)

Award Value: \$9,100 directly applied to cover:

- 2021-22 and 2022-23 participation fees;
- Up to 6 Online PLTW Gateway Core Training registration fees.



PLTW Computer Science (9-12)

Award Value: \$14,000 directly applied to cover:

- 2022-23 and 2023-24 participation fees;
- Up to 4 Online PLTW Computer Science Core Training registration fees.



PLTW Engineering (9-12)

Award Value: \$16,000 directly applied to cover:

- 2022-23 and 2023-24 participation fees;
- Up to 4 Online PLTW Engineering Core Training registration fees.

All schools are encouraged to apply including: private schools, charter schools, **rural schools**, public and private schools that serve 40% or more students who are eligible for free and reduced lunch, public and private schools that serve a minority majority student population, as well as districts/schools seeking to begin PLTW or existing PLTW districts seeking to offer a complete PLTW program pathway.





USD 410 PLTW Implementation



Max Heinrich Superintendent (620) 947-3184 max.heinrichs@usd410.net







Next Steps

Join the KS PLTW Team for an Overview & Grant Opportunities Workshop:

- Thursday, November 4th, 9:00 9:30am CST
 Register Here!
- Thursday, November 4th 3:00 3:30pm CST
 Register Here!

PLTW
UNLOCKING POTENTIAL



Andrea Holzwarth aholzwarth@pltw.org (785) 332-0293 @andreaholzwarth

