

Building a Foundation for Effective PBL in Marshall County Schools, AL



Alabama is a STEM-rich state. It is home to a burgeoning bio-tech hub, leading the nation in aerospace, cybersecurity, biomedicine, and advanced manufacturing. In fact, according to a report released by The Office of the Alabama Governor, STEM jobs are expected to grow by 9 percent in the state between 2017 and 2027.¹

To prepare students for STEM careers, the state implemented new digital literacy and computer science standards. However, according to Marshall County Schools (MCS) school improvement specialist, Ken Kirby, many teachers felt unprepared and doubted their ability to assist students in meeting the higher standards. But a partnership with [Defined Learning](#) that began in the winter of 2022 has increased educators' confidence dramatically.

Defined Learning, an online K–12 solution that provides educators with all of the tools and resources needed to implement high-quality Project Based Learning (PBL), was selected to help students build the skills they need to meet new state standards and be successful after graduation. Defined Learning met all of MCS's criteria for a computer science, STEM, and PBL solution, including:

- ✓ Closing Cross Content Proficiency Gaps
- ✓ Supporting Collaborative Inquiry
- ✓ Meeting Digital Competency Expectations
- ✓ Supporting College & Career Preparedness

Marshall County Schools at a Glance

5,652 students

12 schools

71% Title I

750+ English learners

¹ <https://governor.alabama.gov/newsroom/2019/11/governor-ivey-presented-with-plan-for-achieving-statewide-stem-success/>



www.DefinedLearning.com



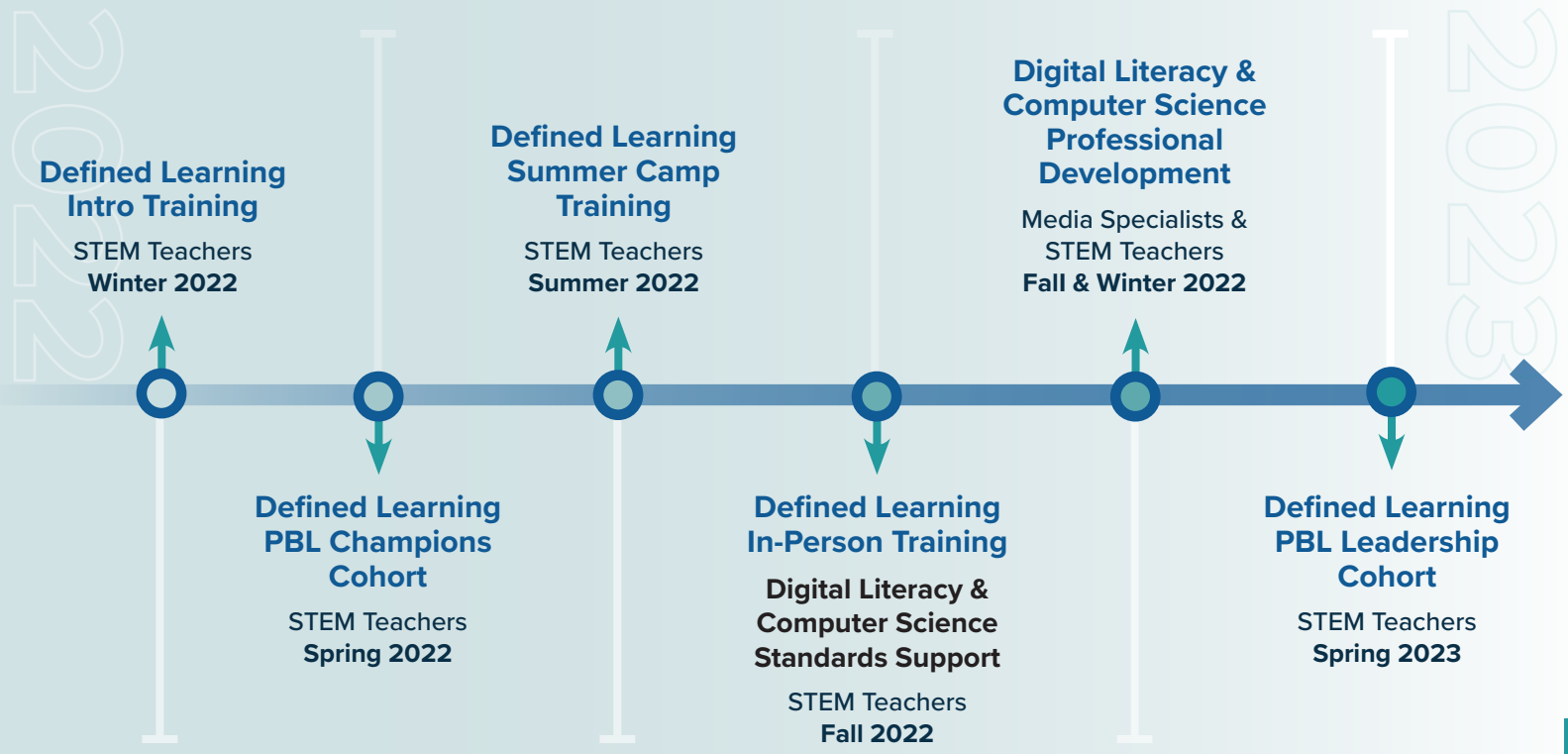
So far, MCS has implemented Defined Learning in their K–8 schools. “So many students inside our schools get a chance to benefit from PBL and computer science instruction and you can just see them thrive,” Kirby shared. “Some of our most vulnerable kids, teachers will come up to us and say ‘I really had no idea that they had these types of capabilities and this level of thinking’ and they are astounded. It is really uplifting to hear that.”


Embracing the Journey: Using a Slow Rollout to Increase Educator Success

As MCS began to roll out Defined Learning, it became clear to Kirby and other district leaders that a slow and steady approach to training educators in its K–8 schools would be key to its success. “To just [give educators a new program] and say ‘take it from here and good luck’ leaves a lot to chance. It doesn’t set teachers up for success and internally we fail students in that way,” explained Kirby. “Support is where it’s at. Finding something and investing the time and funding in order to do it well is what we’re all about. We had to start slow.”

Marshall County Schools, Defined Learning Journey

IMPLEMENTATION TIMELINE





The district began its Defined Learning implementation with an introductory training for its STEM teachers in the winter of 2022, setting the stage for a roll out that would carefully and thoughtfully provide training and implementation to various stakeholders over the following year. After the introductory session, the district offered a Defined Learning PBL Champions Cohort in the spring of the same year, and one of their primary goals came to life in the process: *collaboration between educators*.

“[Educators] take ideas they’re going to use for projects and bring back artifacts and examples of how those projects went and they talk about what they might do differently,” Kirby detailed. “It’s really a PLC [professional learning community]. It helps [educators] to grow across schools.” Teachers in the district now

get the opportunity to exchange ideas through these Defined Learning cohorts, and according to Kirby, this level of collaboration affects meaningful change.

Training sessions continued throughout 2022, including a session for Summer Camp personnel with the goal of increasing PBL instruction year round. “It was a big success,” Kirby offered. “We had good attendance because we made more fun and engaging activities for the kids.” Even though summer schools in the district were already including PBL in their instructional approach, the additional training with Defined Learning increased learning applications for students. “[With PBL] it’s not just a learn it to learn it, but learn it because you want to *do something with it and understand the whole inner workings behind it*,” Kirby explained.

Leveraging High-Quality PBL to Support New State Standards

In the fall of 2022, MCS organized its Defined Learning In-Person Training with a focus on new state-wide digital literacy and computer science standards. The district took the same thoughtful process as they did with implementing Defined Learning to ensure teachers understood the new alignments. They also continued the collaborative spirit from the earlier training sessions to fine tune the pacing and projects based on teacher and student experiences, often working to evolve projects to exemplify more than one standard.

“As you have new standards, new products, new platforms, new resources, you’re continually thinking about how to make the pieces fit to do what’s best for students,” Kirby offered. “We’re continually thinking about how we might do something different. How we might pace something different. Use different tasks or different ways to support students in sharing their learning.”

By the fall and winter of 2022, MCS furthered Defined Learning implementation to include media specialists. Because these educators see classrooms of students everyday, the district knew the importance of looping them in. The district also took this training as an opportunity to utilize direct support from Alabama

Math, Science, and Technology Initiative (AMSTI) affiliates from a local college, The University of Alabama in Huntsville (UAH). The AMSTI is a state department initiative that works to improve math and science education to better prepare students for postsecondary success in careers integral to the region.

“They were able to come and provide digital literacy professional development training and we worked on pacing again. We’re really working on trying to solidify what’s the best unit to teach and when,” Kirby said.

After a Defined Learning PBL Leadership Cohort in the spring of 2023, the district knew the implementation was gaining momentum. Instead of one-off training sessions, MCS will offer ongoing training sessions and cohorts to ensure the district’s STEM teachers and educators are able to continue refining their process, using experiences from the classroom to guide the path forward.

“It went really well, we had lots of good evidence and artifacts shared from our STEM teachers to be able to bring back things they had learned with different Defined Learning units.”





Supporting Student Collaboration, Skill Building, and Success

Students today live in a distracted, often isolated world, Kirby noted, which makes PBL that much more important. “Students need opportunities to talk and share to enhance their learning. Using PBL, we create opportunities for students to come together and work in partnerships and groups, to present, talk, share, create, problem solve, and revise. When I see students engaged in these instructional opportunities, there’s a natural buzz around the room, as there should be!”

The increased student engagement is paying off with student proficiency rates on the rise at MCS. Part of that, according to Kirby, is thanks to the new partnership with Defined Learning. Students have more opportunities to explore future careers and skill interests through PBL. According to Kirby: “What we came to realize early on is how big of a role PBL, STEM-based opportunities, and computer science has [on student success]. It really helped them to engage and learn across all content areas.”



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— Ken Kirby,
School Improvement Specialist,
Marshall County Schools

