

### THE CURRENT STATE OF STEAM AND ARTS EDUCATION IN OREGON:

Baseline and mid-program measures for the Well-Rounded Access Program

The Well-Rounded Access Program (WRAP) is an Oregon Department of Education (ODE) project aimed at increasing availability of and access to high quality STEAM and Arts opportunities for all Oregon K-12 students. The project focuses on three main components to accomplish its goals: Course development to create the widespread availability of STEAM and Arts courses; Course access structures to ensure that available courses are equitably accessible for all students; and Communication around these efforts to all interested parties, including teachers, administrators, parents, and community members.

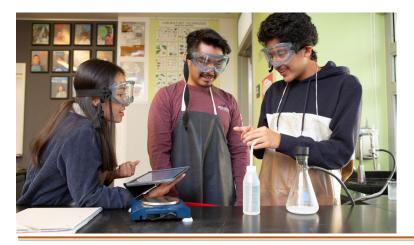
### **Course Development**

#### STEAM EDUCATION

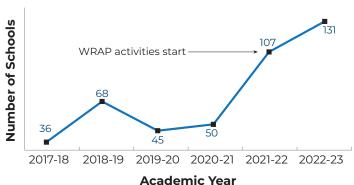
**Challenge:** There are currently inequities in the availability of high school STEAM courses, particularly between urban and rural schools. For example, 84% of students in urban schools versus only 68% in rural schools have access to computer science courses.

**Action:** WRAP is promoting greater implementation of two existing high quality HS STEAM curricula: High School Science for All (HSS4A) and Exploring Computer Science (ECS), by increasing High School teachers' participation in associated professional development (PD), with a strong focus on equity and recruiting rural teachers for these opportunities.

**Preliminary results:** The number of schools participating in High School Science for All PD has increased by 22% since WRAP activities began in 2021-22.



## The number of schools participating in HSS4A professional development



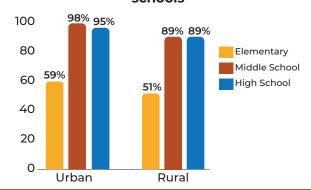
#### ARTS EDUCATION

**Challenge:** There are fewer arts learning opportunities for elementary students compared to students in middle and high schools. There are also fewer arts opportunities for rural versus urban students.

**Action:** WRAP will fund creation of a new equityfocused Arts course for elementary students called Arts, Care & Connection, with a focus on social emotional learning.

**Preliminary results:** The curriculum has been developed and is currently in the pilot stage.

# There are fewer arts learning opportunities for elementary students and for students in rural schools







#### **Course Access Structures**

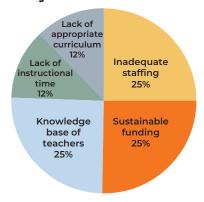
#### **CHALLENGES AND LIMITATIONS**

**Challenge:** Teachers and administrators identified numerous challenges to providing STEAM and Arts education. In addition, even where courses were available, access to the course was limited for some students.

**Action:** WRAP will increase the knowledge base of teachers and provide access to equity-focused STEAM and Arts curriculum materials through the PD efforts described above.

**Preliminary results:** STEAM and Arts curricula have been developed and PD is underway.

Challenges to providing STEAM/arts education identified by school adminstrators (n=38)



(source: surveys and public engagement sessions)

### Communication

#### What is STEAM?

thinking stem learn

projects integrated school

areas skills knowledge

connected career community stand
innovation creative education Content real

problems

solving necessary integration engaging life
curriculum alone subjects courses

integrates solutions opportunities

design relevant solve critical problem

approach curiosity think world

(source: surveys and public engagement sessions)

#### SHARED UNDERSTANDING

**Challenge:** There is currently a lack of shared understanding among teachers, administrators, and community education partners of the definition of STEAM and the importance of STEAM and Arts in a well-rounded education.

**Action:** WRAP will **improve communication around STEAM and Arts** through widespread dissemination of relevant information and resources.

**Preliminary results:** An Arts Access Toolkit and STEAM/Arts funding resources webinar have been produced and are available for download on the <u>WRAP website</u>. Both a <u>WRAP</u> and <u>Arts newsletter</u> are distributed regularly.

### **Summary and Future Directions**

- WRAP activities are proceeding well and are on track for meeting the goals of the program.
- Course Development in particular is showing good progress with a significant increase in participation in HSSAA DD
- There are several avenues of Communication in place including the WRAP website and a WRAP and Arts newsletter.
- The STEM Research Center at Oregon State
   University, with funding from ODE, will continue to
   monitor the progress of WRAP and provide timely
   feedback to ensure the success of this program.



Funding for the WRAP has been provided through a 5-year, \$9.8 Million grant from the U.S. Department of Education to expand access to well rounded education courses. Approximately 10% of the total funding is being used for evaluation through the STEM Research Center at Oregon State University. The content of this document does not necessarily reflect the views or policies of the U.S. Department of Education, and does not imply endorsement by the U.S. government. For questions, contact <a href="mailto:ODE.WRCoursesGrant@ode.oregon.gov">ODE.WRCoursesGrant@ode.oregon.gov</a>