

Lionel Wilson College Preparatory Academy (LWP) acquired new leadership this year, including our new principal, Mr. Michael Ray. It has been a challenge to balance the priorities required to transition our leadership concurrently with our transformational initiative for Linked Learning. Currently, we are scheduled for bi-weekly professional development to continue to build our community of practice using the program design supports and resources from the Teachers Guild (The Guild). The Guild is a consortium of Design Leaders from across the country, and our Lead Facilitator of the LWP Design Pathway was chosen from a competitive application process to be a Guild Design Lead. The function of The Guild is to support design initiatives using the tools of Stanford d.School and IDEO, making it possible for the LWP Pathway Lead Facilitator to activate and sustain a culture of creative leadership, specifically in designing and engineering the site shift to Linked Learning. The Guild materials and personal mentorship of the design pathway lead helped us frame our “WHY”, and provides the structure to change the teaching and learning model at LWP to PBL, a teaching a learning approach that compliments and magnifies the skills intended to be acquired along the pathway. The Guild affirms that our change must be teacher-led, and provides specific tools, tasks and design mentors from IDEO. With the support of The Guild, the Design Pathway Lead Facilitator will be supported to lead LWP through designing solutions and cultivating the teachers, both experienced and new, through individual design thinking, and engineer process, capacity building exercises. The Guild provides support to lead a learning journey of the design process, and has provided exceptional materials and resources to make our vision of a highly engaging and effective linked learning experience a reality.

To ensure that our stakeholders are deeply invested, and deeply understand the goals of Linked Learning, we are hosting a College Real Talk event on December 8, 2018, to which all stakeholders are invited, and all students are required to participate. At this even, Linked Learning is a featured panel, and will host related industry professionals and representatives from Peralta District that will share information about LWP pathways-to-careers. Brochures about the pathway options (Peralta courses, internships, etc) will be distributed, and families can sign up for their personal tours of Laney’s Engineering, Design and Production program to be held in time to choose winter and intersession courses. Additionally, on December 12, 2018, all design students will host winter exhibitions of their first semester integrated projects, to which members of the community and our Linked Learning advisory board are invited.

Our baseline data from the first, ever administered common performance task (tasks administered in pathway and core science courses) indicates that students are generally at various stages of understanding and applying the design process. The assessment was administered in September 2018 indicates that more than 50% of pathway students do not successfully apply the 5 steps of the engineering process to design a solution to a challenge. This includes 10th and 11th graders who have had design courses for one year previous. The design team has looked critically at the data, including outcomes for the specific sub-groups, and has retooled the emphasis in pathway classroom activities and tasks to better make evident how the learning tasks and deliverables reflect the design process, and to provide learners the opportunity to articulate how they applied the design process when engineering a

solution to a problem. The design team will re-administer the same performance task at the end of Semester 1 and re-assess the success of the pathway learning experience interventions.

One way to control the variable of teacher efficacy, effectiveness and ability deliver a sound curriculum in engineering and design skills, is to provide a standards-aligned (NGSS, CTE and Common Core) curriculum. Project Lead the Way (PLTW) has research-based, rigorous modules to support a Design/Engineering Pathway. Four courses have been identified from the PLTW Engineering Pathway that articulate nicely with LWP Design for Social Change - an Engineering Pathway. Given the challenges that we experience in teacher efficacy, the modules are desired as a curriculum foundation for Semester 2 for all pathway courses. PLTW engineering pathway modules provide intensive teacher training designed to norm lesson delivery and student outcome expectations. Providing to pathway teachers a proven engineering curriculum allows them to focus more deeply on expected students outcomes and skill acquisition. Currently, students experiences vary greatly depending on teacher efficacy. PLTW courses “engage students in compelling, real-world challenges that help them become better collaborators and thinkers. Students take from the courses in-demand knowledge and skills they will use in high school and for the rest of their lives, on any career path they take.”

Of the four pillars of Linked Learning, LWP has more deeply focused on Career Technical Education and Work-Based learning development. We have built an advisory board that helped inform our revised graduate profile. The advisory board was instrumental in organizing an externship to Workday for LWP pathway teachers to support their understanding of the demands in the 21st century workplace. The participating teachers identified critical ways to adjust their learning engagements to better align with the current workplace expectations. For instance, participating pathway teacher discovered that the most utilized skills in the featured workspace were skills that include collaboration, persistence, growth mindset and integrity! The shift that teachers committed to making was to design more collaborative learning experiences in their classrooms, to provide more authentic problem-centered opportunities to engage the students with each other...less time with teacher-talk. In addition to teacher externships, learner externships have been arranged with UC Berkeley’s STEM Mini University, as a start. Additionally, the articulation of our LWP pathway with the CTE pathways at Laney’s Engineering, Design and Production program provides to 75% of our students a viable career-centered option where a four-year university college destination may not be a good fit.

In a year, our school will be drastically different from this year. All LWP site pathway courses will use PLTW’s engineer pathway curriculum. All highschool students will have a site-based pathway class (this year, seniors do not). All students will have access to Peralta District class choices that inform their interest in a design- or engineer-based career, and all will have access and support (texts, tutoring, transportation, nutrition) to participate through a 5th year Peralta District degree or certificate program in the Engineering, Design and Production program at Laney. All stakeholders will know, and celebrate, the Linked Learning pathway as an inspiration and instigation of their successful college and/or career journey.