











Authenticity



Public Product



Collaboration



Project Management



Reflection

The Framework for High Quality Project Based Learning (HQPBL) describes PBL in terms of the student experience. It describes six criteria, each of which must be at least minimally present in a project in order for it to be judged "high quality." The six criteria were chosen as a necessary starting point for providing students access to HQPBL because they are an essential baseline, but they are not all-encompassing.

Projects that are the most memorable, and that have the greatest impact on student learning and development, will be those with the highest quality implementation of each criterion. The case study that follows highlights the six criteria and is intended to provide readers with a real-world example of HQPBL.



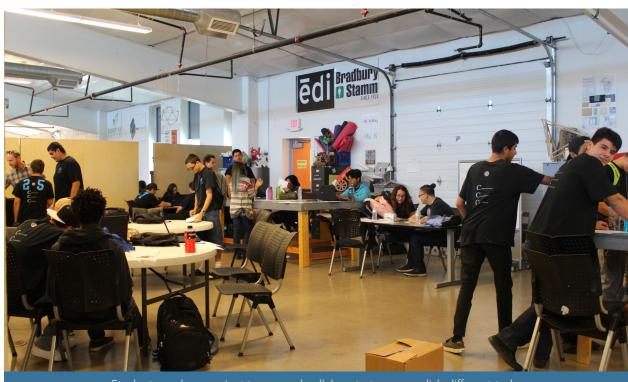


Northwest of downtown Albuquerque, there is a high school of about 400 students, ranging in ages from 14-20, that is proving high quality Project Based Learning (HQPBL) really is for all students. ACE Leadership High School primarily serves students who have already, or seemingly were on their way to, dropping out of high school. On average, students at ACE have been enrolled in three or more high schools and frequently share that school "wasn't working for them." Many hold jobs, sometimes even two, and typically come from low socioeconomic backgrounds.

The founders of ACE knew that HQPBL was an antithesis to the type of learning experiences these students were used to receiving; instead of trying the same methods with already disengaged and frustrated youth, HQPBL would provide them with intellectual challenge, collaboration, management skills, public presentation skills, tactile feedback and reflection. Perhaps most important to founders of ACE, the approach would provide authentic and truly meaningful learning experiences.

## PBL at ACE

At ACE, students engage daily in two ongoing interdisciplinary projects, resulting in about eight complete long-term projects over the course of the year. Each project has intentional direct connections to industries in the local area. After all, ACE stands for Architecture, Construction and Engineering. Students ebb in and out of flexible learning spaces, working with peers at different stages of their Transition Ladder (Apprentice 1, Apprentice 2, Journeyman/ Journeywoman, Final Year Student and Alumni). This allows for deep collaboration as well as skill development and more individual attention from teachers.



Students work on project teams and collaborate to accomplish different tasks



Projects always have a tie to a real-world challenge, which is either a student-generated driving question or a challenge brought to ACE by an industry partner or client. Students work for extended periods of time, usually 12 weeks or so, both investigating driving questions and working to create (often with their hands) a product or solution that meets specific industry requirements and client needs.

At ACE, students literally cannot fail since their grading is based on students mastering skills and identified desired learning outcomes. "Students come to ACE and ask how they can just get a C, and we tell them it isn't possible," said teacher Bridget Elliott. "They continually have to iterate on their designs and products until they meet their own standards, our requirements and the industry partners desired product or outcome. This all requires strong cycles of feedback, collaboration and project management."

"They're engaging much deeper in the inquiry. They're engaging much deeper in the content learning because they need to know what they are presenting to actual clients."

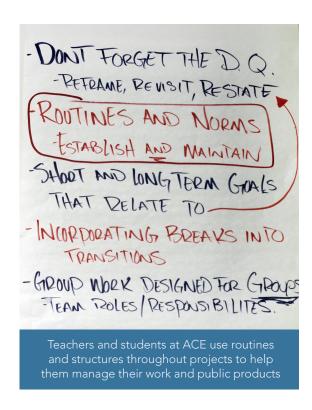
— Rob Shauger, Project Teacher at ACE

## Managing Long-Term Projects

Twelve weeks of managing a project can prove to be a difficult task for many adults, let alone 16 for 18-year-old teenagers. But at ACE, students are guided through the project management process and learn to navigate long-term projects on their own via use of checklists, assessment tools and effective planning.

Students at ACE need these scaffolds to get started and learn to independently define, plan and navigate project cycles as they develop management skills.

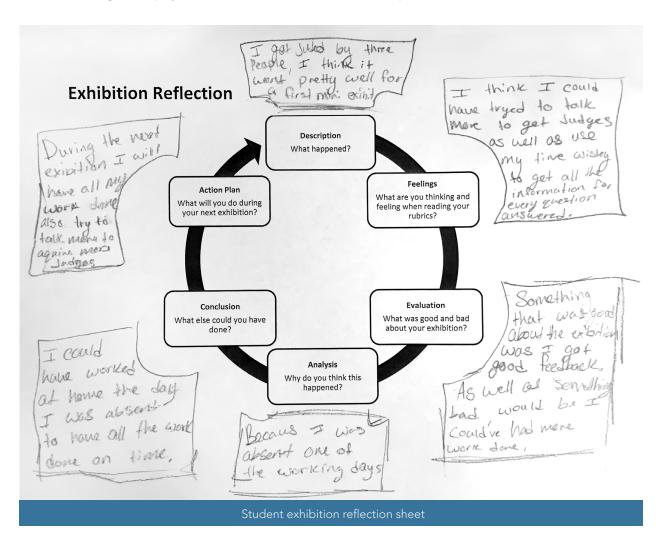
"We decide together on small scale 'need to get done' tasks and items, and then break the project down into experiences that are maybe an hour and then a bit longer the next day and the next," Elliott said. "Then we build upon those structures so students can manage projects for a week at a time."



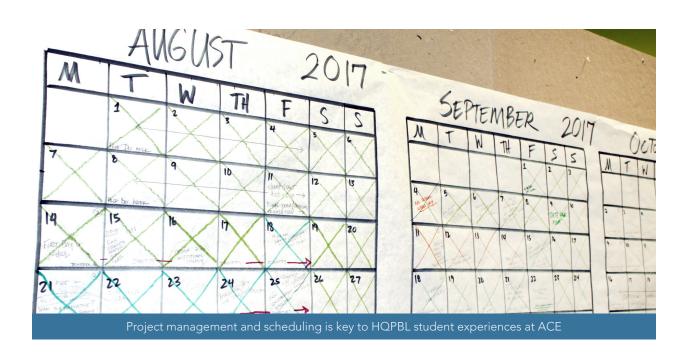


As a result, students at ACE learn how to execute, monitor and control the projects they work on. Students learn to do this for themselves in their individual roles and responsibilities and also in team components. Team members build upon each other's strengths, and constantly reflect on how they are working in their defined roles. Responsibilities are outlined together and revisited throughout the duration of the project.

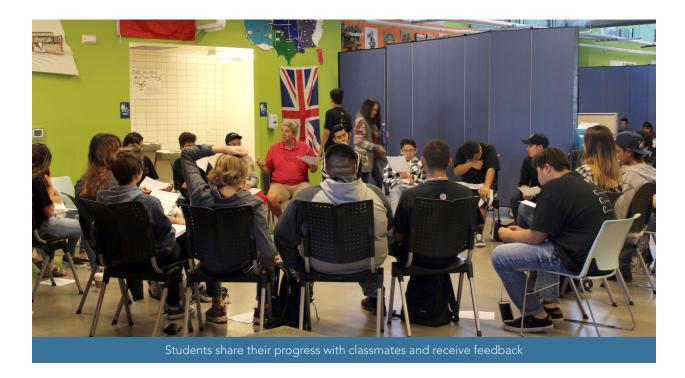
Many students at ACE have learning disabilities and find the checklists and effective project management to be key in helping them work through (at times) a project that is changing and shifting. Teachers at ACE say anyone who thinks students with special needs can't handle PBL ought to see their students in action and that they, the teachers, know time management, project check-ins and formative checks are helpful to all of their students.







Daily advisory is another strategy that helps to ensure students learn how to manage projects and manage them well. Every day students get individual feedback and support on their project work as well as opportunities to address social and emotional needs. This is a time where teachers can check in with students on their project plans and provide cues and nudges where needed.

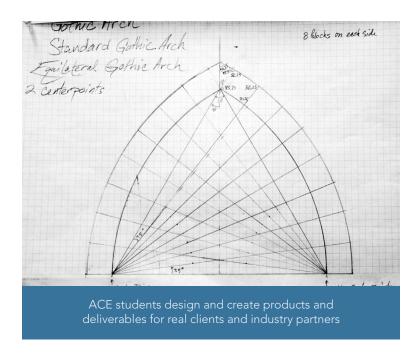




## **Presenting Products**

When it comes to presenting public products, students at ACE acquire ample experience. Many of their products are created for the public and their immediate community. Past projects include designing foot bridges, rebuilding local skate parks, and designing the layout for a zoo.

Before students present such projects, they talk about their work to clients whom they're collaborating with and often other professionals in the community. Students record themselves presenting before the final meeting or presentation and receive feedback from peers and teachers. They are often



asked to do performance assessments that include a presentation and are evaluated not only on their presentation, but also on their ability to meet the desired outcomes for the client as defined by the teacher for the project.

"A great example of this is during a project-based learning experience where students literally went to the Albuquerque Department of Transportation to share their thoughts on a proposed public transit system that was intended to serve the working class community," said Lucy Alfonso, a lead teacher at ACE. "Students knew the proposed route wasn't going to serve those who used public transit most, so they designed a better system that ran along routes that would serve those in most need and then presented these plans to the DoT."

## Reflecting on PBL at ACE

ACE students are constantly reflecting on their work. Checkpoints help students throughout the project gauge their thoughts are on how they're doing. During projects, students might be found filming themselves on what they want to work on or improve, or practicing presentations for their peers. Elliott elaborates on how reflection is built into the project design: "We did a lot of recording of their public speaking. We did feedback loops afterwards where we talked about what are things that were good during the project? What's something you want to change? What's another thing you want to change? This iteration is a consistent part of all project cycles and execution."

Elliott adds, "We also use handwritten feedback on their presentations, and students feel really empowered when go into their presentations because they got to talk about not only what they learned about New Mexico history, and what they learned about science, and what they learned about public speaking, but they got to talk about what they actually cared about and have it truly be heard—not just be a paper and an essay that they wrote down for the sake of writing it for a teacher."

At ACE, the mission is clear: empower each student to develop the skills they need to succeed in the world through meaningful, integrated, real-world HQPBL experiences.





This case study was produced by Getting Smart as part of the High Quality Project Based Learning campaign. The goal of the campaign is to identify what high quality PBL student experiences look like and work to ensure all students have access to this type of learning. The campaign is supported by Project Management Institute Educational Foundation (PMIEF) and the William and Flora Hewlett Foundation and sponsored by the Buck Institute for Education.