

Open Educational Resources Project Grant

2020-2021 Final Report

GRANT AWARDS

<u>Dual Language Immersion Social Studies OER Project</u>

Drumbeats in Time

Financial Literacy Videos

STEM Instructional Materials Collaborative

Teaching Games for Understanding: A PE Approach

World Language OER Development

Abstract of grant efforts

Seattle Public Schools

Thorp School District

Center for Deaf and Hard of Hearing Youth

Educational Service District 112

SHAPE Washington

Tacoma Public Schools

Visit all grantee resources on the WA OER Hub

PROGRAM DETAILS AND IMPACT



OER Grantee Resource Showcase

Grants: 6

Total Awarded: \$67,200

Lessons/Units Created: 20

Direct Impact:

Teachers: 1523 Students: 7745

Additional groups: parents, policymakers

Resources may be freely accessed by all, so the downstream impact of the materials is far greater.

SYSTEMS TO MAKE SURE LEARNING STANDARDS WERE MET



Director Review and Revision Cycle Science, and WA Social Studies)

EQuIP (ELA,

Achieve OER

Other (Publishers' Criteria, higher ed)

Number of grant projects using each system of review.



Dual Language Immersion Social Studies OER Project

Regional STEM Instructional Materials Collaborative

The intention behind the multiple resources created this year was to provide a variety of instructional support to teachers in creating relevant, engaging, and empowering STEM-related learning experiences to students both in the virtual environment.

This year's development was impacted by the context of changes being experienced by our educational community caused by the pandemic and also by the revival of the social justice movement.

STEM Mini-Projects to support virtual learning: The STEM mini-projects that were developed are used in the virtual and blended learning space. They provided an opportunity for students to engage in STEM-based problem solving around a relevant issue that affects people, animals, and plants. These STEM mini projects also strove to include the voices and activism of indigenous communities who have engaged in environmental activism and stewardship since time immemorial. Outcomes for students were assessed based on informal teacher feedback on units and additional outcomes are still being assessed.

The STEM Storylines project has continued for the past four years. Outcomes of this year's storylines have been collected through qualitative methods via informal focus groups with teachers and also through a survey for one of the STEM Storylines. Student outcomes described by teachers include:

- increase of engagement in school activities,
- increased ability to collaborate with peers,
- increased depth of knowledge and questioning around science concepts,
- increased participation in classroom discussions
- increased parent and community involvement.

TGfU: A Physical Education Approach

Student outcomes are evidenced by demonstrating correct skill implementation based on the lesson of the day. There are self-assessment opportunities throughout invasion and net game units.

Efficacy will be measured by the teachers when they use the lesson plans.

World Language OER Development

Students benefited from having common, organized curriculum for distance, hybrid, and in-person learning between schools and programs.

Dual Language Immersion Social Studies OER Project

Financial Literacy Videos

Teachers of the deaf and others are thrilled to have these to use.

Regional STEM Instructional Materials Collaborative

Teacher outcomes were measured through qualitative and quantitative methods. Qualitative information was collected through focus groups and showed that the STEM Storylines have had the following outcome for teachers:

- instructional support that reduces lesson-planning time (slides, handouts)
- pre-curated connections to local phenomena
- connections to career and college pathways to share with students
- opportunities for cross-disciplinary connection that create opportunities for integration into the busy school day.

We also measured efficacy of STEM Storylines as a resource by looking at download data of our units. On our STEM Materials Website, we had 1517 unique download events for our STEM Storylines (of units to date) from August 2020-May 2021. We hope to collect additional information this summer via surveys to gain further insight into efficacy of materials and areas of needed improvement.

TGfU: A Physical Education Approach

Teacher outcomes developing the open resources:

- Design grade level unit and lesson plans for invasion and net games using TGfU methodology and Washington State Standards/Outcomes.
- Differentiate instruction between the 3 grade levels for one invasion game and one net game.
- Evaluate the scope and sequence of the TGfU methodology throughout the invasion game and net game grade level units.
- Create grade level assessments for invasion and net games.

World Language OER Development

Teachers benefited by having concrete documents to help guide their teaching and assessments during this distance- and hybrid-learning year.

Dual Language Immersion Social Studies OER Project

Drumbeats in Time

Our three teachers learning a lot about putting together OER resources and this will help in our curriculum adoption cycle the next time.

Financial Literacy Videos

It was an excellent way for us to organize how we want to present the financial literacy videos in a way that would benefit students, teachers, and parents.

Regional STEM Instructional Materials Collaborative

This year, the materials created have and will continue to create positive outcomes for the students we serve. The curricular units (both STEM storylines and STEM mini projects) provide teachers with a high-quality instructional resource that provides robust support for implementation. Each unit includes lesson plans, slide decks, videos, reading materials, activities, labs, outdoor learning experiences, home connections, etc.

The resources provided this year were created with a strong attention to virtual learning supports that teachers would be able to easily use in the blended learning environment. Teachers shared that their students often enjoyed the STEM part of virtual learning the most. Videos, reading materials, and other suggestions were included to help provide coaching to teachers on how to sustain STEM learning despite the challenges of this year.

The framework of the units is strongly aligned with the essential elements of Project Based Learning with a specific emphasis on authenticity, relevance, student voice and student choice. In this way, the units support teachers in shifting teaching and learning practices towards more student-centered, humanistic, and emancipatory learning. Even our STEM mini projects have focused on critical issues around the world that allow students to develop their identity as STEM learners and emerging activists.

Our specific focus this year on highlighting the stories and activism of young people from BIPOC communities has also aimed to increase representation of marginalized people in our curriculum. We hope that one of the benefits of this year's materials is that teachers have support in bringing in voices of culturally and ethnically diverse people via STEM education. We hope this has positive outcomes for all students and specifically for students who are a part of communities who have been traditionally underrepresented in STEM Education.

TGfU: A Physical Education Approach

- Gaining a deeper understanding of how to efficiently and effectively use the TGfU methodology in multiple grade levels
- PLU students being able to work on developing a scope and sequence for an invasion game and net game unit plan as well as lesson plans.

World Language OER Development

The grant provided us with the funding, platform, and motivation to adapt our existing unit & pacing guides, which was very much needed this year.

CHALLENGES

Dual Language Immersion Social Studies OER Project

Drumbeats in Time

We had to delay the project because the key component could not be interviewed until late May.

Financial Literacy Videos

the biggest challenge that we faced was finding effective and affordable people to do the Spanish voice overs on the videos.

Regional STEM Instructional Materials Collaborative

There were some serious challenges this year as schools shifted from virtual learning to in-person learning in the winter. Suddenly, needs shifted from online instructional formats to those that students could engage in while socially distanced in school. Fortunately, teachers were able to use many of the instructional materials in the socially distanced learning format.

Teachers expressed that STEM was also often a great way to engage students during those virtual learning times. Connections to home environments and outdoor learning were also commended and were helpful as teachers faced the challenges of finding time and space for STEM.

This year, challenges were faced through collaborative problem solving, resource sharing, and innovation. Teachers often took resources from our STEM Storylines/Projects and translated them to the LMS they were using with their district. These were then shared through ESD networks and communication channels so that the work did not need to be redone by others. Teachers were generally overwhelmed with expectations but were encouraged to implement curriculum as well as possible, using helpful areas of the storylines in a modular way if needed.

TGfU: A Physical Education Approach

Having other teachers review the unit plans and lesson plans. Still working on that process. It has just taken more time than was originally anticipated to distribute the information to teachers and to get feedback.

The pandemic in general made the process challenging as I wasn't able to meet with my PLU students regularly as I would have had we been in person. The pandemic gave the students opportunities to work during normal school hours which made it impossible at times to find a common time during the day or evening to meet as a group. Some students had day jobs and some continued to work at night, so the process was challenging.

World Language OER Development

The challenges were organizing the personnel and the logistics of meeting prior to the start of the school year. It ended up being very beneficial to meet before the start of the school year because of how consumed educators have been this year with their online classes.

ADDITIONAL COMMENTS

Dual Language Immersion Social Studies OER Project

Regional STEM Instructional Materials Collaborative

We would like to express a deep gratitude to Barbara Soots and OSPI for encouraging us to be involved on this project for several years. The work is so appreciated by teachers and students in our region.

TGfU: A Physical Education Approach

We thank all involved in the process and thank them for involving Physical Education as a topic in OER.

FOR MORE INFORMATION

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Washington OER Hub



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