

SMS STEM PARTNERSHIP DRAFT WORK PLAN

Vision Statement

The South Metro-Salem STEM Partnership catalyzes Oregon students to achieve STEM degrees and certificates, and reach Oregon's education goals by increasing the access, excitement and engagement of students in STEM courses and experiential learning.

Mission statement

The South Metro-Salem STEM partnership will collectively optimize PK-20 STEM education by utilizing a full spectrum of public and private resources and model instructional practices to develop a career-ready, diverse, and adaptable workforce that enhances the regional economy and community.

Goal

Provide Oregon business and industry with access to an Oregon-educated STEM talent pool that is highly skilled, motivated and globally competitive.

Strategies:

- 1) Train pre-service and in-service teachers in effective instructional practices (teacher coach/guided practice) to integrate science and engineering work samples into common core standards, with contextualized, experience-based teaching and learning methods.
- 2) Build a "STEM Center" network of mentors, programs and events that inspire students and sponsors to highlight the value of STEM activities (ISEF, FIRST, ORTOP, SeaPERCH, MATE, Physics Bowl, Math Olympiad, Skills USA, museums, aquariums, libraries, etc.), connect STEM activities to the classroom, and utilize the region's rich industry and community resources.
- 3) Expand collaborations between schools, colleges and universities to accelerate students through dual credits, advanced placement, and incentives to attract students into STEM degree paths.



Work Plan

Communicate and Build	Sept 2012-	2014-2015	
Engagement	Aug 2013		
 Learning Tour: STEM Bus Tour with Superintendents 	December 14, 2012		
 Partnership Launch: Mentor Graphics 	January 11 or 18, 2013		
 Learning Tour and Showcase: Evergreen 	April 2013		
Strategy 1: Teacher Professional Development			
1.1 Experience-based teaching and learning workshops	-Appoint teacher reps for each district -Select schools that will be engaged -Host in-service teacher professional dev workshops at grade levels: 3-6, 7-10, 11-12	-Identify and develop master teachers/coaches (from schools, CTE, industry, colleges and universities	
1.2 Teacher internships and STEM experiences		Identify at least two teacher internships or STEM experiences for each district	
1.3 Establish professional learning community to share best practices and STEM curriculum among partners			
Strategy 2: STEM Center network of	industry and community resor	urces for schools	
2.1 Recruit mentor coaches	Host mentor-coach happy hour with potential industry mentors	Develop system for matching mentors with teachers	
2.2 Develop connections to community and industry resources	- Host STEM Learning Tour for superintendents - Seek grant funds and other resources for STEM Center - Engage five core industry partners by March 2013 - Host Learning Tour and Showcase at Evergreen Aviation	 Develop systems for connecting community resources to schools Industry support Sustained repurposed ed funding or other business model Grants 	

Strategy 3: Expanded school, college, university collaborations that accelerate students in STEM			
3.1 Develop articulated programs between partner schools, colleges and universities	-Implement Oregon Tech OWLS program and incentives - Build cadre of faculty and students to engage in classrooms, with teachers and parents		
3.2 Increase % of partner high school students getting advanced college credit	-Build capacity to support advanced credit systems		