Missouri Teacher Professional Development Survey

For K-12 Educators Teaching Science, Technology, Engineering, or Mathematics

If you provide any instruction to students in science, technology, engineering, or mathematics, we consider you a "STEM teacher." In order to develop useful professional development in STEM areas, we need to hear from you. Your responses will help us to evaluate and strengthen K-12 STEM education in Missouri.

Please completely and carefully fill in each chosen circle with a #2 pencil or blue/black pen.
Do not use ink that soaks through the paper.

YOUR TEACHING

Reporting only on your current teaching assignment, which subject(s) do you teach at the following grade levels? (*Please mark all that apply.*)

	Grades K-3	Grades 4-6	Grades 7-8	Grades 9-12
Mathematics	○	○	○	○
Science	○	○	○	○
Technology	○	○	○	○
Engineering	○	○	○	○

What proportion of your teaching assignment is in each subject?

	No teaching	Less than half	About half	More than half	All of my teaching
Mathematics	○	○	○	○	○
Science	○	○	○	○	○
Technology	○	○	○	○	○
Engineering	○	○	○	○	○

Including this school year, how many years have you taught at the K-12 level?

0-2 years	3-5 years	6-10 years	11-15 years	16-20 years	Over 20 years
○	○	○	○	○	○

PROFESSIONAL DEVELOPMENT HOURS

*For this survey, **professional development** is an organized activity for the purpose of learning techniques to improve teaching and student learning.*

How many hours of professional development have you participated in during the past 12 months?

0 hours	○	6-10 hours	○	41-60 hours	○
1-2 hours	○	11-20 hours	○	61-80 hours	○
3-5 hours	○	21-40 hours	○	more than 80 hours	○

How many of these hours emphasized <u>STEM</u> teaching or learning?

0 hours	○	6-10 hours	○	41-60 hours	○
1-2 hours	○	11-20 hours	○	61-80 hours	○
3-5 hours	○	21-40 hours	○	more than 80 hours	○

Please select your level of agreement with the following statements.

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I would like to attend professional development for STEM teaching and learning to improve my instructional practices.	◯	◯	◯	◯	◯
Quality professional development programs for STEM teaching and learning are readily available to me.	◯	◯	◯	◯	◯
I am able to adopt or adapt strategies learned from STEM professional development programs into my teaching practice.	◯	◯	◯	◯	◯
I have support from my principal to pursue professional development for STEM teaching and learning.	◯	◯	◯	◯	◯
The students in my school stand to benefit from STEM professional development available to our teachers.	◯	◯	◯	◯	◯
My participation in STEM professional development would help to improve my teaching.	◯	◯	◯	◯	◯
STEM professional development would be received positively within my school.	◯	◯	◯	◯	◯

From the following list of aspects of a professional development program, please rate how important each aspect is to you.

	Not Important	Slightly Important	Moderately Important	Very Important	Extremely Important
Learning about new and innovative teaching strategies	◯	◯	◯	◯	◯
Learning from other teachers	◯	◯	◯	◯	◯
Learning from experts in the field	◯	◯	◯	◯	◯
Networking with other teaching professionals	◯	◯	◯	◯	◯
Receiving feedback on teaching practices	◯	◯	◯	◯	◯
Accessing ready-to-use materials	◯	◯	◯	◯	◯
Meeting professional development requirements from my school or district	◯	◯	◯	◯	◯
Learning about new ideas emerging from STEM fields	◯	◯	◯	◯	◯

How interested would you be in attending professional development programs delivered in the following ways?

	Not Interested	Possibly Interested	Definitely Interested
Training or workshops during school hours	◯	◯	◯
Recurring sessions during school hours	◯	◯	◯
Recurring sessions outside of school hours	◯	◯	◯
One-time, short workshops (1-2 hours)	◯	◯	◯
One-time, half day workshops	◯	◯	◯
One-time, all day workshops	◯	◯	◯
Weekend trainings	◯	◯	◯
Intensive summer workshops (1-2 weeks)	◯	◯	◯
Ongoing support programs (mixture of trainings and support throughout the year)	◯	◯	◯

There are a variety of on-site, off-site, and virtual ways to participate in professional development. To what extent would you be interested in participating in the following modes of professional development?

	Not Interested	Possibly Interested	Definitely Interested
Attending face-to-face programs offered at my school site	○	○	○
Traveling to face-to-face programs offered in my district or region	○	○	○
Collaborating with other teachers in my school/district in a Professional Learning Community	○	○	○
Traveling to face-to-face programs offered at central locations (e.g., St. Louis, Kansas City, Springfield, Columbia)	○	○	○
Receiving mentorship from an expert teacher in my subject area	○	○	○
Viewing virtual trainings and webinars	○	○	○
Completing online, self-paced learning modules	○	○	○
Using online communities and forums like discussion boards, wikis, and/or blogs	○	○	○
Participating in the hybrid model that incorporates some face-to-face time with online follow-up opportunities	○	○	○
Observing an expert teacher working in his/her own classroom	○	○	○

PROFESSIONAL DEVELOPMENT TOPIC AREAS

(For each statement below, please record 2 responses - one for Importance and one for Interest.)

Based on your current teaching assignment, how important are the following teaching and learning topics AND how interested would you be in participating in professional development about these topics?

	Importance of Topic				Interest in Attending PD		
	Not Important	Slightly Important	Moderately Important	Very Important	Not Interested	Possibly Interested	Definitely Interested
Use of educational technologies to support learning	○	○	○	○	○	○	○
Integrating literacy practices with STEM learning	○	○	○	○	○	○	○
Formative assessment for STEM learning	○	○	○	○	○	○	○
Problem-based learning	○	○	○	○	○	○	○
Interdisciplinary STEM teaching	○	○	○	○	○	○	○
Scientific practices (e.g., modeling and argumentation)	○	○	○	○	○	○	○
Engineering design practices	○	○	○	○	○	○	○
Mathematical practices	○	○	○	○	○	○	○
Inquiry-based laboratory activities	○	○	○	○	○	○	○
Supporting girls and minorities in STEM	○	○	○	○	○	○	○
Preparing students for achievement tests	○	○	○	○	○	○	○
Using real-world issues in the classroom	○	○	○	○	○	○	○
Analysis of "big data"	○	○	○	○	○	○	○
Supporting classroom discourse	○	○	○	○	○	○	○
Integrating authentic STEM research into the classroom	○	○	○	○	○	○	○
Next Generation Science Standards	○	○	○	○	○	○	○
Common Core State Standards for Mathematics	○	○	○	○	○	○	○
New Missouri learning standards	○	○	○	○	○	○	○
Instructional strategies for meeting the needs of diverse learners	○	○	○	○	○	○	○
Aligning instruction and curriculum with standards	○	○	○	○	○	○	○
Strategies for student use of mobile technologies (e.g., iPads, Chromebooks, smart phones)	○	○	○	○	○	○	○
Integrating science, technology, engineering, and math	○	○	○	○	○	○	○

Based on your current teaching assignment and the curriculum designated by your district, how <u>important</u> is it for you to teach about the following STEM topics AND how <u>interested</u> would you be in participating in professional development about these topics?

	Importance to Teach about this Topic				Interest in Attending PD		
	Not Important	Slightly Important	Moderately Important	Very Important	Not Interested	Possibly Interested	Definitely Interested
Genetic engineering	○	○	○	○	○	○	○
Climate change	○	○	○	○	○	○	○
Plant science	○	○	○	○	○	○	○
Bioinfomatics	○	○	○	○	○	○	○
Coding/computer programming	○	○	○	○	○	○	○
Soil health	○	○	○	○	○	○	○
Local weather patterns	○	○	○	○	○	○	○
Use of drones to collect scientific data	○	○	○	○	○	○	○
Robotics	○	○	○	○	○	○	○

INTERNET ACCESS

From the following types of online access, please rate how often each type is available to you in your school building?

	Never Available	Sometimes Available	Always Available	I Don't Know
Reliable access to an internet connection at my school for email and web browsing	○	○	○	○
Reliable access to high speed internet at my school for viewing videos and streaming content	○	○	○	○
Access to online learning management systems (e.g., Blackboard, Moodle, and Global Classroom) at my school	○	○	○	○
Access to lesson portals (specialized websites with vetted collections of lesson plans, e.g., eThemes) at my school	○	○	○	○
Access to social media sites like Twitter and Facebook at my school	○	○	○	○

COMMENTS

Please add any comments about your STEM professional development needs.

BARCODE

THANK YOU VERY MUCH FOR TAKING THE TIME TO ANSWER THIS SURVEY.

Please return survey in the enclosed postage-paid envelope or to
ARC, 2800 Maguire, Columbia, MO 65203

Assessment Resource Center
University of Missouri