

Arizona SB1038 & SB1551 history, resources; Cactus Caucus

(updated Sept. 2019 by Jane Jackson)

Our second bill, SB 1051, passed as Section 15 of SB 1551 (K-12 Budget Reconciliation) in June 2019. It appropriates \$1.2 M in the next 3 years (\$400,000 each year) for the same provisions as SB1038. ¼ of the funds each year must be for counties that are NOT Maricopa, Pinal, nor Pima. The Arizona Department of Education (ADE) gets 3% of the funds to administer the program.

Our bill, SB1038, PASSED UNANIMOUSLY in both Arizona houses and was signed by Gov. Ducey on May 8, 2017. It is called High Quality Professional Development for teachers: pilot program. It appropriated \$300,000 for 150 scholarships of \$2000 for certified K-12 teachers, for professional development at a post-secondary Arizona institution, in pursuit of a further certification or credential (e.g., qualifying to teach dual enrollment physics) in a high-need STEM or CTE subject.

The bill is in pdf at <https://www.azleg.gov/legtext/53leg/1R/laws/0284.pdf>

Mike Vargas spearheaded AZ Senate Bill SB1038. He teaches 9th grade physics at Pinnacle HS, a public high school in North Phoenix.

You can learn about SB 1038 in Mike Vargas' three articles after SB 1038 was passed:

* *AZ Teachers Professional Development Pilot Program*. May 11, 2017
<http://www.storiesfromschoolaz.org/az-teachers-professional-development-pilot-program/>

* *Improving STEM Education in Arizona with SB 1038*. July 13, 2017
<http://www.storiesfromschoolaz.org/improving-stem-education-arizona-sb-1038/>

* *Teacher Leadership in Action*. August 24, 2017
“Mike Vargas, a Pinnacle High School physics teacher, has dedicated the last 18 months to cultivating awareness about a dire reality in our state: There are only 159 physics teachers in Arizona. ... Governor Doug Ducey signed Senate Bill 1038 into law on May 8, after a year and a half of hard work.” Read more (blogpost and video) at
<http://azk12.org/homeroom/2017/08/24/teacher-leadership-in-action-mike-vargas>
which leads you to these two articles:
<http://azk12.org/homeroom/2017/08/14/statewide-leadership-a-bill-becomes-a-law/> and
<http://azk12.org/homeroom/2017/08/17/an-inside-look-at-sb-1038/> (with video & timeline; see timeline at the end of this document.)

WHY SB 1038 is needed: Arizona LOST 9 certified physics teachers in one year; in 2016 Arizona had only 159 left who were actually teaching physics. That is 1 for every 2000 high school students.

The teacher shortage in physics is number ONE among 59 education fields, according to the 2014 report of the American Association for Employment in Education. The shortage in Arizona is much WORSE than nationwide, due to low teacher salaries and underfunded public education.

SB1038 HISTORY: In summer 2016, Phoenix physics teacher Mike Vargas asked Jane Jackson to join him in meeting with AZ Senators Sylvia Allen, Debbie Lesko, and John Kavanagh, and Representative Paul Boyer. As a result, SB1038 was crafted that fall by legislative staff.

In January, February, and March 2017, we testified. (For example, on Feb. 21, in the Senate Appropriations Committee, Mike Vargas, Jane Jackson, and Melissa Girmscheid testified.)

In March, we asked physics teachers statewide to e-mail and/or phone their state representatives and senator, in support of SB 1038.

SB1038 can help

- * save physics in AZ,

- * keep teachers in the classroom. It gives them a PATH TO ADVANCEMENT.

Long-term, SB1038 can strengthen Arizona's economy.

June 19, 2018: Watch this NEW 2-minute video by Mike Vargas, on equity in STEM education.

<https://vimeo.com/270557589>

Transcript: It has been my goal the last 4 years to find equity in STEM education in Arizona. My colleagues and I are on a mission to double the number of physics teachers in Arizona in 5 years. Our team is a small dedicated band of physics teachers who all decided we want to make a difference -- a grassroots effort to save our profession.

We passed a bill a year ago called SB 1038: the Arizona Teachers Professional Development Pilot Program. As of today, 150 Arizona teachers have been awarded a \$2000 scholarship to pursue graduate level classes in order to gain a certificate in a STEM subject higher than their current certification.

Our team is looking at this data and its impact for students, so we can take this pilot program to the next level as a permanent broad-spectrum solution to getting high-quality STEM teachers to our students.

Currently there are only 158 certified physics teachers left in Arizona, and all the research states that physics is the chief STEM pathway to careers in science upon graduation. We are woefully underpreparing science students by not giving them the one class that is a pre-requisite for nearly every STEM major.

In Arizona, your zip code dictates your access to the level of STEM education you can get. Our mission is to bring equity to ALL students and give them a chance to take the necessary physics that colleges are looking for. Moving forward, our dream is to get teachers the credentials they need to be effective, and the classes they need, to teach great science in the state of Arizona.

Cactus Caucus

To continue the work, four Phoenix-area teachers applied and were selected to be Fellows for the 2018 Master Teacher Policy Fellowship, funded by the American Institute of Physics Venture Partnership Fund. The fellowship opportunity began with a Leadership Workshop, July 21-28, 2018 in Washington, DC and had a follow-up weeklong workshop in July 2019. The 12 Fellows nationwide include these 2 physics and 2 physical science teachers in Greater Phoenix:

Melissa Girmscheid, Centennial High School, Peoria USD

Jeffrey Hengesbach, Estrella Mountain Community College
Nichole Spencer, Phoenix College (STEM Outreach; was Wilson Elementary School, Phx)
Amanda Whitehurst, STEMteachersPHX www.stemtchrspnx.org
Mentors for the four (who call themselves the **Cactus Caucus**) are:
Mike Vargas, Pinnacle High School, Paradise Valley USD
Kelli Gamez Warble, Teacher-in-Residence, ASU Dept. of Physics
More at <http://aapt.org/aboutaapt/2018-Master-Teacher-Policy-Fellows.cfm>



STORIES OF TEACHER LEADERSHIP

Mike Vargas

A Look at Senate Bill 1038

- Jan. 10** Collaborated with stakeholders to craft agreeable language. Senate staff dropped language into a bill folder. Referred to Senate Education and Appropriations Committees
- Jan. 19** Received a "Do Pass" from Senate Education Committee
- Feb. 22** Received a "Do Pass" from Senate Appropriations Committee with an amendment
- Feb. 28** Made it through Senate Rules Committee
- Mar. 1** Senate Committee of the Whole approved
- Mar. 6** Passed Senate 30-0 and sent to House
- Mar. 8** Referred to House Education and Appropriations Committees
- Mar. 14** Received a "Do Pass" from House Education Committee
- Mar. 16** Received a "Do Pass" from House Appropriations Committee
- May 1** Made it through House Rules Committee
- May 4** House Committee of the Whole approved 57-0. Sent to governor
- May 8** Signed by governor. Chapter 284, Laws 2017