Frequently Asked Questions

1. **What is the Maine Physical Sciences Partnership?**
The MainePSP is a partnership among rural Maine school districts, the University of Maine, several non-profit organizations, and the Maine Department of Education seeking to build a sustainable infrastructure that strengthens rural science education. We are supported by a $12 million grant from the National Science Foundation. Our goal is to create a sustainable partnership that improves STEM (science, technology, engineering and math) teacher recruitment, retention and preparation; strengthens the teaching and learning of physical science in the critical grade range of 6th-9th; and supports research that will inform future rural educational initiatives.

2. **Who can participate?**
Any teacher in a partner district is eligible if she/he is teaching a full year of middle school earth science (eligible for SEPUP - usually 6th or 7th grade), a full year of middle school physical science, such as force & motion, energy and chemistry (eligible for PBIS - usually 7th or 8th grade), or a half year of high school earth science (eligible for EarthComm - usually grade 9). Priority is given to teachers within districts that anticipate district-wide participation in the MainePSP, meaning all eligible teachers will eventually participate. Priority is also given to districts currently partnering with us through the Maine Elementary Sciences Partnership.

3. **How do we become a partner district?**
The MainePSP accepts applications for new district partners in the spring of each year, for partnership beginning the following academic year. The application process is typically led by a district's Curriculum Coordinator. Please visit our website for more information: [http://umaine.edu/mainepsp](http://umaine.edu/mainepsp).

4. **How long have you been around? What other districts are participating?**
The MainePSP leverages educational partnerships that have been active for many years, including the Penobscot River Educational Partnership (PREP), the Downeast Educational Partnership (DEEP), and the Maine Center for Research in STEM Education (RISE). The MainePSP launched in 2010, and 24 teachers began using MainePSP instructional resources in their classrooms in 2011-2012 school year. In 2012-2013, we added another 24 teachers, and we plan to add 24 teachers per year until 2015. Our active partnership currently includes 75 teachers from 44 schools across over 20 districts. Schools in our partnership span the geographic area from Milo and Katadhin out to MDI, Blue Hill and Steuben down to Belfast and Camden, and inland along the Penobscot River. A complete list of partner schools and districts can be found on our website.

5. **How did you pick the instructional resources?**
A task force comprised of middle and high school teachers, STEM faculty and STEM education faculty from the University of Maine, pre-service teachers and graduate students from the University of Maine, and non-profit partners followed a protocol from the American Association for the Advancement of Science to review instructional resources. They recommended resources that aligned to the shared vision and values of a student-centered, active-learning, inquiry-style science classroom. The MainePSP Leadership Team then voted to adopt these recommendations.
You can find out more about the selected instructional resources (SEPUP for middle school earth science, PBIS for middle school physical science, and EarthComm for high school earth science) by requesting program overview documents from your Curriculum Coordinator or directly from the MainePSP.

6. **What do teachers and districts get by participating in the MainePSP?**

   All MainePSP teachers become active participants in the MainePSP community of practice, which includes other science teachers from around the state, STEM and STEM education faculty from the University of Maine, and pre-service science teachers. Over the course of their involvement, participants receive over 100 hours of professional development specifically around physical science education as a part of this community. An active online community facilitates additional collaboration and access to available resources. MainePSP classrooms also receive the use of research-proven, hands-on science instructional resources, and a community-supported scope & sequence guiding the use of these resources. These resources include a classroom set of textbooks and supporting hands-on materials, with a value of around $7000. Classrooms receive further support using these resources from two full-time Resource Coordinators who deliver, replenish, repair and pick-up all materials, timed with the teaching cycle. Participating teachers receive stipends to attend all professional development and community activities.

   MainePSP districts benefit from vertically-aligned physical science instruction across grades 6-9. In addition to student achievement gains in science, students have been shown to develop problem-solving, communication and team work skills that transfer to other classrooms. The MainePSP also fosters collaboration among science teachers within a district.

7. **What am I obligated to do if I am selected as a district partner or participant?**

   MainePSP partners agree to follow the community-supported scope & sequence using the provided instructional resources, to actively participate in community activities and professional development, and to strive for district-wide participation in the MainePSP.

   For MainePSP teachers, this includes attending a week-long Summer Academy to kick off your participation (June 24-28, 2014), a two-day curriculum orientation in August (Aug 18-19, 2014), and all cohort meetings during the academic year (1x per month). Participants are expected to maintain a weekly online journal of classroom reflections (<1 hr per week) and to contribute to the community’s work on issues of teaching and learning science during these meetings. Participants are also strongly encouraged to attend their local Collaborative gatherings, which are open to the public and focus on vertical alignment (1x per month, 3 hours). Participants receive $1000, plus lodging and meals for attending each Summer Academy, and are compensated at $25/hr for all other MainePSP meetings and community activities.

   For MainePSP partner districts, this includes sending at least one representative administrator to attend the MainePSP annual Summit in the fall (tentatively November 14-15, 2014).

8. **Do I have to attend all of the meetings?**

   The true value of the MainePSP is the community of science educators working together to strengthen rural science education. It is more than just putting materials in classrooms. For this community of practice to thrive, our members need to participate actively with this professional learning community using a common set of instructional resources. If you are a teacher with MainePSP resources in your classroom, you are expected to attend all cohort meetings (1x per
9. Are your programs standards-based/standards-referenced?
Many of our teachers work in districts and schools that are standards-based or standards-referenced. The MainePSP resources align with all Maine Learning Results and strongly support the ambitious teaching called for in A Framework for K-12 Science Education and the Next Generation Science Standards. Some partnering districts are part of the Maine Cohort for Customized Learning. Our program supports standards-based diploma legislative requirements, and our community supports teachers’ efforts to align their school’s grading system with the MainePSP resources.

10. What happens when the grant runs out?
Preliminary findings of this project show increases in student engagement, student achievement, teacher engagement, teacher content knowledge and changes in classroom practice. Everyone involved wants the positive impacts of this project to continue and, for this reason, a Sustainability Team has been formed including the University, school districts and nonprofit partners to explore way to work to transition the costs to sustain the program to various stakeholders.

11. What about life science?
We recognize that by only working on physical sciences, and not life sciences, a gap has been created in middle school science instruction. At the current phase in our grant, a life sciences program is outside the scope of our focus on the physical sciences, and we do not have the resources to support this. We are interested in expanding our program to cover life science and hope to be able to expand in this direction in the future. Several districts have decided to purchase their own life sciences program, either from SEPUP or PBIS, in order to maintain vertical alignment with the MainePSP. RSU #24 runs a monthly collaborative of teachers using SEPUP Issues and Life Science, and has agreed to allow participation of any other MainePSP teachers into this collaborative.

12. Who can I contact for more information?
Please visit us online at http://umaine.edu/mainepsp/ or direct specific questions to MainePSP Project Director Erika Allison at 207-581-4674 or erika.allison@maine.edu.