Model Programs and Practice

At Los Molinos High School, we are aware of the rapidly changing technological advances and want to prepare our students using teaching strategies reflective of the era they are experiencing. The goal of teaching with modern technology is to develop 21st century skills in our students, allowing them an opportunity to adapt as rapidly as the very technology they live with. We believe that it is our responsibility to ensure learning is facilitated to happen anytime and anywhere. We also believe we can support all learning styles to ensure inclusivity and equity.

Los Molinos High School is a small school by all measures, currently enrolling 204 students and employing 11 full time teachers. Those characteristics make it logistically difficult to create a master schedule that includes sequences of CTE courses and pathways, A-G compliant courses, and AP Courses, and still fulfill State and District graduation requirements. Additionally, there had been a pattern of low academic achievement and interest among some demographics. In an effort to address these issues and create a greater flexibility for students the school adopted a 1:1 Chromebook program. From there, teachers began to enhance their curriculum by developing means to make communication and accessibility seamless.

The focus is now the creation of classrooms and systems where differentiation is common practice and all instruction is learner centered. One example of systemic change includes the use of the highly popular Google Classroom. This streamlined and easy to use tool makes giving out assignments, editing writing, giving feedback, and general communication with students easy. Teachers and students are able to communicate, collaborate, and make revisions or corrections faster whether in the classroom or across the ocean. An example of working long distance occurred this past December when a teacher was 2,500 miles away and still able to present and grade a final exam in mathematics. That same teacher also used technology to facilitate student participation in a mathematics competition that pitted teams from across the globe. After regular league play, our tiny school made the final round ranked number 24. This lead to wins against schools from Colorado, China, and California, earning our place in the final and finishing in second place. When looking at the list of schools competing, this was a great accomplishment for our school!

Other examples of the integration of technology in the modern classroom include students having the opportunity to make up credits if they fall behind academically, as well as take online courses for enrichment. In addition, students may take advantage of dual enrollment with Shasta College, taking online courses or participating in site-facilitated college courses. Furthermore, we implement reading programs like I-Ready to help English Learners and underperforming students to close gaps. Students with Individual Educational Plans have reading systems to help with decoding and language instruction. Other uses of technology facilitated by one to one Chromebooks include the use of remotely connected expert guest speakers in CTE courses, as well as the facilitation of certifications in three areas of Career Technical Education. This approach gives students choice and flexibility. By empowering students to have more control over their learning, students are highly motivated and learning increases.

Some teachers have developed websites that are essential in day-to-day instruction, allowing for teaching and learning to take place even when the teacher is not physically present in the classroom. With a teacher YouTube channel and links to daily, weekly or monthly assignments, teachers can facilitate a dynamic learning experience. Communication, recordkeeping, and learning extends beyond the walls of the classroom. An example of one teacher's website is http://www.tennesonagsci.com/.

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These programs and practices are needed to address the demands of a small high school, to facilitate technology use, and to extend and connect the learning environments. The practices have been adopted and continue with modifications over time. Due to the nature of a small school, teachers have custom adapted their courses with the goal of using communications technology to the benefit of students. There is a strain on resources when using a 1:1 Chromebook program. Changes to the infrastructure necessary for the modern classroom have been made over time and a plan has been developed by the District to replace Chromebooks as needed due to wear as well as address the necessary and rapidly changing computer technologies. During the 2018-2019 school year about one fourth of the computers were replaced with new ones given to incoming ninth graders, thus retiring the oldest batch of Chromebooks. An investment in projection systems and other CTE friendly technologies have also had an impact on the essential resources necessary to the programs and practices.

The use and availability of one to one computer technology has increased school-wide student achievement as evidenced by gains in English Language Arts and Mathematics on statewide standardized testing. Teachers utilize online interim assessments, using the data to guide instruction. Teachers analyze this, along with summative data, to share it with other colleagues during structured (PLC) Professional Learning Community meetings. Through data analysis, we pinpoint areas of need as well as identify specific students who may need additional support. Unique populations like English Learners, students with learning disabilities, and other students can be given specific attention based on data reflections. The technology paradigm has shifted from thinking of technology as a separate entity to the embedding of technology in the classroom and beyond with fluidity.

The Los Molinos Unified School District LCAP developed by the Superintendent in the summer of 2017 addresses needs beginning with the Board Goals. The first goal states that all administrators and teaches will participate in Professional Learning Communities. The Superintendent gave initial training in the PLC process to administrators. Then the Principals began the PLC training for the teaching staff. At that point, the PLC practice was put in place with a focus on data analysis to drive instruction. Data has since been analyzed by teaching staff in core subject areas as well as in grading practices and outcomes. The result to date has been higher achievement scores for students.

A second LCAP goal addresses the use of technology by all students and teachers and goal number five specifically calls for the proficiency of all students in the areas of ELA and math. The common link with all three goals mentioned above is the readily available technology, programs and processes in place. None would work as smoothly as they do without every student having access to a Chromebook connected to the world and the training, initiative and dedication of the teaching staff.

An effective way of addressing student interest and school climate is through the recent training and implementation of Project Based Learning. This teaching and learning practice incorporates real world problems into the curriculum. Teachers are planning and currently executing cross-curricular projects that add meaning and depth to the learning experience. Each project culminates with a publicly displayed product. This approach has Physics teachers working with History teachers, Math working with Ag Mechanics, and Dance working with Spanish, among other partnerships.

Implementation and Monitoring:

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Implementation and monitoring of this program and practice starts with the LCAP which transitions fluidly in the (SARC) Single Plan for Student Achievement. Parents have access to their student's attendance as well as grade books. They also have access to curriculum through their student's Google Classrooms and teacher web pages. Parents participate in awards banquets, various committees, and serve on councils and other school events like the annual FFA contest hosted at LMHS. By participating in the English Learners Advisory, the School Site Council, the Curriculum Council, the CTE advisories, and by volunteering, parents are part of the monitoring process. The school's administration has a yearlong plan for the 17 PLC days with a focus of data analysis and the development of Project Based Learning. Classroom walk-throughs as well as formal teacher observations serve to support teachers and students in the teaching and learning process. The common thread is the integration of 21st century teaching and learning as a common and routine practice.

A direct result of the monitoring of programs and integration of 21st century teaching and learning is evidenced in the Single Plan for Student Achievement and in the California State Dashboard. The goals for ELA for the 2017-2018 school year were established by administration and staff and written into the plan. It stated a goal of increasing the student performance by 10 percentage points over the previous year. This goal was met and surpassed. The actions taken by teaching staff towards the results included the use of measurable formative and summative assessments with data analysis to identify target learning goals. In the area of mathematics, the goal was also a lofty increase of 10 percentage points over the previous year. This goal was also achieved. Measureable assessments were also used in this area. In addition, the math teachers held a math camp for students whose data analysis showed a specific need in segments of the curriculum.

Results of the Model Program and Practice:

By monitoring the most recent assessment results, teachers are able to determine (adjust) a plan of action at intervals during the school year. This is the most crucial step, as the summative outcomes will directly reflect on the practice during the school year. Our findings on student achievement do show significant overall increases. Deeper analysis can reveal gaps in achievement growth in targeted populations like English learners and students with special education plans. These two populations along with the overall student body continue to be a focus for continual improvement. Our Single Plan for Student Achievement matches our LCAP and Board goals and is the instrument by which we will continue our improvement. The Plan delineates credit recovery and enrichment options online; we are using Cyber High school to address these needs. We are also using a systematic implementation of a targeted ELD curriculum delivered by an experienced teacher using Keystone Keys to Learning, running two leveled sections that target needs of students at the Expanding level. This razor sharp focus for these eighteen students increases the efficiency as well as the effectiveness of the curriculum. The ELD Designated Instruction teacher is also directly responsible for progress monitoring and ELPAC testing. The Special Education Teacher/Coordinator co-teaches in mainstream classes to support our students with individualized educational plans. Through co-teaching, she has a greater insight into individual student needs. This teacher works closely with other teachers in delivering appropriate instruction and monitors to ensure accommodations are taking place.

Other monitoring tools include the use of data analysis tools, the continued implementation of Project Based Learning, additional and continued professional development in interim assessments, and Multi-

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tiered system of support. We also continue to submit for approval of A-G courses and continue aligning curriculum for growth in CTE pathways. Though our master schedule is limiting, we continue to offer as many AP courses as possible as well as college dual enrolled courses. Lastly, the component that weaves in and out of all the other elements is the use of one to one Chromebooks to facilitate a 21st century learning and a continual growth program.

In addition to growth in student achievement, by implementing 21st century teaching, both teachers and students are learning new rapidly changing technologies. The homework, products, and assessments used for learning, practice, and teaching are different from traditional assignments. Formative assessments can be done by using Google Docs and result in immediate feedback to teachers. Examples of student products might include PowerPoints and videos as well as writing assignments submitted electronically. The result is growth on both sides of the teaching and learning equation as students and teachers obtain skills necessary to survive in the modern world including critical thinking, communication and collaboration, and technology literacy.