



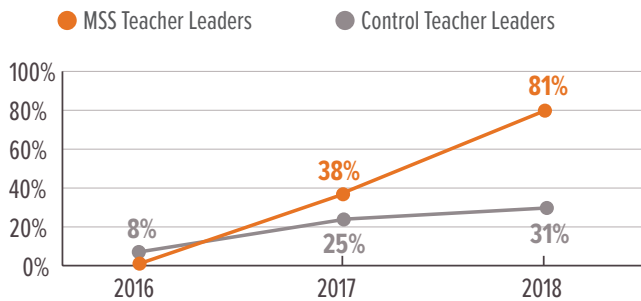
Demonstrating Positive Impact on Leadership at All Levels

To build local capacity through leadership development, Making Sense of SCIENCE provided professional learning to regional leaders first in Wisconsin and California as part of a validation study, and later in New Mexico as a scale-up and expansion effort. Regional cadres of teacher leaders, district leaders, and community members participated in workshops to deepen their understanding of the Next Generation Science Standards (NGSS), collaborate and strategize around NGSS implementation challenges, learn to facilitate professional learning, and develop their own leadership skills. As a result, research has shown a positive impact at all levels — state, district, and teacher leaders.



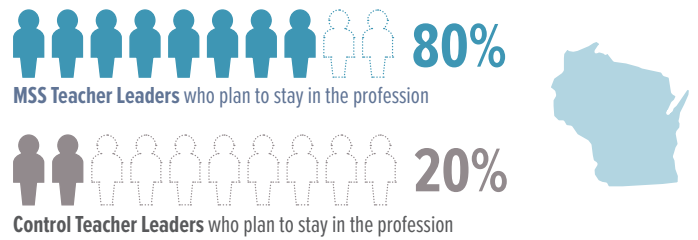
Teacher leaders reported a deeper knowledge of NGSS and a stronger ability to support other teachers around next-generation teaching practices. MSS Teacher Leaders are also more likely stay in the profession and advocate for critical changes in science education.

Compared to the control group, MSS Teacher Leaders reported a substantially greater familiarity with the NGSS as a result of their involvement in leadership activities. Almost all Teacher Leaders began the study with little or no familiarity with the NGSS and by the end of Year 2 **over 80% of the MSS Teacher Leaders indicated they could teach others about NGSS teaching and learning.**

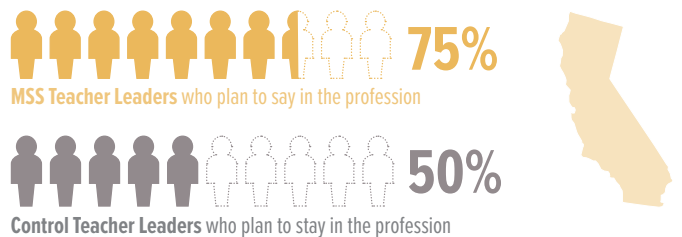


After participating in MSS activities, Teacher Leaders were more likely to advocate for positive change. One leader worked with her principle to allot **1 hour of science 2 or 3 times per week in all elementary classrooms as compared to none before.**

In Wisconsin, **80% of MSS Teacher Leaders planned to remain in the profession** as long as they are able, compared to 20% of their control group counterparts



In California, more than **75% of MSS Teacher Leaders planned to remain in the profession** as long as they are able, compared to 50% of their control group counterparts.





Leaders from **districts** increased capacity around facilitation and expanded the reach of professional learning, some across grades K–12, benefiting thousands of students.



We were able to expand MSS PL from just the 4–5 teachers in the original i3 project to the majority of our 5–12 grade science teachers! In addition, we were able to bring MSS PL to some K–3 teachers and now have a plan to extend MSS PL to all of our teachers within the next 5 years.

During the study phase, MSS trained 84 Teacher Leaders across 2 states and 7 districts who hosted more than 700 professional learning events. Events included week-long summer institutes for 4th and 5th grade teachers and school-based PLCs. This collective effort reached more than 460 individual teachers and **benefited more than 100,000 students over the course of 4 years.**

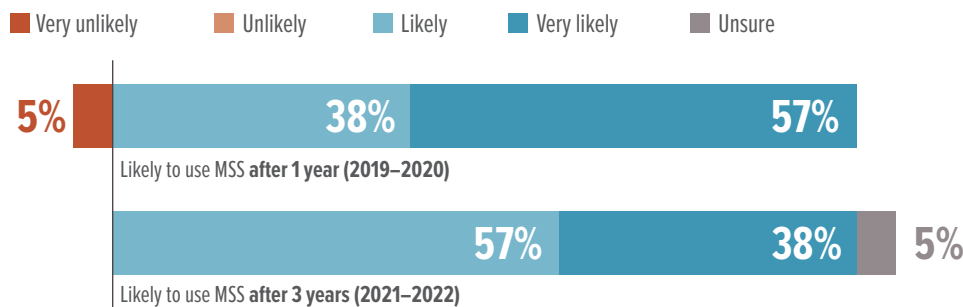


During the scale-up phase, 43 Teacher Leaders in California and Wisconsin supported school and district efforts to broaden the reach of the MSS program. In addition, 15 new leaders from New Mexico expanded the MSS program statewide from urban areas to remote, rural regions reaching more than 3700 participants including K–12 teachers and school administrators from 12 districts.



During the scale-up phase, leaders from **districts, regions, and states** developed and implemented sustainability plans to strengthen science education beyond the end of the grant.

Nearly all leaders indicated that their school or district would **likely or very likely continue to use the MSS program** as part of their sustainability plans in the year following the study and three years later, indicating their optimism about the program’s sustainability beyond the end of the grant.



SUSTAINABILITY PLANS

- ✓ Are multi-year initiatives that include science professional learning and classroom resources.
- ✓ Require obtaining additional funding to sustain efforts (e.g., Local Control and Accountability Plan (LCAP) money, LIGHT Awards, community partners).
- ✓ Expand the cadre of trained local leaders.

LESSONS LEARNED

- A program’s sustainability is dependent, in part, on how readily it can be adapted to each site’s unique needs. It must provide a framework of support, but allow leaders the flexibility and autonomy to make alterations (e.g., swapping investigations for ones that offer more grade appropriate learning for teachers, choose-your-own adventure PLCs).
- Creating systemic change in a region requires developing leadership at all levels. All leaders must be given the opportunity to experience the type of learning being called for by the NGSS so they develop a first-hand understanding of what it’s like to learn in this new way.