SMILE Program

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MISSION

Our mission is to increase underrepresented students' success in STEM degree programs and careers, and to deliver high-quality teacher professional development.

VISION

Our vision is to provide a broad range of pathway programs to help underrepresented students succeed in STEM degrees and careers. We provide professional development resources that create better teachers.

HISTORY

Since 1988, the goal of the SMILE Program is to increase the numbers of historically underrepresented and other educationally underserved students and those from groups with low high school graduation rates who graduate from high school qualified to enroll in college and pursue careers related to science, mathematics, the health professions, engineering, and teaching.

OVERVIEW

The purpose of the Science & Math Investigative Learning Experiences (SMILE) Program at Oregon State University is to increase the number of minority, low income, and other historically underrepresented and other educationally underserved students who graduate from high school qualified to go to college and pursue science-related careers. To achieve this goal, SMILE works in partnership with mostly rural Oregon school districts, providing a year-round program of science and math enrichment.

The program functions as a pathway, taking students from the 4th through 12th grades and ultimately into post-secondary education. SMILE's schedule of activities includes weekly after-school clubs that emphasize understanding through inquiry, relevance to students' lives, field trips, and problem-solving challenge events on college campuses.

SMILE also conducts workshops for the teachers who serve as SMILE Club advisors in their communities. These workshops are designed to increase their knowledge of science and mathematics content and help to support them by providing curricular materials, projects and activities, and technology support. Through SMILE, OSU faculty and SMILE professional staff provide scientific and pedagogical expertise, access to equipment, mentoring, and a professional network.

For more information, please visit our web site at *http://smile.oregonstate.edu* or contact:

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Cave Junction (2003)
•Evergreen Elementary School
•Lorna Byrne Middle School
•Illinois Valley High School
Chiloquin (1988)
•Chiloquin Elementary School
•Chiloquin Middle School
•Chiloquin High School
Dayton (2001)
•Dayton Grade School
•Dayton Middle School
Forest Grove (1998)
•Tom McCall Upper Elementary School
•Neil Armstrong Middle School
•Forest Grove High School
Four Rivers (2015)
•Four Rivers Middle School
•Four Rivers High School
Gold Beach (2020)
•Gold Beach High School
Jefferson (2015)
•Jefferson Middle School
Lebanon (2016)
•Seven Oak Middle School
Madras (1988)
•Madras High School
Monroe (2015)
•Monroe Grade School (MS Club)
Murphy (2014/2020)
•Lincoln Savage Middle School
•Hidden Valley High School
Nyssa (1989)
•Nyssa Elementary School
•Nyssa Middle School
•Nyssa High School
Ontario (1988)
•Ontario Middle School
•Ontario High School
Siletz (1989)
•Siletz Valley School (ES Club)
•Siletz Valley School (MS Club)
•Siletz Valley Early College Academy (HS)
Sisters (2002)
•Sisters Middle School

SMILE Communities (continued)

Warm Springs (1988)
•Warm Springs Elementary School
•Warm Springs Middle School
Willamina (1989)
•Willamina Elementary School
•Willamina Middle School
•Willamina High School
Woodburn (1988)
•Lincoln Elementary School
•Nellie Muir Elementary School
•Washington Elementary School
•French Prairie Middle School
•Valor Middle School
•Wellness, Business and Sports School (HS)

WHY SMILE WORKS

SMILE Student Impact

SMILE's pathway is producing high school graduates who go on to college. In 2017, students with three years in SMILE graduated high school at a rate of 84 percent—well above the state average regardless of income or ethnicity. Students who stayed with SMILE through their senior year graduated at a rate of 98 percent, and more than 80 percent of them went on to college. For financial reasons, almost all of SMILE's graduates continue their education at public colleges and universities in Oregon. For example, in 2017, more than 103 SMILE high school graduates have enrolled at OSU. Their grades are a little better than OSU undergraduates generally, and their retention rate is comparable, too. As of 2017, more than 50 of these students were currently enrolled; 43 of the students had completed their undergraduate degrees at OSU.

SMILE Club Essential Attributes

Inclusive Community

We provide a safe and supportive place for participants to engage in challenging activities and risk failure.

High Expectations

We promote participants' creativity and learning through hands-on, minds-on activities.

Positive Attitudes

We help participants develop and sustain confidence in their capacity to learn and succeed.

Continuous Improvement

We assess our programming and make changes to better meet the needs of our participants and our school district partners.

SMILE CLUBS: PATHWAY TO SUCCESS

SMILE Clubs function as a pathway from elementary school, through middle and high schools, and on to college. Seven of our eighteen SMILE communities have clubs at all levels. Below is a brief summary of how we want our pathway to help students progress through SMILE Club activities.

ELEMENTARY SCHOOL: "BECOMING SCIENTISTS"

In becoming scientists, fourth and fifth grade students demonstrate skills and attributes that enable them to:

- Make careful observations
- Use tools to enhance their observations and improve their accuracy
- Connect their understanding of relevant content to predictions about results and/or changes in the system
- Work as a member of a team

MIDDLE SCHOOL: "GROWING INTO PROBLEM SOLVERS"

To grow as problem solvers, sixth through eighth grade students demonstrate additional skills and attributes that enable them to:

- Identify a need or define a challenge/concern within a community
- Frame the above problem and then break it into smaller components that foster learning and investigation
- Connect their understanding of relevant content to the problem and its possible solutions
- Experience the role of teams in generating a variety of options or ideas to address the identified problem

HIGH SCHOOL: "SERVING AS INFORMED COMMUNITY VOICES"

To serve as informed voices in the community, ninth through twelfth grade students demonstrate additional skills and attributes enabling them to:

- Understand the nature of their community and its needs, define broader problems and identify potential solutions
- Use evidence and science content to enhance their observations and improve their accuracy
- Connect their understanding relevant science content to the needs of and possibilities for a community
- Formulate and deliver persuasive presentations; share with interested stakeholder relate science content and possible solutions

TEACHER RESPONSIBILITIES

- **Weekly Meetings**
- **Field Trips**
- **Family Math and Science Nights**
- **College Connection Events**

These responsibilities should be shared by consensus among the designated SMILE teachers.

1. Identify and recruit eligible students from the appropriate grades to be members of the SMILE Club. Membership at any one time should be approximately 20. Clubs to begin meeting before October 1

2. Facilitate weekly club meetings (approx. 20-25), integrating SMILE STEM activities. Meetings that are canceled or postponed should be rescheduled. Dependability and continuity are important to the success of SMILE students. Select meeting times that are convenient for the most students. Negotiate solutions to conflicts with other activities in the school.

3. Plan to attend and prepare students for the SMILE college connection events. Submit student registrations and waivers. Arrange for and coordinate transportation to and from these events.

4. Connect with your local community by inviting a guest speaker or conducting a field trip. Field trips could be as extensive as a trip to a local science center or as simple as a walk down to the creek. Field trips should complement SMILE projects and further the goals of the program.

5. Keep records of the following and report to the SMILE Office:
   - Student membership (online in Ideal-logic).
   - Club activity logs, including attendance by students, and a description of the activities, including resources and contact persons (submit in Ideal-logic).

6. Keep track of expenditures from SMILE Club funds. Follow your District procedures to access the SMILE Club funds. If you are having trouble accessing your Club funds, contact the SMILE Office for assistance.

7. Attend all SMILE Teacher Workshops.

8. Maintain contact with and encourage participation of parents of SMILE students.

TEACHER PROFESSIONAL DEVELOPMENT WORKSHOPS

Professional development workshops are the foundation of the program structure. SMILE provides continuous support to the club teachers through professional development workshops, networking, curriculum materials, and equipment. Workshops, led by SMILE staff, are conducted two to three times a year (August, January and May) at Oregon State University or other area venues. SMILE leaders are expected to attend all workshops.

- In August, 3 days, to prepare for the coming school year
- In August, 1 day, to prepare first-year teacher-partners to serve as SMILE Club advisors
- In January, 2 days, to share new materials and prepare for the college connection events
- In May, 2 days, to wrap-up the year and celebrate accomplishments

The purpose of SMILE's teacher professional development workshops is to enhance teachers' ability to deliver inquiry-based integrated science/math curricula, to deepen content of science and math, to make connection to career fields, to facilitate cooperative or collaborative classes and activities, and to provide culturally-relevant, equity promoting teaching techniques—in short, to help SMILE Club teachers develop instructional strategies in science and math, especially attuned to helping students succeed.

SMILE staff, OSU faculty and other identified presenters conduct instructional sessions at workshops. The workshops provide a range of materials and projects to use with students, to conduct inquiry-based, STEM focused activities.

The workshops also include time for networking with other SMILE teachers and addressing organizational concerns, such as planning the SMILE year, coordination between grade levels, and issues in each community/school district. Resources are provided to teachers at each workshop based on content focus.

Attendance is expected at all workshops, and the contract with each school district explicitly stipulates that all SMILE teachers must be released in order to attend the workshops. Funds are provided for the cost of substitutes, room, board, and travel expenses, and a stipend for participation in the August workshop. Teachers receive continuing professional development units for these workshops.

Teacher support is provided on an ongoing basis by SMILE staff and OSU faculty. This includes curriculum, activity materials and misc. supplies, and access to faculty expertise. One of the strengths of the program is that it puts the resources of a large state university at the service of public school teachers and students.

The provision of professional development opportunities, support, and access to university faculty have helped make SMILE teachers among the very best in Oregon, and is a major reason for the success of the SMILE students.

WEEKLY CLUB MEETINGS

All activities and events revolve around weekly after school club meetings that take place in each school. Club meetings last 1- 1.5 hours and provide fun, integrated STEM activities in a relaxed atmosphere. The SMILE program provides a variety of activities during professional development events that can be used during a Club meeting. We also have hundreds of lessons and activities on our website as resources for Club leaders. The focus of the SMILE Club meetings should include one or more of the following components:

- Hands-on and Engaging STEM
- Scientific and Career Exploration Field Trips
- College Awareness
- Social Emotional Learning (i.e. growth mindset, leadership, etc.)

After each club meeting teachers are required to complete an online meeting log.

SMILE CLUB LOG

Club Logs are submitted electronically. After each SMILE Club meeting, the teacher should log onto Ideal-Logic, the online registration system, at https://apps.ideal-logic.com/smile. From your club's dashboard, click New Club Log to begin.

SMILE TEACHER BENEFITS

SMILE teachers are given a stipend and club budget and supported academically with curriculum and through professional development. Teachers earn professional development hours each year, learn about exciting scientific research from OSU faculty, and receive hands-on STEM materials. SMILE clubs provide a venue where teachers can test out new activities and hone teaching skills. Teachers are part of an active community of experienced teachers from around Oregon where you can exchange information and network.

Every fall students must apply for membership in their respective SMILE Club. The SMILE Club teachers recruit members and select members based on the membership eligibility requirements below. All applications are due online or on paper no later than the first Friday in November.

In Fall 2019, the SMILE application went online. It is the same for all members, regardless of grade level. Teachers can ask parents to apply through Ideal-Logic online or use the paper applications and send them to the SMILE Program to enter.

TEACHER APPLICATION CHECKLIST

In August, each club's teacher(s) will receive a copy of the membership eligibility criteria and an application checklist showing those students in their club the previous year or those students moving from elementary to middle or middle to high that might be eligible to join their club.

When accepting a student for membership, the SMILE Club teacher should review the membership eligibility criteria to make sure the student applying meets the criteria. When approving applications:

- Verify a student's eligibility using criteria for Part A and for Part B explained below and printed on the reverse side of the checklist
- If you have questions, contact the SMILE Office.

MEMBERSHIP SELECTION PROCESS

The selection committee shall consist of the local SMILE teachers, who may invite others, such as the principal of the host school, or his/her designate, to participate.

Verify the eligibility of each applicant using Parts A and B criteria. Give preference for membership in the following order:

1. Student was a member of SMILE in the previous school year.
2. Student meets two or more of the criteria listed in Part B of Membership Eligibility. Preference will be given to those students meeting the most criteria in Part B.
3. Student has been a member of SMILE in the past (although not the previous school year).

Once you obtain a student's parent's email, you will send them a link to apply online. Once the parent has completed an application, you will receive an Action Item in Ideal-logic to approve or disprove the applicant. Or, you can distribute the paper applications, collect them and send them to SMILE for entry.

Ideally, club membership is 20 students per club. If you feel a larger membership is warranted, be sure that ALL students have completed an application.

SMILE Membership (continued)

All applications are due no later than the first Friday in November.

Changes and additions: Teachers can change or add students to the club roster until the winter teacher workshop. Teachers will receive a 'most recent' roster at the winter workshop for their verification. Note any discrepancies on this roster and return it at the workshop or shortly thereafter. The SMILE Staff will work with you to correct your roster. At that time, the club membership will be set.

Students may drop, or be dropped, at any time during the SMILE year, however no membership additions will be accepted after the Winter Teacher Workshop.

Removal from Membership
At several intervals during the school year, SMILE teachers will check grades, behavior, and attendance for all students to determine whether they still meet membership standards.

Reasons for removal could include: failure to maintain grade average, repeated absence from meetings, failure to complete projects, not attending field trips, and/or unacceptable behavior. SMILE teachers should report all changes in membership to the SMILE office immediately (who, when, why).

Prior to removal from membership the following steps must be taken:

1. Discuss situation with student and parent/guardian
2. Provide documentation of existing problem
3. Provide a probationary period allowing student time to overcome the problem

Important Application Process Information
Each student must submit an online application form each year.

A parent or guardian must login to the online system to give the student permission to participate in SMILE, select whether or not to release photos, and sign the online OSU waiver OR complete the paper applicationm form with signature.

Student must complete the online application form and receive approval from the SMILE teacher within two weeks of the first meeting.

Membership Eligibility
To be considered for SMILE membership, a student must meet ALL the requirements in Part A and AT LEAST ONE of the criteria in Part B.

Part A

- Student must be working at grade level or receiving grades of C or better in all classes, as determined by school records.
- Student must be able to help establish and maintain a safe club environment.
- Student must be able to participate in and contribute to cooperative learning, college-readiness and academic enrichment activities.
- Student must show an interest in math and science, as evidenced by class participation or extracurricular involvement.
- Student must exhibit good behavior and good school citizenship, as determined by school records and recommendations from school staff.
- Student must complete The SMILE Program application and obtain parent/guardian permission to participate.

Part B

- Be a member of a group that exhibits high school graduation rates lower than the state average. Such groups include Native American/American Indian, African American, and Latino/Chicano/Hispanic American.
- Be from a low-income household (as determined by student's eligibility for free or reduced-priced lunch).
- Have parents who have not earned a bachelor's degree from a four-year university.
- Have linguistic or cultural backgrounds different from those that predominate in Oregon's elementary and secondary school system.
- Title I-C: Education of Migratory Children
- Title III: Language Instruction for Limited English Proficient and Immigrant Children

Funding a SMILE club at your school is a joint effort between SMILE and the school district. Many school districts commit to paying a portion of the costs.

Activities and Events

District-Wide Family Math and Science Nights

Family Math and Science Nights bring together SMILE students, their families, and community members in an open house-style event organized by SMILE club members. Typically, it is held in the fall. Students and SMILE club leaders demonstrate interactive science activities.

Ideally, community partners, such as 4-H, are invited and organize hands-on STEM activities and informational displays relating to college readiness. For parents and guardians, it's a time to learn about the club their child has joined, and for the students, it's a time to exhibit leadership in the program.

College Connection Events

College Connection events bring SMILE club students onto college campuses and build a strong connection between the students and higher education. Students learn about careers they want to pursue and familiarize themselves with life on a college campus. Students go into classrooms and labs and learn about academic programs and meet college students and faculty. Club leaders are required to bring students to these events.

SMILE's High School Challenge is a two-day event where students from the SMILE clubs across the state come together to work through a complex STEM-based problem. The event is held on both the Western Oregon University and Oregon State University campuses. This event also provides students an opportunity to experience life on a college campus firsthand and see labs and research being done.

SMILE's Middle and Elementary School Challenge is a one day regional event held on college campuses around the state depending on club location. SMILE clubs from these regions come together to work through a complex STEM-based problem. This event also provides students an opportunity to experience life on a college campus firsthand and see labs and research being done.

Timeline of Activities & Events

- August: Attend Summer Teacher Workshop and receive curriculum and materials
- August-September: Plan your SMILE year
- September: Recruit at least 20 students and receive paper or online applications. Pick a day of the week to meet. Conduct icebreakers so that students get to know each other and a club atmosphere is developed. Provide healthy snacks at the start of each club meeting. Students must maintain good grades (C or above), good school attendance, and good behavior.
- October: Continue weekly club meetings and begin preparing for Family Math and Science Night.
- October and November: Family Math and Science Night
- December: Continue weekly club meetings.
- January: Attend the Winter Teacher Workshop at OSU and receive new curriculum.
- February: Continue with curriculum activities. Begin preparation for upcoming SMILE Challenge Events. Hand out Event Permission Forms to students and collect them. Arrange transportation.
- April: High School Challenge Event at WOU and OSU
- April-May: Continue with curriculum activities. Middle and Elementary School Regional Challenge Events
- May: Attend Spring Teacher Workshop
- May-June: Continue with curriculum activities, last SMILE club meeting.

STUDENT AWARDS

SMILE Letter, Bar and Honor Cord Policies

SMILE Letters
SMILE members who contribute outstanding quantity and quality of involvement in SMILE activities are eligible for a SMILE letter.

Requirements for Lettering:
1. Be a member of the SMILE Club for 2 years during high school
2. Attend 85 percent of the meetings and field trips (illnesses excused)
3. Attend a High School Challenge during each of the two years
4. Complete at least two of the following:
   a. Serve as an officer of the SMILE Club
   b. Participate in a SMILE sponsored community project or activity
   c. Arrange a speaker for a SMILE meeting or a field trip for the SMILE Club
   d. Make a presentation about SMILE outside of school
5. Maintain a GPA greater than 2.5

SMILE Bars
SMILE Bars can be earned for additional years of participation and accomplishment in SMILE.
Requirements for First Bar:
1. Have earned a SMILE letter
2. Continue to meet above criteria
3. Participate in and contribute to SMILE Club during Junior or Senior year

Requirements for Second Bar:
1. Have earned a SMILE letter
2. Continue to meet above criteria
3. Participate in and contribute to SMILE Club during Senior year

SMILE Honor Cords
Graduating seniors who have been in and contributed to SMILE ALL 4 years of high school and attended at least two High School Challenge events are eligible for an orange and black OSU honorcord.

3-year, 5-year and 9-year student awards
Students who have shown enthusiasm, perseverance and dedication to SMILE for 3-years will be recognized with a certificate.

Students who have shown enthusiasm, perseverance and dedication to SMILE for 5-years will be recognized with a certificate and SMILE pen.

Students who have participated in SMILE from fourth through twelfth grade – all nine years – are recognized for their commitment with a certificate and gift.

TEACHER AWARDS

Longevity
SMILE teachers who have led a Club for five, ten, fifteen or twenty years are recognized with a certicate and gift.

SMILE Leadership and Service Award
The SMILE Leadership and Service Award was started to honor a teacher(s) in 2009. This award celebrates an educator who has consistently provided outstanding leadership, service, and engagement in SMILE. To be eligible for this award, the individual must be a current SMILE teacher or advisor and have demonstrated excellence in the award criteria below.

The individual receiving the SMILE Leadership and Service Award should demonstrate:

- Engagement in the SMILE teacher learning community by participating in workops, sharing best practices, and mentoring new SMILE teachers.
- Exceptional service to their SMILE Club students, by attending Challenge events, utilizing innovative activities, taking students on Club-related field trips, and by achieving consistently high rates of student participation in Clubs.

You may nominate yourself or others. In your nomination, please list the reasons you recommend this person, including specific examples of how the nominee meets most/all the criteria above.