Insights from Practice:

Reflections on Linked Learning Implementation in Secondary Settings

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Collaborative for the Advancement of Linked Learning

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Table of Contents

CHAPTER 1 7

Introduction

Corinne Martinez & Betina Hsieh
California State University Long Beach, College of Education

CHAPTER 2 15

Engaging Middle School Students in Career and College Exploration and Planning

Caroline Lopez-Perry & Jacob Olsen
California State University Long Beach, College of Education

CHAPTER 3 25

Laying the Groundwork for Linked Learning Experiences

Kevin Smith
Long Beach Unified School District

CHAPTER 4 33

Transitional Support for At-Risk Students: Easing the Middle School Transition into a High School Pathway Model

Stephany Garcia
Long Beach Unified School District

CHAPTER 5 43

Gaming Design through a Critical Lens: Supporting Students of Color through an Integrated Grade Level Project

Jacqueline Paredes
Los Angeles Unified School District

CHAPTER 6 53

Building Cohesion in an Evolving Pathway: Establishing a Shared Vision

Andrea Glenn & Torielee Frapwell
Long Beach Unified School District

CHAPTER 7 61

Administrator Support in and for Linked Learning Settings

Erin Biolchino
California State University Long Beach, College of Education

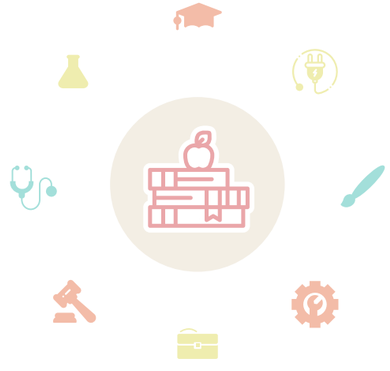
CHAPTER 8 71

Supporting Cohesive Work-Based Learning Experiences for Students in LL Pathways

Betina Hsieh & Melissa Dyo
California State University Long Beach, College of Education &
California State University Long Beach, School of Nursing

Chapter 1

Introduction



CHAPTER 1

Introduction – Insights from Practice Reflections on Linked Learning Implementation in Secondary Settings

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Since the publication of a "Nation at Risk" in 1983, several reports have been written on how to improve teaching and learning to meet the demands of life and work in the twenty-first century. As early as 1990, employers and policymakers acknowledged that high school graduates seeking entry level positions were not adequately prepared for the changing demands of the work place. In the United States, education legislation, like the Carl D. Perkins Act calls for all students, regardless of their income, race, ethnic or language background, or disability status, to graduate from high school ready for college and a career. Since the 2006 reauthorization, Perkins legislation has required states to offer programs of study (POS) that include (a) greater integration of academic curricula and career-focused education in order to foster the learning of advanced academic skills in career-oriented, technically challenging settings, and (b) better alignment of curricula across regional consortia of secondary and postsecondary institutions (Perkins, 2006). In 2010, a report by Achieve pointed out that states across the country are "becoming increasingly aware that their high schools, which [have] changed little since the mid-20th century, [are] not producing the twenty-first-century graduates needed to compete and succeed after high school in an increasingly complex and interconnected world." (p. 7). The National Governors Association responded to the increasing demands to better prepare our youth and launched a new set of standards intended to prepare students for college and careers (Common Core State Standards Initiative, 2010). The Common Core State Standards (CCSS) describe a common set of knowledge and skills that all students will learn by the time they graduate from high school. Indicators of readiness include academic measures of preparation, such as course grades, standardized test scores, and the degree of rigor of courses taken. However, non-cognitive factors such as motivation, persistence, tenacity and attitude can also be important determinants of success in college and careers (Conley 2007; Dweck, Walton & Cohen 2011). Since then, policies, programs and initiatives have been put in motion in various states across the U.S. In the state of California, the movement to ensure that more students are ready for college and have what it takes to enter the world of work and pursue a career pathway is multifaceted and includes systemic change at the classroom, school, district, and regional levels. Whether defined as programs of study, career academies, or career pathways these programs are generally characterized by small learning communities comprised of a cohort of students within a larger high school who take a career-themed college-preparatory curriculum that helps them see the connection across academic subjects and apply what they learn in their academic and CTE classes to the world of work (Kemple & Snipes, 2000; Stern, et al., 2007).

Strategic investments from foundations and the State Department of Education, which has committed more than $2 billion to help schools and regions establish and expand college and career pathways, has resulted in exponential growth in the number of school districts across California that are offering or planning to offer readiness opportunities to students. State-funded career academies include California Partnership Academies, academies sponsored by the National Academy Foundation and Linked Learning pathways. At its technical core, Linked Learning joins together rigorous college-prep academics, a challenging career themed curriculum, and an opportunity for students to apply classroom learning through work-based experiences or other real-world experiences in their communities. Beyond this defining core, however, Linked Learning encapsulates a broader and clearly transformative vision for the American high school. As framed by the California Department of Education (CDE) in a report to the California Legislature, the Linked Learning approach is understood as aiming to "fundamentally change the orientation of the high school experience… in ways that provide multiple rigorous programs of study, structures, and practices to ensure student success" . . . and engage business, industry, and labor "in more integral roles within high schools to help ensure the relevance and applicability of curricula" (California Department of Education, 2010, p. 197).

In seeking ways to improve and expand the implementation of Linked Learning and provide teachers, counselors and administrators the support necessary to enhance their knowledge and improve their instructional practice, the CSU Chancellor's Office, in partnership with CSU campuses and ConnectEd, established a model of clinical teacher education to prepare future high school teachers who are proficient in Linked Learning (Stallones & Wiley, 2014). The model was implemented on multiple sites by CSU Long Beach and at one or more sites by several other campuses including CSU East Bay, CSU Los Angeles, CSU Sacramento, Fresno State and San Diego State. This work involved scaling up Linked Learning clinical preparation and expanding pre-service preparation to include school counselors and administrators.

Initiated in 2008 and expanded in 2013, with funding from the James Irvine Foundation, the CSU established a state-wide consortium of teacher preparation institutions that collaborate as part of a network community of learners in this initiative (Stallones & Wiley, 2014). Known as the Collaborative for the Advancement of Linked Learning (CSU CALL), this consortium was led by CSU Long Beach and included San Diego State (SDSU), Sacramento State University, Fresno State University, California State University Northridge (CSUN), California State University, Los Angeles (CSULA), California State University, San Bernardino (CSUSB), and California State University, East Bay. By 2017, the work expanded to include (a) replicable models for Single Subject Credential Programs that prepare new teachers

to participate as professional educators in Linked Learning pathways and schools; (b) Master's degree programs that prepare teachers, counselors, and administrators for distributed leadership roles in Linked Learning; and (c) an Ed.D. fellowship program in which doctoral students conduct research in Linked Learning and its various models designed to prepare students for both college and career.

The CSU CALL network has expanded through years of conducting professional development and conference presentations for high school teachers, counselors, and local and state administrators. Through their work, CSU CALL faculty have built trusting relationships with educators and community partners throughout California. More recently, the CSU CALL has sought the expertise of district partners, leaders in the field and colleagues with the CSU system in the development of educational research that could contribute to the expansion and sustainability of Linked Learning in California. This guidebook recognizes the unique expertise and experience of faculty and educational master candidates who have committed to the hard work of transforming the high school experience for students using the Linked Learning approach. By contextualizing the work within specific problems of practice, we are able to illustrate how practitioners' approach curricular demands, work-based learning opportunities and specialized student supports related to Linked Learning.

The chapters in this guidebook provide a variety of insights from secondary and post-secondary educators involved in work associated with Linked Learning implementation. While some of the educators in the volume engaged in more formalized action research or research studies related to work in Linked Learning contexts, many undertook this opportunity as a chance to reflect on core elements of their practice in relation to supporting students and educators in Linked Learning contexts.

Each chapter begins with a core problem of practice which the authors used to frame their reflection. These problems of practice range from preparing middle school students to enter Linked Learning pathways, to supporting students after they transition into pathways, to supporting educators engaging with the work of Linked Learning through more cohesive pathway visions, administrative leadership and professional learning opportunities. Each chapter incorporates perspectives from the viewpoint of the authors, as they engaged in the work of supporting students, counselors, educators and/or administrators in Linked Learning contexts. The authors in the guidebook offer reflections on their experiences and recommendations for others interested in similar problems of practice in their own contexts.

Chapters 2 and 3 provide important complimentary perspectives to an important and often overlooked aspect of Linked Learning: preparing middle school students for pathway choices. In chapter 2, Counselor-educators Caroline Lopez-Perry and Jacob Olsen explore how counselors can help prepare middle school students to make more informed choices when deciding upon a high school career pathway. They draw from their work with middle school counselors, providing a model of counselors in classrooms teaching college and career guidance directly through a series of lessons.

In chapter 3, Kevin Smith, a middle school educator, similarly examines how to support middle schoolers' transition to Linked Learning pathways, but does so through an educator's perspective. He reflects on his own experiences implementing a three-week enrichment program introducing students to various career options and to district pathways. Through early and comprehensive introduction to career options, pathway choices, pathway requirements, and even some pathway experiences, these chapters demonstrate how middle school educators and counselors can play instrumental roles in making the high school choice process less intimidating and more for students and their families.

Given the commitment and importance of choosing a career pathway, this groundwork is critical in preparing students for a successful high school transition. In chapter 4, Stephany Garcia examines this transition from the other side, as a ninth-grade teacher working with a counselor to support students labeled "at-risk," who are struggling to adjust to the demands and accountability of high school within a pathway setting. Garcia's chapter highlights the importance of specialized and personalized student supports and the role of student perceptions of themselves, their teachers, and their pathway courses as important factors in determining students' experiences within their pathways.

Chapters 5 and 6 examine the ways in which teacher collaboration can be crucial in designing powerful, cohesive learning environments for Linked Learning pathway students. In chapter 5, Jackie Paredes discusses a powerful example of grade level cross-curricular collaboration that challenges deficit ideologies of low-income students of color. Her experiences as a game design teacher supporting her 10th grade students' creation of a two-dimensional platform computer game which integrated a critical lens towards issues of colonization (US History) and principles of astronomy and space exploration (Physics) show how Linked Learning pedagogies in equity-minded collaborative spaces can provide opportunities for young people of color in fields where there are few role models that reflect their racial-ethnic and socio-economic backgrounds. Paredes's student, team, and community supported successes demonstrate some of the powerful possibilities of Linked Learning, even as projects continue to be works-in-progress and develop over time.

In chapter 6, Andrea Glenn and Torie Frapwell examine what happens as an existing pathway with a thematic focus on social justice transforms into a CTE-aligned legal services pathway. They focus on the initial design and subsequent implementation of a pathway-specific graduate profile which is informing pathways teachers' curriculum design. The goal is for students to demonstrate their competency in focal pathway goals through an e-portfolio compiled throughout students' four years in the pathway and culminating in a senior defense. Their chapter highlights pathway transformation as a continually evolving process that requires educator buy-in, a common vision for student success, and opportunities for collaboration. They highlight the importance of collaborative time, tools and structures to support teacher and student understanding of a cohesive and integrated pathway vision.

In chapters 7 and 8, we move outside of the classroom to examine the role of administrators and authentic professional learning experiences on Linked Learning pathways and learning opportunities. In chapter 7, Erin Biolchino draws from her work supporting and researching administrators in Linked Learning pathways. Administrators are another often overlooked, but critical, factor in Linked Learning implementation. Biolchino notes how important it is for administrators to have deep knowledge of Linked Learning. While administrator support is crucial to pathway success, without knowledge of Linked Learning, it is not wholly sufficient in establishing strong pathways. Knowledge of Linked Learning can support principals in creating structures to support Linked Learning implementation, which is particularly important in the early stages of pathway development. Biolchino advocates for administrators having ongoing professional learning opportunities that can support their work in pathway settings.

In chapter 8, Betina Hsieh and Melissa Dyo examine district-university partnerships and the role they can play in "professional development" in a broad sense. As nursing faculty with close relationships to local partner hospitals, Dyo was able to team with hospital and school district administration to design and implement a district-wide health pathway student mentoring program with medical professionals in a local hospital. This opportunity allowed students to get nine-weeks of mentoring in a professional setting, provided an introduction to various medical professions and included a hospital simulation, where students applied their knowledge acting in the role of their medical professional mentor. Hsieh discusses university-district partnerships related to teacher preparation for Linked Learning pathways. Her experiences demonstrate a variety of ways in which colleges of education might support preservice teacher candidates and educators in the field to develop greater familiarity and deepen their understandings of Linked Learning pedagogies and core elements. While their experiences with partnerships differed, both Hsieh and Dyo emphasize the importance of sustaining partnerships over time through focused, consistent and committed leadership from districts and universities (and community partners in the case of the hospital simulation partnership).

Taken together, these chapters provide powerful perspectives from educators intimately involved in Linked Learning settings and supporting Linked Learning work. They highlight the premium placed on time: for planning, instruction, reflection, collaboration and to build sustainable partnerships. They show the necessity of administrative support at all levels and across school sites, districts and university collaborative settings for successful Linked Learning implementation. They demonstrate the importance of structures for program sustainability and for various forms of collaboration: vertical collaboration within and across sites, for grade-level collaboration, for community, university and district partnerships, for administrative and counselor collaboration.

These chapters also shine a spotlight on the power and possibilities of Linked Learning implementation. These committed and thoughtful educators each draw from their own experiences doing the work of Linked Learning and doing it well. Even for projects still "in-progress" (and it often seems that we are all always in progress) or that may have ended in the iterations discussed in the chapters, these educators' work brings hope for the transformative promise of Linked Learning. It is hope that sometimes proves all too rare in secondary and post-secondary settings and it is with this hope that we ask you to approach each chapter, looking for the ways in which your practice too might grow and begin to transform from the insights offered in these pages.

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Chapter 2

Engaging Middle School Students in Career and College Exploration and Planning

CHAPTER 2

Engaging Middle School Students in Career and College Exploration and Planning

Caroline Lopez-Perry & Jacob Olsen
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Problem of Practice

What role can middle school counselors play in supporting students to make informed decisions about career pathways?

Linked Learning combines rigorous college prep academics, a sequence of career-technical education courses, and the opportunity to apply classroom learning through work-based experiences. Enrollment in a Linked Learning pathway typically occurs during a students' eighth grade year when they are provided a course/pathway selection form. For these eighth graders, completing the course/pathway selection form might be their first introduction to Linked Learning pathways. Yet, when these students enroll in career-oriented pathways, like those in Linked Learning contexts, they commit to a four-year program of study in one of the fifteen industry sectors. Two key concerns arise when students have limited exposure to career and pathway exploration. First, middle school is a critical time to develop an awareness of students' potential occupational interests. When students have not engaged in career exploration they may have unrealistic career plans and know little about the demands of the workplace. Secondly, limited exposure to Linked Learning pathway exploration can result in misunderstanding of how their high school education choices relate to future careers. This lack of awareness can result in a student dropping a course because they weren't aware it was connected to the pathway of study or dropping out of a pathway completely.

School counselors are uniquely trained in career development theory and career assessments and guide student academic and career planning. Thus, we sought to understand how middle school counselors prepare students to make informed decisions about high school career pathways and postsecondary options via career exploration. In this chapter, we provide first-hand accounts of our work to help one school district engage middle school students in career exploration via the school counseling program.

Background and Context

There continues to be a national emphasis on preparing all students to be career and college ready by the end of high school (Achieve, 2012; Institute of Educational Sciences, 2013; Radcliffe & Bos, 2013). As a result, key indicators of career and college readiness have improved (McFarland et al., 2019). The focus on career and college readiness is mirrored at the state level. For example, the California Department of Education recently developed Standards for Career Ready Practice (California Department of Education, 2014). These standards outline the knowledge (e.g., academic knowledge, understanding the impact of decisions) and skills (e.g., developing an education and career plan, utilizing critical thinking, technical skills related to workforce) students need to prepare for transitions to postsecondary education, career training, or the workforce (California Department of Education, 2014). These standards are reflected in an improved state level accountability reporting system. Specifically, career and college readiness is one of the six state measures on the California School Dashboard which the California Department of Education uses to track the performance of local education agencies, schools, and student groups to identify strengths, challenges, and areas in need of improvement (California Department of Education, 2018).

To better prepare all students for career and college readiness, many districts are developing and implementing Linked Learning career pathways to engage students in rigorous coursework and connect coursework to prominent industry sectors. Linked Learning pathways are intended to "provide all students - regardless of race, socioeconomic status, gender, prior academic achievement, or special learning needs - with equitable access to and opportunities for full participation in a variety of high-quality career-themed pathways" (Warner & Caspary, 2017, p. 2). In terms of access and equity, research shows that traditionally underserved students have improved outcomes from participating in Linked Learning pathways compared to their peers in traditional high schools. For example, students with low prior achievement, English language learners and Latino students were less likely to drop out, accumulated more credits and college preparatory requirements, and were more likely to enroll in 4-year institutions as a result in pathway participation (Warner & Caspary, 2017). Linked Learning pathways have benefited students in other ways including being more likely to graduate high school and be classified as "ready" or "conditionally ready" for college in English language arts (ELA), which exempts students from having to enroll in remedial and non-credit bearing college courses (Warner et al., 2016). Students in pathways also reported that high school helped them develop 21st century skills (e.g., communication, collaboration, self-management, professional behavior; Warner et al., 2016). Particularly relevant given the goals of the Linked Learning approach, students in pathways rated factors such as courses taken in high school, encouragement from a school counselor or adult and spending time in a work setting as influencing their choice of a college major (Warner et al., 2016).

The benefits of Linked Learning pathways for students is promising and there is growing evidence that Linked Learning pathways impact student outcomes in important ways. One best practice that contributes to positive student outcomes is for districts to require an open-choice policy (i.e., eighth graders choose a high school and pathway; Warner et al., 2016). For this process to be effective and equitable, intentional and systematic efforts to inform middle school students about pathway options, how current interests connect to high school pathways, and how high school pathways are related to their postsecondary plans are needed.

The role of school counselors in supporting students' career and college readiness is more commonly thought of in the context of high schools; a time when students are already participating in career pathways, developing goals, and making decisions for life after high school. However, in our work with school counselors and high schools implementing Linked Learning pathways, we realized that much less attention was given to helping middle school students develop the knowledge and skills they need to make meaningful decisions about high school pathways and begin high school with an initial postsecondary goal and plan. We also

"...school counselors are uniquely positioned to collaborate and plan career and college readiness services across the 6-12th grade continuum. By providing career and college readiness supports starting in middle school, school counselors can help students begin exploring postsecondary options, make informed decisions about high school pathways, and enter high school more focused on connecting their courses and experiences to their goals."

Relevance of Problem to School Counseling

School counselors are uniquely trained to develop, implement and evaluate a school counseling program that addresses the academic, career and social/emotional development of all students (ASCA, 2019a, 2019b). To support students' career and college readiness, school counselors coordinate school-wide events, provide classroom, small group and individual instruction, and provide appraisal and advisement (ASCA, 2019a; Olsen & Lopez-Perry, 2019). These services fall under the "Deliver" component of the American School Counselor Association (ASCA) National Model for school counseling programs (ASCA, 2019a).

approach this work with an advocacy and equity lens. From this perspective, middle school students who are not exposed to opportunities where they can explore career and college options and make connections between those options and their high school pathway choice, are less prepared than students who get those opportunities. Middle school students who are traditionally underserved and who would be first-generation college students are at a further disadvantage compared to peers who may have family members who are having conversations about career and college, and who are more informed or familiar with the options and procedures for choosing high school pathways. These issues are relevant to school counselors because school counselors are uniquely positioned to collaborate and plan career and college readiness services

across the 6-12th grade continuum. By providing career and college readiness supports starting in middle school, school counselors can help students begin exploring postsecondary options, make informed decisions about high school pathways, and enter high school more focused on connecting their courses and experiences to their goals.

Working with a Local District to Expand Pathway Engagement at the Middle School Level

As faculty members in a school counseling program, we have had opportunities to collaborate and consult with local school districts engaged in career pathway implementation and who have identified the key role school counselors can play in providing services to increase student access and success in these pathways. In one particular district, helping all students graduate career and college ready was identified as one of three focus areas. Below, we highlight what was already happening in the district, the district needs, and the improvement strategies that were used to address the needs.

An Existing Attention to Pathway Education in Eighth Grade

In the school district we are focusing on in this chapter, district leaders and school personnel were already taking steps to support their students' career and college readiness and prepare middle school students for high school pathway selection. This included establishing a district-wide priority to support all students career and college readiness and conducting school-wide events to expose middle school students to high school career pathways. Specifically, all eighth-grade students received information about the various pathways offered in the district's high schools. In addition, pathways hosted open houses to provide information about pathways and school facilities to students and their families. As we began our collaboration, the district identified the California College Guidance Initiative (CCGI) as a school-wide career and college readiness online platform and resource that included classroom career and college exploration lessons.

District Needs: Developing a CCGI Curriculum Implementation Plan

Although the district we were collaborating with was making intentional efforts to support students' career and college readiness, we identified a gap in the services middle school students were receiving. Providing pathway information and offering pathway open houses was a good start to helping students learn about pathway options; however, the district wanted middle school students to develop more in-depth knowledge and skills focused on career and college readiness and choosing a high school pathway. The district also identified school counselors as having the potential to play a key role in making this happen. As a result, the district needs revolved around developing a district-wide implementation plan for the CCGI curriculum, using district professional development and meeting time to better understand the scope and sequence of the CCGI curriculum, and how to best deliver impactful classroom lessons.

Improvement Strategies

Researchers and practitioners involved in successful career pathway implementation recommend that career and college readiness supports start in the

middle school grades (Jones, Van Belle, Johnson, & Simmons, 2014; Schmidt, Hardinge, & Rokutani, 2012; Shaefer, 2014). Efforts to address career and college readiness with middle school students have included online career and college exploration programs, college campus visits, mentoring, and parent involvement. These supports have resulted in important outcomes such as improved student career self-efficacy (i.e., perceptions of having the ability to pursue a career) and improved perceptions of higher education (Glessner, Rockinson, & Lopez, 2017; Radcliffe & Stephens, 2008; Turner & Lapan, 2005). Beginning career and college supports before students reach high school is also supported by ASCA. Consistent with the ASCA National Model (2019a), school counselors can provide classroom instruction focused on career and interest exploration, career and postsecondary options, and developing work-related skills including resilience, perseverance, and decision-making (ASCA, 2017). For students needing support beyond classroom lessons, school counselors can deliver targeted small group instruction to provide students with more personalized career and college information and dig deeper into developing and practicing the knowledge and skills students need (ASCA, 2017; ASCA, 2019a). To help students develop individualized learning plans, set goals, and make decisions, school counselors can provide appraisal and advisement for individual students (ASCA, 2017; ASCA, 2019a).

PROPOSED MODIFICATIONS AND NEW IDEAS. Using these best practices as a multi-tiered approach to support middle school students' career and college readiness, we proposed that the district implement the CCGI classroom lessons for all middle school students across the district. This approach would give middle school students opportunities to take interest inventories, explore careers, and learn goal setting and decision-making strategies. Because many of the students in the district come from traditionally underserved populations and would be first- generation college students, we also proposed that students receive individual advisement to review career assessments and have personalized conversations about content from the classroom lessons. Individual advising sessions would also give students who may not have felt comfortable asking personal questions during classroom lessons the opportunity to ask questions and relate lesson content to their personal situation.

IMPLEMENTATION OF STRATEGIES. To carry out our proposed plan, we first collaborated with the district to provide professional development for all middle school counselors focused on (1) understanding the scope and sequence and content of the CCGI classroom curriculum, (2) developing the structure and activities for individual advising sessions, and (3) learning best practices in classroom lesson and advising session delivery. Second, school counselor meeting time was designated for planning the logistics of lesson delivery and individual advising. Planning between school counselors, administrators, and teachers took place to develop a systematic schedule to ensureall students received CCGI classroom lessons. Similar planning took place to determine when students would receive individual advising, the length of the advising sessions, and the frequency of the advising sessions to maximize student benefits. Finally, we coordinated with building administrators and middle school counselors to evaluate the impact of the classroom lessons and individual advising by administering surveys to all middle school students before and after receiving classroom lessons and advising sessions.

INITIAL CHALLENGES. As we began to implement our strategies, we noticed three key challenges. First, in a few schools, there was a misalignment of school counselors' roles and how their time was allocated. Specifically, there was no precedent of school counselors going into classrooms to teach lessons on a regular basis. In addition, some school counselors' time was allocated to non-school counseling duties (e.g., supervising classrooms or common areas, student discipline, 504 coordination). Secondly, in a few schools, building administrators were reluctant to realign school counselor roles or reallocate how time was spent to make implementing classroom lessons and individual advising possible. Similarly, these administrators were not responsive to communications related to scheduling survey disbursement to evaluate classroom lessons and individual advising. The third challenge was coordinating and scheduling classroom lessons and individual advising session given these supports were school-wide, in large schools, and impacted all students. Each school site had their own challenges, and some sites experienced a smoother process than others. Overall, planning the delivery of the supports involved commitment from the school counselors, collaboration among staff to determine student schedules and best times to reach students, and flexibility and buy-in from classroom teachers.

After determining existing district practices and establishing needs, we collaborated with the district to develop a plan and related improvement strategies. These strategies included proposing modifications to existing practices and developing a plan for implementation, Along the way, we experienced initial challenges that are expected given the scope of a district-wide, multi-tiered approach to supporting the career and college readiness of all middle school students. Next, we highlight the lessons we learned through this process.

Lessons Learned

Having summarized implementation strategies for career exploration via the school counseling program, we turn to the lessons learned that we believe affect future thinking about middle school career and pathway exploration. We highlight findings that can serve as an orienting framework for organizing career exploration via the school counseling programs.

LESSON 1: SITE ADMINISTRATOR AND SCHOOL COUNSELOR COLLABORATION IS CRITICAL

In order for school counselors to develop a systematic approach to delivering career exploration activities, such as schoolwide programs, classroom lessons, and academic advising, collaboration with site administrators is needed. According to Michael Fullen (2011), "the natural definition of systemic means that all elements of the system are unavoidably interconnected and involved, day after day" (p.16). Thus, site administrators and school counselors would benefit from time dedicated to collaborative planning.

We believe this collaboration between site administrators and school counselors allows career and college readiness supports to move from fragmented implementation to systematic implementation. Weekly, biweekly or monthly meetings regarding

mutually established goals and upcoming tasks allow for better coordination of services and allocation of staff and resources. For example, academic advising requires that school counselors access large numbers of student schedules and systematize pulling students from class. School counseling classroom lessons require making arrangements with teachers in all grade levels. Administrators can play a key role in coordinating these efforts. From garnering assistance from office staff to help counselors with student schedules, to providing counselors with time during teacher meetings to coordinate career exploration lessons are small but essential tasks that administrators can help coordinate. For example, at one middle school, under the direction of the administrator, teachers had started to teach some CCGI lessons out of sequence without the awareness of the school counselor who had a plan in place for delivering the very same lessons. When site administrators and school counselors regularly share information with one another, the more each knows about the work they are doing, and the better they are able to organize the delivery of services.

> ***"We believe this collaboration between site administrators and school counselors allows career and college readiness supports to move from fragmented implementation to systematic implementation."***

LESSON 2: SCHOOL COUNSELORS NEED TO TAKE AN ACTIVE LEADERSHIP ROLE

School counselors should take an active leadership role in school and district leadership teams and be included in the design and implementation of career and pathway exploration programs within their schools. Too often, school counselors are left at the periphery of school and district initiatives or relegated to non-counseling duties (e.g., scheduling, discipline, and 504 and SST coordination). However, academic and career planning is part of a comprehensive school counseling program designed to guide students through a successful transition from school to viable postsecondary options. When school counselors have a seat at the table, they are better positioned to educate stakeholders on the importance of career exploration in middle school and how the school counseling program's activities support school and district goals. This can result in greater buy-in from stakeholders. Contrarily, we found that when school counselors are not included, this organizational isolation resulted in disjointed services that do not meet the needs of students. Merging the skillset and collective knowledge of administrators, teachers, and school counselors allows sites to address career exploration activities more coherently and comprehensively.

Next Steps

As we continue to collaborate and consult with local school districts engaged in career pathway implementation, ongoing reflection and a review of data guide our future practice. At a personal level, the lessons learned have informed the training of our preservice school counselors and our career counseling course. We emphasize the importance of exploring postsecondary opportunities staring in middle school, and devote portions of the course to developing classroom lesson plans and individual advising interventions to be implemented at partnering middle school sites. Additionally, it is our hope to create opportunities for interdisciplinary training between graduate administration programs and school counseling programs focused on the coordination and delivery of student supports. In collaboration with our partner district, we will be examining school level data to examine the impact of career and pathway exploration on students' career decision making self-efficacy, grade point average, pathway enrollment and completion. We will also engage in reflective practice with school counselors, site administrators, and district leaders to examine the strengths and challenges of implementation and recommendations. The results of such inquiry will guide future goals and implementation strategies.

> ***"When school counselors have a seat at the table, they are better positioned to educate stakeholders on the importance of career exploration in middle school and how the school counseling program's activities support school and district goals."***

Conclusion

The need to prepare all students to be career and college ready by the end of high school is as crucial as ever; and there are innovative approaches aimed at this goal. However, more needs to be done given the continued gaps in achievement and career and college readiness indicators among student subgroups. Linked Learning career pathways provides a promising framework to engage students in rigorous coursework while giving them work-based experiences to aid in career and college related goals and decision-making. In addition, school counselors have the training and are well-positioned to support all students in developing the knowledge and skills they need to explore careers, make intentional choices about career pathways, succeed in pathways, and leave high school ready to enter the workforce, attend college, or pursue a trade school or the military. It is our hope that our systematic and collaborative approach to using school counseling program services to support students' career and college readiness at the middle school level can inform Linked Learning sites and school counselor practices. Continued attention on effective practices for middle school students in districts with career pathways is needed given the lack of research, literature, and practical examples focused on middle school students career and college readiness and their experience in Linked Learning career pathways.

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Chapter 3

Laying the Groundwork for Linked Learning Experiences

CHAPTER 3

Laying the Groundwork for Linked Learning Experiences

Kevin Smith
Long Beach Unified School District

Problem of Practice

How do educators prepare middle school students for a Linked Learning high school pathway experience?

Beginning in 2009, Long Beach Unified (LBUSD) transitioned from a traditional high school system to becoming a wall-to-wall Linked Learning school district. High schools with large student populations were sectioned off into pathways, while smaller schools were created to focus on specific industry sectors. Referred to as academies, small learning communities, specialized programs, or more commonly career pathways, LBUSD now has around 38 different programs from which students can select: a process we call High School Choice. While LBUSD's transition should be celebrated for its many successes, it has unfortunately also presented unforeseen challenges for middle school teachers in the district.

Although the district has done their best to simplify and streamline High School Choice, the experience nonetheless remains complicated. Middle school students seem to lack an overall understanding of Linked Learning and really have no clue what constitutes a career pathway. Sometimes, they can name examples of pathways in Long Beach, but rarely can they articulate what actually happens there. Furthermore, the process demands that the students have a guide to inform them of the details and importance of each step. This guide must be able to help them identify or discover their own personal interests, review their transcripts and grades with them, explore their high school options, and support them in making a choice the will undoubtedly impact their future. The district views parents and middle school counselors as serving in this role, but with a student population of about 800 each year, it is impossible for our single counselor to have the capacity to assist so many students. Unfortunately, our parent population often isn't equipped to carry

the burden of this decision either, especially if it is the family's first child going through the process. The High School Choice informational packet is helpful, but it is only a starting point. Extensive research is necessary to make a well-informed choice and parents must be able to consider many factors: the location of the school, daily transportation options, opportunities for sports and clubs, access to honors and AP courses, graduation rates, and the overall quality of the program and the teachers.

> ***"Helping students select a high school pathway often feels like trying to help them pick a flavor of ice cream at a store. There are so many choices that students are often paralyzed by indecision."***

In this guidebook chapter, I will be exploring the process of supporting my 8th grade students in being better informed in the high school choice process through a pilot 3-week supplemental career exploration enrichment program.

The Paralysis of High School Choice

It happens every year. It's the final day before the High School Choice window closes and my 8th grade students have to make a decision that will greatly impact the next four years of their lives. The students have had over three months to decide so one might think that, with their families, they would have carefully researched the different high school pathways in Long Beach and made a well-informed choice. However, in many cases, that assumption would be completely wrong. Instead, a chaotic scramble ensues, as an overwhelmed counselor desperately attempts to track down students and parents to register before it's too late. Helping students select a high school pathway often feels like trying to help them pick a flavor of ice cream at a store. There are so many choices that students are often paralyzed by indecision. Even worse, because students know so little about Linked Learning or high school pathways, it feels more like helping them select a flavor when they don't even know what ice cream is. Pick any school, pick any pathway, pick any future, just pick something. How has the process come to this? Why aren't these students and families better prepared for such an important decision? And finally, what can I do as their teacher to help?

These were the questions that puzzled me during my first few years as a teacher in Long Beach Unified, a large urban school district located in Southern California. To be honest, I didn't understand the High School Choice process and had never even heard the term "Linked Learning." As a result, I was grossly uninformed and unable to guide my students through this difficult process. I decided to solve the problem by going back to school and earning a master's degree in Curriculum and Instruction, with a focus in Linked Learning. It was through my experiences in the CSULB graduate program that I began to understand the core components of Linked Learning and more importantly, how to better prepare middle school students for High School Choice and the career pathway experience in Long Beach.

Learning About the High School Choice Process

The High School Choice process spans the entire school year for 8th grade students. It officially begins when they receive their informational packets in

mid-September and they start researching possible programs. In October, the district offers two High School Choice Summits, where representatives from each pathway present information to families in a format similar to a career fair. Next, individual high schools begin offering information nights in November, where prospective students can get a deeper insight into the different pathways and programs that exist at the various schools. It's also during this time that students can sign-up for two "shadow days," a highly competitive process that allows students to visit their top-choice pathways. Finally, in December, students will select up to six high school pathways and rank them. The ranking is often the most crucial part of the whole experience, as placing pathways in the wrong order has led some students to not being accepted to any of their top choices. It's not until the Spring that students will learn their fate and discover which pathways have accepted them. The whole process is very similar to applying for college, however, these students are only thirteen years old.

In addition to the challenges of the process itself, students from specific schools often face societal factors that contribute to the complexity of High School Choice. My school is located in a diverse, working class neighborhood in Long Beach, so time and transportation restrictions, language barriers, and literacy levels further complicate the High School Choice process for parents and guardians. Without a knowledgeable guide, students will most likely select a pathway because their friends are going there or because of access, rather than basing their choice on career interest. This combination of factors limits choice for some students, as evidenced by the fact that, despite being a school of choice district, we send roughly 70% of our outgoing 8th graders to the local high school each year.

So, how do we make the High School Choice process more equitable? How do we as teachers help guide our students in selecting the right pathway? Furthermore, if we are able to successfully help them, how do we provide students with experiences that will prepare them for those 38 different pathways?

An Opportunity for Focused Career and Pathway Exploration

As I attempted to work through some of these problematic questions during my studies in the graduate program, a unique opportunity was presented to me by my principal at the time. LBUSD had approved funding for a middle school summer enrichment program that would focus on preparing students for the high school pathway experience. They were specifically targeting those students who might choose to attend one of the specialized honors programs, such as the well-established PACE program at Poly High School. We were one of three middle schools in the district who had been selected and were given freedom to design a 3-week course that would hopefully address some of the High School Choice issues I had been contemplating. Due to my work in Linked Learning and my expanding knowledge of the pathway model, I was chosen to head this program at my site. Luckily, a very talented colleague volunteered to be the other teacher and brought with him a unique skill set as one of the district's technology curriculum coaches. In true Linked Learning fashion, we collaborated to develop a program that would help prepare students for High School Choice, the high school pathway experience, and beyond that, college and career readiness.

Students began the process of selecting a high school by completing an "Interest Profiler" survey on the website *California Career Zone* (https://www.cacareerzone.org/ip). After finishing the questionnaire, the students received an extensive list of possible career matches. This initial step was nothing new or groundbreaking necessarily, as these types of surveys have been employed by counselors for years. However, the detailed, up-to-date information about potential occupations provided at the end of the survey is what makes the website so unique. From their personalized list, students conducted initial research (e.g. job description, average salary, and number of job openings in CA) and began to identify patterns within the occupations. These patterns helped reveal the industry sectors that best suited them which was an essential piece of helping them select a high school pathway. Through this initial research, the students were able to imagine themselves twenty years in the future and really envision what kind of career they wanted. After working with them to set SMART goals about their futures, we started drafting a plan to help them achieve those goals.

"Regardless of the ease of access, the summer program allowed the students time to sort through all of the different pathways and the opportunity to ask questions as they pondered their future."

The next step was to guide them through the High School Choice research process and match their newly discovered industry sectors with the available programs in Long Beach. Just this year, the district has created a High School Choice website with detailed information about all of the various pathways conveniently listed in one location. However, at the time, the resources were much more difficult to track down as each high school had a separate webpage. Regardless of the ease of access, the summer program allowed the students time to sort through all of the different pathways and the opportunity to ask questions as they pondered their future. Together we calculated their academic GPAs, identified which pathways they qualified for, and then used their career profiler survey results to uncover the high school programs that best fit their interests. We also researched elective courses, AP classes, clubs, sports, bus routes, worked-based learning opportunities, options after graduation, and anything else we could think of that would aid them in making the difficult choice. Finally, utilizing district data that detailed high school acceptance rates, the students created a list of their top six pathways and ranked them.

Besides the research component, we wanted to provide the students with a glimpse of the opportunities available to them in high school so I invited a colleague, a friend from my CSULB Linked Learning graduate cohort, to lead the students in a mock trial experience. His law-focused pathway, CALJ at Cabrillo High School, was in the process of earning a Linked Learning certification and he was excited to showcase one of the extracurricular activities the pathway had to offer. He created a scenario in which one of his high school students had been arrested for possession of drugs on campus and my students had to work together in order to decide if he was guilty, and if so, what his punishment should be. It

was incredible to witness the student engagement as they discovered what it was like to be an attorney in a courtroom. In retrospect, the success of this experience was a testament to the power of collaboration between high school and middle school teachers.

Over the course of the three week enrichment program, students also worked to create a digital portfolio in which they demonstrated their different learnings. My colleague utilized a strategy that highlighted student choice and enabled them to experiment with a variety of digital applications and tools. As students researched the different aspects of their futures (e.g. high school, college, or careers) in my class, they designed digital artifacts that they collected in one all-encompassing website. By the end of the summer program, they were able to showcase their individual interests, high school pathway selections, and where they saw themselves twenty years in the future. They were then required to present their digital portfolios to the class in an activity somewhat similar to a graduation defense. Basically, the students needed to summarize where they were going and explain how they were going to get there.

The Importance of Teacher Support and Student Empowerment in the High School Choice Process

After speaking with many of my students, it has become increasingly apparent that High School Choice can be overwhelming and often corresponds with a lot of anxiety. For a 13-year old child to make such an important decision without the proper support can be disastrous. While counselors and parents are important stakeholders, given counselor caseloads and parents' lack of familiarity with High School Choice (and the range of career options), it would be disadvantageous for them to serve as the sole guides in this process. The burden must be shared by the teachers. In order to promote the most-informed student choice, it is imperative that we collaborate to design programs that meet the needs of our student population. As teachers, we spend so much time preparing students for high school, we must also be there to guide them when they're at the crucial stage of choosing the right pathway. While we clearly cannot and should not make career decisions for our students, we can provide them with the structure and support they need to make such an important choice. It might be one of the most significant life lessons we can teach them: how to make a life-altering decision.

> ***"While we clearly cannot and should not make career decisions for our students, we can provide them with the structure and support they need to make such an important choice. It might be one of the most significant life lessons we can teach them: how to make a life-altering decision."***

The process should be seen as a chance to empower students instead of frighten them, as if often does. In many districts, students are shuffled directly into whatever high school is close by or currently has openings. LBUSD's Linked Learning initiative has opened up doorways that were previously unimaginable to students from our neighborhood. It's not surprising then how excited my students were after completing the summer program. They had a much deeper understanding of the numerous pathways and as a result, had developed a list of their top choices. Furthermore, the students could thoroughly explain the pathway model and articulate their expectations for the upcoming high school experience. The exhaustive research demanded by the High School Choice process means that students need extensive time to make a well-informed decision. A 3-week summer program was adequate but not ideal. Some students still had unanswered questions and concerns over their immediate futures. Moreover, the inaugural year of this program was only offered to our highest achieving students. How do we ensure the process is more equitable by offering these types of experiences to all our students?

Moving Towards More Equitable High School Choice Processes

Middle and high school teachers need to start working together in order to design programs that showcase all the offerings of the various pathways. By creating a joint task force, with teacher representatives from both levels, we could construct a bridge between 8th and 9th grade that would enable middle school students to truly gain insight into the pathway model. For example, we could coordinate our efforts to provide more opportunities like the mock trial experience so that students really comprehend the programs they're enrolling in. Furthermore, middle school students could have the opportunity to attend classes in their prospective pathways in order to sample the curriculum and rigor that will soon be demanded of them. This would be beneficial to the students and to the pathways because expectations would be set right from the start.

Additionally, we need to offer Summer Enrichment Programs, or at the very least High School Choice programs, to all of our students. In the inaugural year, we only recruited high achieving students who had the most options when it came to pathways. We were fortunate to receive funding for a second year to which we invited all of our students. However, because it was an optional summer enrichment program, only about forty of our approximate 250 8th graders attended on a regular basis. This just isn't good enough. We need to discover ways to integrate the pathway research into the academic school year by making career exploration a mandatory part of the curriculum.

Additionally, in order to promote more equitable pathway choices, students need to be better informed throughout their entire middle school careers. Every year, students in 8th grade are surprised to learn that they don't qualify for many of the pathways due to poor grades or low SBAC scores. Although we continuously remind them that 6th and 7th grade matter, they don't believe us until it's too late. It's a disheartening moment when you have to inform a child that they can't attend their first choice pathway. I've had students in tears begging me to help them. Unfortunately there's nothing that they (or I) can do at that point to help them meet the pathway entrance requirement. As a result, I believe students need to begin the career exploration process in elementary school and start researching potential high school pathways immediately upon entering 6th grade. This would enable the students to set goals for themselves and track their progress towards those goals as middle school unfolds. In addition to teacher and counselor support, students would also benefit

greatly from having a peer mentor who is already enrolled in the pathway. These mentors could serve as supplementary guides in the process and help build capacity at the school site. Middle school students would gain incredible insight into the lives of current high school students. Furthermore, they would be able to recognize the benefits and challenges of their pathway of choice.

Finally, one essential piece that seems to still be lacking related to High School Choice, at least in our neighborhood, is the inclusion of the students' families in the decision-making process. Although the district offers informational sessions at the individual sites and through the High School Choice summits, the restraints placed on parents and guardians limit the impact of these opportunities. Single parent family structures, lack of familiarity with the overall choice process, language barriers, time restrictions due to managing multiple jobs, and other conflicting responsibilities are all factors that impede the participation of our working class families in these events. Given their systematic nature, these obstacles are difficult to overcome. However, by creating that hypothetical bridge between middle and high schools, and extending the mentorship program to include adults, families going through the High School Choice process could receive guidance from those families who have already completed it. Imagine how meaningful the choice process could be if students and their families were supported by their own neighbors and community members. Working in collaboration with teachers and counselors from both middle and high schools, these families would be thoroughly equipped to make a well-informed choice about their students' futures.

Imagining the Equitable Future of Choice

Hopefully one day in the very near future that chaotic scramble to select a high school pathway will have transformed into an overwhelmingly uneventful day. There will be no need to panic because our students will have spent the last two and a half years of middle school meticulously exploring their interests, researching possible careers, and will have thoughtfully chosen a pathway with the guidance of their counselor, teachers, families, and peer mentors. There will be no surprises about entrance requirements because the students will have set goals for themselves and will have tracked their own progress. Additionally, the students will have sampled the curriculum and rigor of their future pathways so they know what they're signing up for. They will have been provided with numerous opportunities to experience the extracurricular activities each high school has to offer and will have created a vision for the next four years. Every child, regardless of class, race, gender, or ability will have been provided with the necessary support, equipped with the knowledge, and empowered to make a major life-altering decision. This equitable process will have become the driving force for social change in which the definition of choice has the same meaning for every student in the district. At this point, the excitement in the air will be the culmination of the High School Choice process and the anticipation of waiting to discover which pathways have accepted them. Student will not only have choice, but will have access to the pathways they choose. It is this future that I and many other educators in our district are working towards, a future in which all my students, and all students in the district can experience the promise of Linked Learning pathways.

Chapter 4

Transitional Support for At-Risk Students: Easing the Middle School Transition into a High School Pathway Model

CHAPTER 4

Transitional Support for At-Risk Students: Easing the Middle School Transition into a High School Pathway Model

Stephany Garcia
Long Beach Unified School District

Problem of Practice

What happens when a counselor and a pathway teacher collaborate to support ninth grade at-risk students transitioning into a high school pathway model?

My problem of practice connects to the Comprehensive Student Support component of Linked Learning, particularly looking at the following essential Linked Learning Pathway Goals: equitable access to learning opportunities, 21st Century Skills, Technology Integration, and student centered (personalization, differentiated service) delivery design. In my inquiry into this problem, my goals were to: a) gain an understanding first hand from my at-risk students and find common transitional themes and connections that they face when transitioning to high school, so that I could better support them and assist in their transition with the collaboration and support of my pathway counselor, b) implement assignments/lessons as a means of helping students gain an understanding of the high school academic requirements, and ease the transition process, c) for at-risk students to understand that both their counselor and myself are working as a united front to ensure their success, so that they stay in school and have a successful academic experience in high school. By conducting an action research cycle of inquiry into the collaboration between the counselor and myself, I wanted to examine concrete data and evidence that I could then share and better inform my colleagues, my pathway team, my administration team, my student's parents, and myself, so that ultimately as a team, we can support our at-risk students.

Setting the Stage

On a warm afternoon in mid-June 2018, I watched a green wave of graduation gowns make their way to the stage, but this was a different viewing experience for me because I was watching my first graduating

class. Amidst the smiles, pictures, and energy, I could not stop thinking about certain students labeled "at-risk," students who throughout their middle school academic performance earned multiple "D" and "F" grades, and as a result faced transitional challenges in high school and were unable to make it to their graduation day. Some middle to high school transitional challenges include placement in transitional support programs (e.g. summer bridge), school counselor caseloads, adolescent autonomy (Neild, 2009, p. 54 & Trudeau et al., 2012, p. 1249), acculturation, academic accountability, (Roybal et al., 2014, p. 476), and absenteeism (McKee & Caldarella, 2016, p. 518). Such transitional challenges are detrimental to student lives and improving graduation rates.

As a ninth-grade teacher, I have the opportunity, very early in a student's high school academic development, to not only make a strong impact, but to also see them blossom into young adults. Although the opportunity is incredibly rewarding, I have also become a first-hand witness to the transitional challenges that plague many incoming ninth grade students. Ultimately, such challenges prevent ninth grade students from making it to that warm sunny graduation day.

> ***"Unfortunately, too often at-risk students' transitional challenges are misunderstood or not acknowledged..."***

Unfortunately, too often at-risk students' transitional challenges are misunderstood or not acknowledged and as a result, they are not given the appropriate support with which to successfully transition from middle school to high school. Those transitional challenges can be magnified, rather than mitigated, when there is a pathway model in place. While pathways offer opportunities for engagement with college and career readiness and can be relevant settings for development, their non-traditional structures can be even more overwhelming for some students.

These past five years, I have taught ninth grade English at a large urban public high school in southern California with both block scheduling and a pathway model structure in place. At the high school level, my district has wall-to-wall pathways in place, and I am part of the Engineering and Computer Science pathway at my school site. Our pathway industry sectors are Engineering and Architecture and Information and Communication Technologies, with a growing selection of CTE (Career Technical Education) courses. The counselor in my pathway has been counseling for fifteen years and has been instrumental in helping all students assigned to him. I have had the pleasure of working in tandem with the counselor since the fall of 2014, and over the course of the years, we have shared and discussed one of our biggest concerns regarding ninth grade students: their understanding of earning and needing course credit to graduate.

One thing that I have come to realize is that ninth grade students struggle with academic accountability. As middle school students, they were passed on to the next grade level regardless of passing or failing a class, however, as high schoolers they are now being held accountable as each class holds course credit, credit needed to either graduate high school or to be in compliance with college admissions requirements. Understanding high school course credit is such a foreign concept to ninth

grade students, and as a result by the end of their ninth-grade year (or in some cases first semester), they end up enrolling in summer school courses for credit recovery, or seek alternative schooling options (e.g. continuation school, home schooling, or some form of charter school). Understanding high school course credit is a great adjustment for many students, but an even greater one for at-risk ninth grade students because they are now being asked to change many (if not all) of their academic habits, and it becomes very difficult to make the necessary and much needed academic changes when historically, they are used to being passed on to the next grade level. Expecting at-risk students to be in charge of their academic development and success in their first year in high school is setting them up for failure when there are no effective transitional supports in place.

The role of a school's academic counselor has a huge impact on a student's academic development since the counselor is often the only consistent adult assigned to a student throughout their high school experience. Having been personally tired of losing students due to transitional challenges, I wanted to deeply examine and document the collaboration between my pathway counselor and myself, and how our work with students could be a better support for them. The two of us have collaborated since the beginning of my teaching career through developing interventions and support for our at-risk students. Since the counselor always takes the time to look at middle school grade and behavior trends for our incoming students, I thought it would be interesting to start monitoring and documenting what we already do, and ultimately that became the way that I approached this inquiry.

> ***"The role of a school's academic counselor has a huge impact on a student's academic development since the counselor is often the only consistent adult assigned to a student throughout their high school experience."***

Working Together to Support Students: The Importance of Collaborative Reflective Practice

Since the beginning of my teaching career, I have done two things of instrumental value for myself and my students. The first is that I have taken the time to reflect on my teaching practice by stepping back and modifying my lessons and overall approach to teaching based on the needs of my students, but especially those identified as at-risk. The second thing that I have done is to be in constant communication and working as a team with the counselor regarding our incoming ninth grade students as well as continuing to be of support once they have left my classroom.

Over the summer of 2018, the counselor identified and compiled a list of incoming at-risk students (nineteen students total) in our pathway with noteworthy academic and, in some cases, personal history about them (this is an incredibly helpful resource and tool that the counselor always puts together for our pathway). From the compiled list, I was able to put those students on my radar and select several of them to analyze over the course of the 2018-2019 school year. Using a case study approach, I selected five students, and ended up zeroing in on three. I also interviewed both the counselor and a former student, and I took on the role of participant researcher.

I collected data in the following ways: noted academic behaviors both positive and negative i.e., celebrations and setbacks (through my action research journal that was then analyzed), looked for concrete academic evidence in the form of both progress report and semester grades, samples of student work (S.M.A.R.T. goal ladder, survey written responses), took notes on one-on-one teacher grade checks and conferences, maintained purposive unscheduled second period for academic check-ins/interventions, School Loop grade graphs trends to measure whether a student is trending up or down, and student debriefs with the counselor.

In looking at this evidence, I hoped: a) to gain an understanding from students themselves as a means to further assist with the navigation of the middle school to a pathway high school transition, b) to implement assignments/lessons as a means of helping students gain an understanding of the high school academic requirements, and ease the transition process, c) establish a stronger student rapport/relationship between students and their counselor. For the purpose of this inquiry, I referred to the students I studied as Student One, Student Two, and Student Three.

Student One was unscheduled second period and was given both a Study Lab and a Literacy Development class for academic support due to his poor academic performance in middle school, which included a low SBAC (Smarter Balanced Assessment Consortium) score. Like Student One, Student Two struggled with attending school in middle school and was given both a Study Lab and Literacy class as support due to his poor academic performance in middle school. Student Three (like Student Two) struggled with his attendance in middle school, which affected his overall academic performance that in the ninth grade, the attendance board began to monitor his attendance, which has highly improved. Student Three was unscheduled first period as opposed to second period due to the availability of his course elective, and like Students One and Two, he too is in Study Lab, but had no Literacy Support class because he did well on the SBAC. Because of his SBAC score, Student Three was able to participate in a pathway elective, whereas Students One and Two could not.

Factors that Impact Student Transition

Prior to conducting this systematic study of my practice, it was easy for me to both assume and conclude that my at-risk students were "careless" when it came to their academics. It had been obvious to me that they were deliberately choosing to perform poorly. However, throughout the process of this inquiry, I learned that it is extremely difficult for students to make the middle to high school pathway transition, especially when there is history of academic struggles in place, and that it is imperative to move away from jumping to conclusions when it comes to at-risk students, in my case, labeling them as "careless." My goals remained the same throughout my inquiry, and based on my findings, I have created present and future goals to assist both my at-risk and general students, so that they stay on campus and make it to that warm June afternoon in their very own green robes. Based on the data collected, I have identified three main areas of focus to take into account when easing the

middle to high school transition for at-risk students entering a pathway model: 1) student perception of staff (i.e., teachers, counselors, authoritative figures); 2) student self-perception, and 3) the importance of having at-risk students participate in pathway elective courses.

Student perception of staff (i.e., teachers, counselors, authoritative figures) plays a strong role especially for at-risk students as it influences whether a student will have an open or closed mindset to learning experiences. For example, all three focal students had the same pathway science teacher and felt this teacher was the least helpful.

In early October 2018 after I had done my first one-on-one student grade checks, I started to notice how disgruntled many students were with their science teacher (at this grade check Student One had a "D," Student Two also had a "D," and Student Three had a "C" in science). Days later during his second period unscheduled, Student One shared that his Science Teacher had alienated him by having him sit in the back of the classroom, and that he had also made remarks about Student One constantly having his mouth open and being "*too dumb*" to complete the tasks at hand. Students One, Two, and Three collectively had a negative experience with their science teacher, and in the first semester reflection given at the end of January 2019, Student Two shared the following: "*I never came to school on science days because my teacher was unfair and he would do way more than things have to be*," and Student Three shared the following, "*I learned that I hate science now.*" The way in which at-risk students perceive themselves also has an impact on their academic performance, and their self-perception is something that they have developed as a result of comments made by their teachers, their academic results, and lack of positive reinforcement.

For example, in the First Semester Reflection, Student One shared the following, "*What I learned about myself is that I could do better than [being] a[n] "F" or "D" student… [What] I would change about first semester is no more messing around and not going to class [what] I would like to keep is doing my work, coming to school… What Ms. Garcia and my counselor could do is just motivate me because sometimes I'm not in the mood or not motivated to do work or to come to class…*" Through Student One's reflection, it is evident that he wants to change the perception and label that exists about him, being more than a "D" of "F" student.

Lastly, it is important for students within a pathway to participate in its elective courses. Among the three focal students, despite scheduling that allows for two electives in ninth grade, their electives were almost exclusively taken up by intervention courses. At-risk students that happen to have a Literacy Support class see it as another English class, and as a result, they find it "*boring*" and they also quickly learn to associate it as having "*all the bad students in one class*," as opposed to seeing it as a support class. By not allowing at-risk students to take pathway elective courses, their self-perception is being impacted and they are being excluded in areas where they could thrive. In many ways, these students are being denied the opportunity to fully participate in a core part of Linked Learning coursework.

> ***"…it is important for students within a pathway to participate in its elective courses."***

Providing Academic Support and Centering Students

Understanding the findings of my inquiry allowed me to implement academic support strategies with essential Linked Learning components. My strategies focused on providing students with equitable learning opportunities and student-centered delivery design. The strategy that was of most help were the one-on-one grade checks due to its personalization, along with the S.M.A.R.T. semester goal tracking assignment for students. Through the one-on-one grade checks I was able to establish rapport with my all of my students, for it allowed for the development of personalized conversations in which academic progress along with setbacks and family/social life were discussed between the students and myself.

In terms of the semester S.M.A.R.T. goal ladder, students created an academic goal (usually focused around their most challenging class set with realistic expectations, i.e., if a student typically earned a "D" grade in math then their goal would be to earn a "C" grade) that was tracked once a month over the course of the semester with the purpose of allowing students to reflect on growth and overall development. In addition, in an effort to differentiate myself from a traditional English class, I implemented a 21st century approach to my classes by integrating technology as an effort to improve student engagement while continuing to provide a relevant and rigorous academic experience.

The technology that I incorporated consisted of various educational applications such as Biteable for creating animated videos, Pear Deck as an add-on through Google Slides, Venngage for creating infographics, FlipGrid for online video discussion board, and Google Classroom for classroom announcements and assignment postings. Using all of these technological applications changed the perception that my students had about having an English class, and it changed my approach to teaching and delivery design. One example in particular was when I incorporated a Project Based Learning "survival" unit in which students were assigned to one of seven groups, and one of the topics was titled, "Surviving High School." The group of students who conducted research on the topic created an infographic, and presented their findings to the class, and interestingly many students had not made the high school survival connection from the lens of their day-to-day high school experience. This marks the first time that I have fully implemented technology and I will continue to do so because today's students are digital natives, and it is important to merge their technological experience with education, so that they can see that they go hand-in-hand in the same way that my goal was for my students to see the counselor and myself as a team.

Moving Forward: Supporting Ninth Grade Student Transition

As a ninth-grade teacher, this inquiry is personal to me because my role is not just to teach students, my job is to help them acculturate into a new environment, ensure that their first year of high school is successful and that can only happen

through my understanding that they will face more struggles compared to their classmates because the transitional challenges that they face are unique to their grade level and age group. As a result of this inquiry, I am more compassionate and understanding of the transitional needs of my students, and as a result I have become more patient and have now prioritized one-on-one student monthly conferences. This marks the first school year in which I set time aside once a month to do one-on-one grade checks. While some teachers have wondered why I would use my instructional time to do that, my response is straight-forward, "Because if I do not pause, and step back to check in with my students, then what purpose do I serve as an educator when I am not willing to back away from lessons to connect with my students as individuals?" Otherwise, if I just continue to teach without pausing, then how can I expect for my students to improve when they are struggling and I am doing nothing about it? I will continue to do monthly grade check conferences to support students and share the data with my ninth-grade pathway teachers and the counselor.

When I interviewed the counselor, he emphasized "the importance of team" and this inquiry has reinforced and proven true my perspective on the importance of communication and collaboration between teachers and their pathway counselor. Students, particularly at-risk students, need to see that their teachers and counselor are working as a united front to ensure their high school academic success especially because, while a student's teacher may come and go (e.g. I only have my pathway students in their ninth-grade year), their counselor remains the same all throughout high school.

With such a heavy student caseload and having to come up with an individual academic plan for each student, counselors are currently unable to ease the middle to high school transition for many incoming ninth grade students, but that does not mean that it is an impossible job as demonstrated by my own pathway's counselor. Despite being charged with completing an academic plan for every student assigned to [his] caseload, and graduate as many students as possible (Blount, 2012, p. 22-24), my pathway counselor supports his teachers by keeping an open line of communication and being ten steps ahead by calling students out and setting early interventions in place. My counselor has effectively developed a plan to work with teachers and students to ensure their academic success. It takes caring individuals like the counselor, who understand the challenges within the educational system and are willing to go above and beyond for students who often get ignored to provide the institutional support needed to close the gap between those who make it to graduation day and those who do not. My goal will be to continue being in constant communication with the counselor and continue working in tandem with him because he is a great resource for me by helping me identify at-risk students and providing me with students' academic data, so that in turn I can respond to it and change it for the better, and so that at the end of a student's journey with me, he can continue that support.

Recommendations for Practice

Linked Learning holds such a big possibility for students to be successful and make it to that warm June afternoon, and teachers, especially ninth grade teachers need to reflect and modify their curriculum as a means of supporting all incoming high school students, particularly at-risk students. At-risk students need and deserve teachers that understand the eighth to ninth grade transitional challenges, and what teachers can do is to be more flexible and both develop and implement lessons tailored to meet the needs of their students, especially at-risk students. As discussed earlier, students are paying attention to their teacher's tone, attitude, and behavior towards them, and in turn, a student's self-perception affects their attitude towards school.

> ***"At-risk students need and deserve teachers that understand the eighth to ninth grade transitional challenges..."***

RECOMMENDATION 1: AT-RISK STUDENT ACCESS TO PATHWAY ELECTIVES AND COHESIVE SUPPORT

Sites that have a Linked Learning model in place need to ensure that at-risk students are participating in pathway electives and must have support systems in place for them that begin with their pathway counselor and teachers at the ninth-grade level. With this being said, Linked Learning sites should allow for ninth-grade teachers and counselors to work closely together to share interventions and strategies that would help support at-risk students, and administration needs to be part of that dialogue as well, so that as a team, students remain in school and make it to the warm graduation stage in June. One effective strategy would be for pathway teachers and counselors to get together prior to the start of the school year (just like the counselor and I did) to begin identifying at-risk students and begin to come up with strategies and support systems in place early on, and again, that can only happen with the support of administration when designating faculty planning time.

In addition, expanding on cohesive support, as a pathway, we have come up with a tutoring intervention, in which several teachers host after school tutoring once day a week or one hour, and students have access to computers and academic support as well. Students are given a tutoring referral slip by any of their pathway teachers or their counselor, and even students who may not necessarily receive a tutoring slip, the doors are open to them, so that they can come in and utilize the space to do classwork or homework. One of the ways that this was able to fully form and take root at my school site has been with the support of my principal who also happens to oversee our pathway, since he allowed teachers to log that tutoring time for adjunct duty hours as part of the requirement through our school district, or for hours to be logged as service hours for teachers who are in the National Board Credential program.

RECOMMENDATION 2: SUPPORT SYSTEMS FOR HIGH SCHOOL TRANSITION

If as a nation our goal is to close the achievement gap and reduce high school dropout rates, then there must be a bigger focus and support systems in place to support students, especially at-risk students, when making the middle to high school transition. Transitioning to high school is a huge challenge for incoming ninth-grade students, but when a pathway model is also part of that transition, it can become challenging because students in middle school are not part of a small learning community, and that is a major adjustment to take into account. Perhaps students at the middle school level, especially when it is around the time that they are applying

to high school, should be given a research project in which they explore the available pathways and programs that are offered through their district's schools. The time spent on such project could be extremely beneficial because students are making a decision that will impact the rest of their secondary education, which role in their lives until they turn eighteen or graduate high school.

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Chapter 5

Gaming Design through a Critical Lens

Supporting Students of Color through

an Integrated Grade Level Project

CHAPTER 5

Gaming Design through a Critical Lens Supporting Students of Color through an Integrated Grade Level Project

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Problem of Practice

How can a team of teachers implement Linked Learning in ways that both enrich the critical lenses of students of color and develop students' technical skills, particularly in an area that rarely incorporates the experiences of people of color?

For Latinx and Black students in communities like South Central Los Angeles, the need to understand the world around them through a critical lens is very crucial. A significant struggle that these students encounter is that "[racism] is so enmeshed in the fabric of our social order, it appears both normal and natural to people" (Ladson-Billings, 1998). Consequently, for students to learn about racism as a form of oppression becomes crucial so that they "can recognize and struggle against this particular form of oppression" (Ladson-Billings, 1998), and thus, employ a critical lens when making sense of the world around them. Throughout their lives, Black and Latinx students will often find themselves in spaces or situations that make them feel like they don't belong or that they are not as good or smart as "successful" people. Such feelings are a result of systemic racism, a societal structure that has placed Black and Latinx communities in subordinate positions to white communities. Without critical lenses towards these discourses, one day our Black and Latinx students might believe that feeling less than is based on truth. With knowledge about how colonization and imperialism have created a disinvestment in communities of color, students of color can then know that these feelings of not belonging are based on systems that are not a reflection of their worth, but a reflection of different forms of oppression.

At the Critical Design and Gaming School (C:\DAGS) at Augustus F. Hawkins High School, our tenth-grade Linked Learning project, a two-dimensional platform computer game, was an attempt to not only develop our students' content knowledge, but also an attempt to teach our students to develop a critical lens. In this chapter, I explore the work of our tenth-grade team to design a project that empowered students as people of color, to integrate their knowledge, voices, and skills in creating video games that begin to challenge both dominant historical narratives (colonization and imperialism) and current inequities in the gaming industry which often excludes authentic perspectives of people of color in video games.

Introduction

The Critical Design and Gaming School (C:\DAGS) at Augustus F. Hawkins is one of three small schools that comprise the broader Hawkins campus located in South Central Los Angeles. The school opened in the Fall of 2012 to relieve overcrowding in another nearby school, Manual Arts High School. With 100% of its students meeting the poverty indicator and only 23% of students' parents having graduated high school, C:\DAGS is classified as a Title 1 school. In other words, it is a school considered by the California Department of Education, to be composed of "disadvantaged students" who need support to "meet state academic content and performance standards."

TABLE 1.

INTERDISCIPLINARY PROJECT-BASED LEARNING	
9TH GRADE	*Freshmen assess the needs of their community to produce a public service announcement animated using Scratch programming language. This PSA is then presented to a panel of design professionals.*
10TH GRADE	*Sophomores design and produce a playable 2D side-scrolling video game that reflects content learned in their English, Social Studies and Physics courses. Students present their game to peers and professionals at the C:\DAGS Game Fair.*
11TH GRADE	*Juniors apply their learning from their Humanities and Science courses to develop an innovation that addresses modern community issues in LA such as pollution control, transportation, affordable housing, homelessness, and Water Reclamation.*
12TH GRADE	*Seniors prototype an app that informs community members of their constitutional rights. These apps are presented to peers, families, community members, and industry professionals at an annual Know Your Rights Fair.*

The student population at C:\DAGS is comprised of approximately 15% Black students, approximately 84% Latinx students, and approximately 1% White/American and Indian/Asian students.

Although C:\DAGS is still a relatively new school, its Linked Learning program has grown enough to gain recognition. In 2018-2019, C:\DAGS became one of the first Gold-Certified Linked Learning schools, with most grade-level teachers participating in cross-curricular grade-level projects that have a shared curricular focus and often integrate increasing demanding work-based learning skills. Table 1 offers a brief description of the collaborative projects that teachers incorporate at each grade level.

In order to be gold-certified in Linked Learning, some of the things schools must offer include industry validation, a complete program of study, career-themed courses, college credits, interdisciplinary projects, and collaborative cohorts. As far as industry validation goes, C:\DAGS teachers and students have had the great opportunity to collaborate with industry partners, some of which are from prestigious game companies such as Mattel, Riot Games, Respawn Entertainment, Gamkedo and IndieCade. Regarding the program of study, Table 2 below lists the C:\DAGS Program of Study, which is the collection of pathway courses that students may take each academic year.

This chapter focuses specifically on the tenth-grade project, a project that I participate in as a Game Design teacher, alongside our Physics, English and World History teachers. In last school year's project, we had our students design and develop a computer

game to address the essential question "What would a world without colonization look like?" This project supported students in incorporating aspects of Game Design, Physics, English and World History, and required students to take part in a critical analysis of the impact of colonization and imperialism throughout world history.

TABLE 2.

C:\DAGS PROGRAM OF STUDY	
9TH GRADE	*Exploring Computer Science, Introduction to Art, AP Computer Science Principles*
10TH GRADE	*Game Design*
11TH GRADE	*Music Technology, App Development (offered via West Los Angeles Community College), AP Computer Science A, New Media*
12TH GRADE	*Design Craft, Graphic Communication II, Robotics, Design Internship*

Because students were expected to address the problems with colonization and imperialism in their games, by default they were also using a critical lens as addressing these problems also involved "unmasking and exposing racism in its various permutations." (Ladson-Billings, 1998). Another way in which this project employed a critical lens was by the fact that it gave way to students of color seeing themselves as game developers in an industry that famously lacks game developers of color. In fact, a 2014/2015 Diversity Report released by the International Game Developers Association (igda.org) stated that "workers of color were particularly underrepresented in senior management roles" and that "26 percent of workers of color reported earning less than $40,000 per year, while only 17% of white workers reported earnings in this bracket." The consequences of not employing game developers of color is problematic, as it can lead to games that reinforce stereotypes and racism (Mou & Peng, 2009; Burgess et.al., 2011). Thus, for our tenth-grade students of color to create digital games with a critical lens that questioned racist systems of oppression, also meant teaching our students how to fight against those very systems that fail to represent them.

Developing a Gaming Project with a Critical Lens

The tenth-grade project in C:\DAGS is still a very new project, and so it is not yet at the level we would like it to be. However, the following details the tenth-grade teacher team's process of project design and implementation.

Moving from a Game-Design Project to an Integrated Learning Experience

Creating a two-dimensional platform computer game was a project that I had been assigning in my tenth-grade Game Design class for several years before it was implemented as a grade-level project. As the Game Design teacher, the tenth-grade project used to require students to create a game with any theme of their choice as long as they incorporated key technical skills such as programming characters to move using the keyboard, to shoot, to spawn, to interact with other characters, to jump, to acquire or lose points and to trigger scene changes. This project also culminated in a community game fair where the school community and outside members of the local and gaming community were invited in to see the projects the students had created. Although it was a fun project for the students, I felt as though the project lacked purpose. I began to talk to my tenth-grade teacher colleagues about the project in hopes that we could collaborate to expand on the Game Design project, and we quickly realized that collaborating would allow us to turn this assignment into a much more powerful learning experience for our students and would also result in the creation of games with much more depth. We arrived at an approach via backwards planning; we knew that our end goal was for students to design and develop a digital game, and from there we figured out how each content area could contribute to it.

The current tenth grade game design project has been a two-year evolving collaboration. In year one, our focal guiding question was "How do you maintain balance in a system?" The goal of this question was for students to create a game that explored the importance of balance in society and nature. Table 3 demonstrates the plan developed by the tenth-grade teachers at the time. Because it was our first year trying to implement a collaborative project, there were several challenges that we did not anticipate and so some of our goals were not realized. Some of our challenges were attributed to running out of time. For example, in World History class most students ran out of time to create a poster for their game and in English class students were unable to dedicate enough time to writing their game narratives. Another significant challenge we had was that due to pressures of improving math test scores, our math teachers had to opt out of the project before beginning their portion with students. The collection of challenges that arose throughout the project's process affected students during Level 5 when they programmed and created art for their games. Because many students had not completed their game narrative in English class, they then had to work on that in their Game Design class in order to have a clear plan for the context, themes, characters and mechanics of their game before they could begin programming or creating art.

Upon starting the brainstorming process for year two of implementing this grade-level project, we knew that we wanted to improve our communication and planning. We decided to change the project's guiding question to "What would a world without colonization look like?" We decided that the project would first be introduced in students' World History class, where students had already been learning about imperialism. The teacher would give an overview of the project's theme and the breakdown of how students would work toward their final product in each of the participating classes. Students would then spend approximately one week analyzing the effects of colonialism and resistance to inform the game's guiding question.

After spending a week being introduced to the project and analyzing concepts of imperialism, students began working on their projects in their English and Physics classes. In their English class, students learned foundational components of narrative structure and wrote their Game Design Document (GDD), a document that our English teacher obtained from a meeting he and a colleague had with a game developer who used this GDD in his company of employment. The English teacher used the GDD to teach students how to come up with details about their game, such as its story, gameplay and mechanics. In this class, students were also put in teams of three or four that would remain until the project was completed. At the same time that students worked on their GDD, they also worked on their project in Physics class, where they had already

been learning about astronomy. Our Physics teacher had students use physics and astronomy concepts to teach them about space travel. After learning about our universe, students were asked to determine a destination and then design a spaceship to get there. Finally, students had to develop context for what life would be on that destination. The time spent in students' English and Physics classes to work on the project occurred simultaneously and lasted approximately one month.

TABLE 3. PLAN FOR TENTH-GRADE PROJECT (2017-2018)

Level 1: World History (Game Concept)
Develop the idea for a game that is based on events related to the Industrial Revolution. Potential themes include Resistance, Rebellion and Revolution. Design a cover of propaganda poster using the four elements of Graphic Design (line, text, color, space)

↓

Level 2: Physics (Balance)
Study and apply laws of Physics to your game to extablish one of your game's core mechanics.

↓

Level 3: English (Writing Game Narrative)
Write your game's narrative and prepare gameplay storyboards.

↓

Level 4: Geometry (Character Modeling)
Design and render 3D character models in industry-standard animation software.
OR
Level 4: Algebra 2 (Mathematics of Animation)
Write the equations needed to design your board space and make your characters move.

↓

Level 5: Game Design (Make Game)
Apply computer programming and pixel art skills to bring all ideas and deliverables from Levels 1 - 4 to make game come to life. Build game.

↓

Level 6: Game Design (Make Game)
Apply computer programming and pixel art skills to bring all ideas and deliverables from Levels 1 - 4 to make game come to life. Build game.

Once students had been equipped with knowledge about colonialism and imperialism, had completed a GDD, and had done much research about space travel, it was then time for them to begin learning the more technical aspect of designing and creating their games in my Game Design class. Prior to students working on their project in my class, they already had experience with designing tabletop games, programming some of the most-used mechanics in two-dimensional video games, and creating pixel art and animations. For their first task in my class, members of each student team were asked to take on one or more of the following roles for the development of their games: Artist, Animator, Scene Developer and Programmer. Once roles were chosen, the artists, animators and scene developers used an online software called Piskel to create the pixel art and animations for their games. At the same time, the programmers of each team programmed their games using a game development software called GameSalad. Throughout this development process, students were given smaller-scale deadlines to help their pacing, and they often referred to their GDD and were asked to use the spaceships they had designed in Physics class.

Table 4 below provides an overview of the entire project timeline as well as the approximate months and weeks that each of the four classes involved worked on their part of the project.

TABLE 4. TIMELINE OF TENTH-GRADE PROJECT (2018-2019)

Class	Topics Covered and Deliverables	Approximate Time Spent
World History	*Give an over view of project theme, timeline, and analyze effect of colonialism and resistance.*	*End of January (1 week)*
Physics	*Learn about places in the universe and determine a destination. Design a spaceship to get there. Develop context for what life would be on that destination.*	*All of February (1 month)*
English	*Learn about foundational components of narrative structure and complete Game Design Document.*	*All of February (1 month)*
Game Design	*Create artwork and animation for game and program the game.*	*All of March and April (8 weeks)*
GAME FAIR	*Showcase student games and invite industry professional to play-test them.*	*Beginning of May (1 day)*

After having spent over three months across many of their grade-level classes gaining many skills and much knowledge, students showcased their culminating projects at an end-of-the-year C:\DAGS-wide Game Fair. The event began during the last period of the school day and carried on until about two hours after. Students, families, school staff and many of our school's Advisory Board industry partners attended. Throughout the event, guests played students' games and judges judged games based on a variety of categories such as "Best Narrative Impact", "Best Visual Design" and "Best of Show" for awards and prizes that would be announced at the end of the event. Figure 1 – 3 show screenshots of some student games.

FIGURE 1. Tuwan

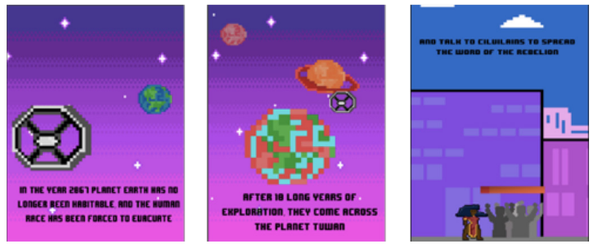


FIGURE 2. The Larcenist

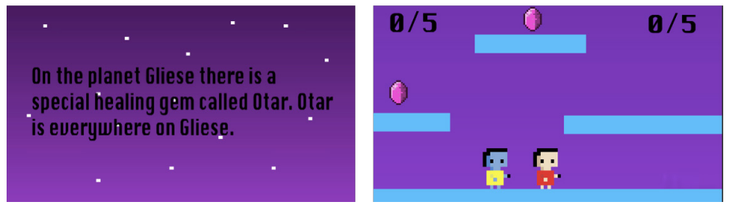
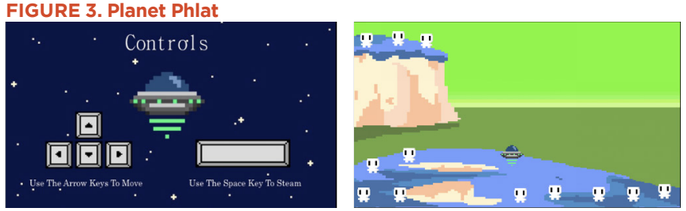


FIGURE 3. Planet Phlat



Lessons on Integration: Bringing in Community & Bridging Content Learning

Throughout the implementation process for this project, we learned a lot about what worked and what did not. During our Game Fair, the culminating event, we learned that having had the event after school proved to be very beneficial because more students' parents, school staff and Advisory Board members were able to attend compared to the amounts that attended during previous years. In previous years, the game fair event had been held during the school day. This limited the number of professionals and families that could attend. Also, the idea of having awards and prizes (we managed to get many donations for prizes), ended up building much excitement and a sense of playful competition, both of which contributed greatly to our event's positive environment.

When it comes to improvements, there are two main things we would like to improve upon for this school year. One is to get better with maintaining our timeline, and the other is to spend more time debriefing and reflecting with our students. Table 4 showed the timeline that we planned prior to beginning the project, but a lack of experience with its implementation caused us to take longer on some portions of the project and not enough time on others. Also, because we had difficulty finding the time to meet, we were often unaware that our pacing had gone askew until it was too late. Another thing we would like to improve for this school year is spending more time debriefing and reflecting with students. Although all students created games with anti-colonialism themes, it was not clear if students fully internalized the importance of creating a game with a critical lens. In other words, we know that students enjoyed at least a portion of the project because after the game fair students were asked to reflect about the event and almost all students communicated having a very positive experience. Also, we know that students gained the skills and tools necessary to write a game narrative and develop a two-dimensional game because they all submitted a final product. However, if we had created time across all participating classes to reflect about topics such as the importance of games that don't reinforce stereotypes, games that accurately reflect the experiences of people of color and the importance of being an individual who can employ a critical lens, we could have had data regarding more than just the tangible skills our students gained.

On the other hand, the projects many teams created led us to believe that students may have internalized the importance of creating a game from a critical perspective, even if it was only a little. For example, Figure 1 shows the screenshots of a game named Tuwan that tells the story of a time when Earth has become uninhabitable and so people must leave the planet and find a new planet to live in. After travelling for many years, they finally find a planet, named Tuwan, in which they can live. However, as people begin to make a home from this planet, many people begin to selfishly take over land and so the job of the player is to resist by "spreading the word of the rebellion". Tuwan was not the only game that employed a meaningful message, most student games demonstrated well thought-out stories.

This school year, my tenth-grade teacher colleagues and I are greatly looking forward to being able to implement our grade-level project once again, drawing from all of our lessons learned over the past two years. We will be keeping the same theme and guiding question ("What would a world without colonization look like?"), and address the areas of improvement that we observed from last school year's project.

Implications and Recommendations

The design and implementation of the tenth-grade project has been a significant learning experience, one that my colleagues and I look forward to developing further every year. Implications and recommendations for teachers who may consider implementing a similar project include starting early and meeting often with collaborative teams. Because teachers are often tasked with a variety of responsibilities outside of their own classroom, it is necessary to start meeting far in advance to starting the project, and regularly during project implementation to adjust the timeline as various content components may depend upon one another.

Second, it is imperative that teachers design projects that are meaningful and relevant to students. In his widely praised work of 1968, Pedagogy of the Oppressed, educator Paulo Freire wrote: "Education either functions as an instrument which is used to facilitate integration of the younger generation into the logic of the present system and bring about conformity or it becomes the practice of freedom, the means by which men and women deal critically and creatively with reality and discover how to participate in the transformation of their world."

Collaborative cross-curricular projects provide an opportunity for students to make sense of the world that surrounds them and to devise a plan to bring about positive change because the problems they get to address can go beyond the context of just one content area. In the case of our project, a critical lens was used to connect narrative writing, historical concepts of colonization and imperialism and space exploration through game design, integrating multiple content areas into a project presented to community members and industry partners. The integration of content, technical skills and community presentation made this project more relevant to students than each of the individual components alone, and supported students development of both academic and career skills.

One last recommendation that teachers may want to consider if implementing a collaborative project is to ensure that if projects are showcased, that these showcases occur during a time and day when community members can also attend. This may mean that the showcases occur after school hours or on a weekend, but at the benefit of opening the event to more families, school partners and other community members. Schools seeking to implement such projects must work with community partners and families to find a mutually agreeable time. This will allow students to more authentically build their professional presentation skills and will encourage students to invest more in their projects, given an audience that extends beyond their teachers and peers.

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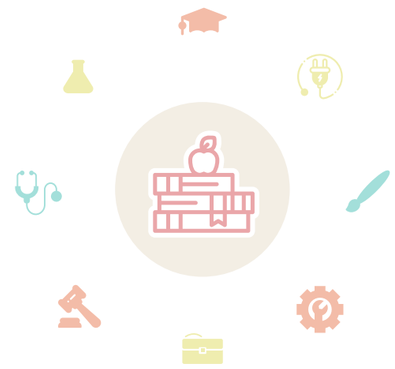
Chapter 6

Building Cohesion in an Evolving Pathway: Establishing a Shared Vision



CHAPTER 6

Building Cohesion in an Evolving Pathway: Establishing a Shared Vision

Andrea Glenn & Torielee Frapwell
Long Beach Unified School District

Problem of Practice

How can Linked Learning pathway teachers help students to develop a cohesive and consistent understanding of pathway goals? What collaborative structures are necessary to support this work?

Our pathway was created nearly 15 years ago, long before our own teaching careers began. The founders of the pathway were a group of passionate teachers who believed in the value of teaching children to become active citizens in the fight to better their community and our world. Through both vertical and horizontal teaming, the teachers began to integrate the theme of social justice into their core subjects. Students began to see how social justice was a process, not a destination and learned both the content as well as the soft skills that they would need in order to make a difference in their community.

There have been many changes and additions since the pathway was first designed. In 2016, as part of a district initiative to align small learning communities with the California Career and Technical Education standards, the pathway teachers began looking at ways of implementing the Public Services, Legal Practices CTE standards into the pathway, while still trying to maintain the original vision of social justice and the value of student activism. Since this transition, our students have successfully graduated with California A-G requirements fulfilled, 21st-century skills, and the value of community activism, yet the pathway vision has been muddled, and there is no longer one consistent and cohesive understanding of the pathway. In this chapter, we explore our journey as Linked Learning pathway teachers, in trying to help students (and faculty) develop a more cohesive understanding of the goals and vision of our current pathway. We highlight the necessity of ongoing collaborative spaces focused specifically on professional learning to allow for cohesive pathway development and discuss the development of a graduate profile to support student understanding of pathway goals.

Surveying the Pathway:

WHAT DO STUDENTS KNOW ABOUT OUR INTEGRATED SOCIAL JUSTICE & LEGAL PRACTICES IDENTITIES? WHAT DO WE WANT THEM TO KNOW?

When we surveyed 148 seniors in our academy, most of whom had been in the academy since freshman year, students consistently stated that the focus of our academy was either legal practices or social justice, but few recognized the integration of the two themes. The question, for us as pathway teachers, then became, what does it mean to be a legal practices academy with a social justice theme? The problem within our academy was that we seemed to no longer share a singular vision which has led to a lack of clarity for the teachers and the students.

> ***"The problem within our academy was that we seemed to no longer share a singular vision which has led to a lack of clarity for the teachers and the students."***

As a way to help clarify this message in student-friendly language, a cohort of five pathway teachers joined the Curriculum and Instruction MA program with a focus on Linked Learning at CSULB. In the spring of 2017, the two of us along with three of our colleagues all decided to apply for the same program with the common goal of improving our practice as well as our pathway. This would allow for a cohesive professional development space that would also have immediate impact on our pathway work. In the spring of 2018, under the guidance of a program professor in one of our MA courses, we rewrote our Graduate Profile, consisting of a list of skills we expect our seniors to have mastered when they leave our program. This profile was designed to match the standards as well as the values of the teachers of the academy: lifelong learners, strong communicators, legal scholars, and active citizens. In doing this, we hoped to create a streamlined vision of expectations of the pathway for all stakeholders, and a common language for teachers to convey this vision. During this time, we updated some of the existing pathway documents such as the Student Profile, the mission and vision statements, and our alignment to the CTE standards.

Designing the Graduate Profile as a Pathway Tool

In the process of creating our graduate profile, one of the things that we learned is that, while there is a student profile on file with the district, it is not a document that has ever been used with the students. The new pathway specific Graduate Profile, that we designed in our Masters course, established focused goals for each grade level in a way that we hoped would support students in gradually developing both an understanding of the pathway increasing college and career readiness.

During freshman year, teachers would integrate all elements of the profile, but would focus specifically on helping students to become lifelong learners

by incorporating elements of the growth mindset, empowering students to take ownership of their learning, and helping to cultivate self-motivation. At the sophomore level, the focus would be on strong communication. Elements of this include the ability to work collaboratively with peers and not only be strong speakers, but strong listeners and develop the skills that allow them to build onto others' perspectives. At the junior level, with the historical focus on American History, and the opportunity to participate in mock trial, the focus is on becoming a legal scholar. We defined legal scholar as a student who possesses persuasive and argumentation skills, the ability to search, interpret and cite research. At the senior level, the focus is to nurture active and engaged citizens, helping students to learn about the ways they can get involved in the community, providing students with opportunities to engage in work-based learning, and participating in local politics.

> ***"Our goal behind the graduate profile design was that students should learn sets of skills, and understand when those different skills can be applied and in what capacities."***

Our goal behind the graduate profile design was that students should learn sets of skills, and understand when those different skills can be applied and in what capacities. If teachers within a pathway and a school site have a basic understanding of the content and skills taught by the other teachers in the same grade level and the teachers of the same subject but different grade levels, they can better equip their students with the tools that they need to be successful. An example of this, that can be seen as something to aspire towards, is the 9th, 10th and 11th grade English team in our pathway. The sophomore English teacher has a clear understanding of the learning that her freshmen had their 9th-grade year. She knows the language that that teacher used to explain, what they read and why, and the types of writing that they practiced. When they have her, rather than spending time on guessing what they may or may not know, she can assess their retention or understanding of their learning and more quickly move forward. Also, working closely with the junior teacher, the sophomore teacher knows how far she needs to take her class and is able to backward plan to get students where they need to be. If more teachers were able to plan and prepare with the previous and future teachers we could better streamline education and make more meaning for the students. These learning opportunities have made for stronger Linked Learning Integration. Our goal for the graduate profile is to expand upon the work that was already happening and focus on the cohesive vision.

The graduate profile categories were created while keeping the grade-level content in mind for more natural alignment with the Common Core and CTE standards. In the design of the profile, we wanted teachers and students to be part of a more cohesive pathway with elements infused throughout all classes, culminating in a senior defense, where seniors would articulate their mastery of the four categories (lifelong learners, strong communicators, legal scholars and engaged citizens) using evidence and reflection from their time in the pathway.

The summer immediately following graduation from the master's program, we met with other teachers from our pathway to rewrite and adopt a new

student learning outcome chart to be submitted to our administration and district. Represented in this meeting were core-content and pathway elective teachers from each grade level, the pathway lead teacher, and our school counselor. With this grouping of teachers, building from the work we began in the master's program on the graduate profile, we co-constructed a new graduate profile combining elements of district expectations, site and pathway goals that we all agreed we could implement and support in our classrooms. We took into consideration the content already being taught, the grade-level projects, and the elective offerings as a foundation. From this we built a comprehensive list of what we, as pathway faculty, wanted the students to know at each grade level, what they would do, and the appropriate actions for teachers to take to make the outcome chart successful in the classrooms.

Working Towards Graduate Profile Integration: e-Portfolios

We are still in the process of integrating the graduate profile cohesively through our first cohort of 9th graders (who are now in 10th grade). In initializing our work, as a way to help students address all parts of our program, we've implemented an ePortfolio to give the students the opportunity to sort thematically, reflect on their learning, and to provide teachers in the pathway with insight to any gaps in the curriculum. Students will be able to sort their work, papers, group work, and identify pieces that fit into the newly created graduate profile. They will have the opportunity to choose which pieces they most strongly believe prove their mastery of the graduate profile. Once the students have submitted their portfolios, we will be able to see what they believe meets the goals of the profile and the variety of work that they had to choose from.

For the actual structure of the ePortfolio, we have begun the process of students organizing their work in folders in Google Drive. Because our district has the G-Suite, formally known as the Google Apps for education, the students are most familiar with the Google Platform. Additionally, due to the ease of collaborative work through Google Docs, Slides, and so on, and the emphasis on collaborative learning, all students can have access to their completed projects through Google Drive. From there they will choose their top five artifacts from any of the categories to prove mastery of the elements of the graduate profile. For each element, students will also write a reflection discussing their process, the projects, why they chose those particular pieces, and how they learned this element.

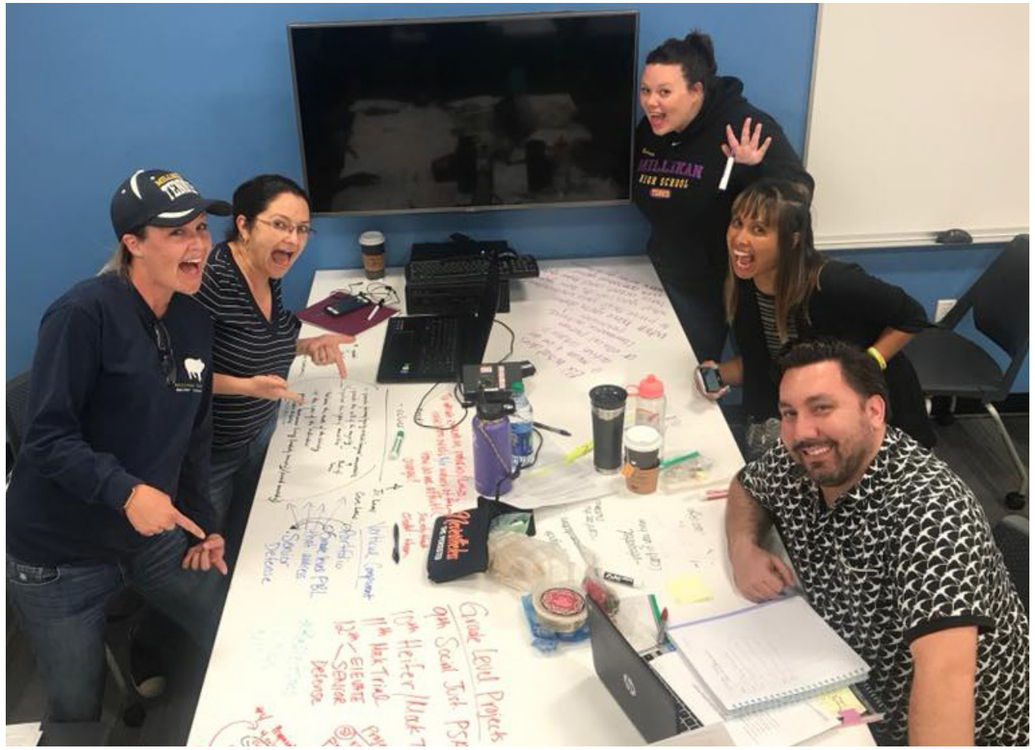
As this process, the new graduate profile and Google Drive, is used in all courses throughout the pathway, we are moving towards a graduation defense. During this defense, students will defend the artifacts in their portfolio and explain their mastery of the elements of the profile to a panel of evaluators. In meeting with the other grade level elective teachers from the pathway, we all agree to promote the elements of the graduate profile and to restructure existing, and develop new assignments and projects with the understanding that these can later be used as artifacts in the graduation defense. The 9th-grade elective teacher is guiding the students in creating four thematic folders addressing the different elements. The sophomore/ junior elective teacher will check in with the students and make sure they are continuing to add work into their folders. By the time students enter the senior capstone class, they will have examples of their work from all grade levels to pull from. During the building of the senior defense, the teachers are working towards creating an advisory board to bring industry professionals to help score the senior defenses. All of this has required extended collaboration as we work towards building a more cohesive pathway vision.

> ***"Planning a cohesive and comprehensive pathway experience takes time and space."***

The Importance of Collaboration to Design Cohesive Pathway Structures

From this experience, most of what we have learned with respect to the keys to success, stems from the value of time and a team with the shared common goal of improving student outcomes. Planning a cohesive and comprehensive pathway experience takes time and space. Some of our best ideas came from writing on a shared workspace, in the form of a dry-erase tabletop during our master's classes where we were able to build off each other's ideas. With the ability to map out our own curriculum, and see how our secondary classes align with each other, we were able to see common skills that we already focus on in our individual classes. These skills became the foundation of our graduate profile and helped us identify our own strengths and gaps in our curriculum leading to a more cohesive pathway.

Another major understanding we walked away with is that there are many other districts, school sites, and teachers out there that can be a source of inspiration, a sounding board, or provide critique and criticism to build on success. At the Linked Learning Convention in Palm Springs in 2019, there were so many teachers from programs looking to share, inspire and work with others, including a teacher from another, large, unified school district at a comprehensive site who is the capstone teacher for a social justice academy. While talking with her about how she conducts her graduation defenses, plans were made for school visits and sitting on panels for students' defenses. She offered to share her rubrics, and for us to sit down with her and have a conversation about how we run our programs, our successes, our challenges and our areas for growth. Initially in the conversation, we were under the impression that there was nothing that we were going to be able to offer her in return since she has already done what we plan to implement. However, she was interested in learning more about our interdisciplinary projects: how we structure them, have kept them going for so many years, how we have been able to bring new teachers into the team, and how we allow time for a project with the curricular demands of core content classes. Teaching does not happen in isolation; we are, or should be, a part of the larger community. If we find something that can benefit more students, this should be celebrated and shared. We should build on each other's successes, and use each other's learning to better our practice. This collaboration happened largely outside of the school day through our master's program and the opportunities for professional learning like the Linked Learning conference. To attend and participate in professional development, our substitutes were covered, but it required an investment of our personal time, money and energy. We were fortunate



to have a team that was invested enough to do this work collaboratively. We realize however, this raises equity concerns for teachers in pathways who might want to do this work and may not have the resources to pursue this independently through a master's program. In our case, while our district-provided collaboration time was essential to implementation, it wasn't sufficient.

Moving Forward: Developing a Pathway e-Portfolio

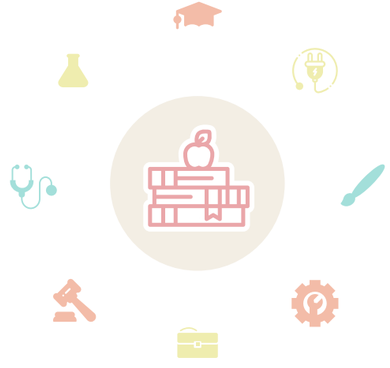
BUILDING A STRONGER PATHWAY COLLABORATIVELY

Working in a Linked Learning Pathway with a team of other dedicated professionals has given us the opportunity to further the field of education in ways that would not be possible in a traditional school setting. Our students know that their teachers are all dedicated members of a team built to benefit them. It's because of this structure that we are constantly growing and developing as educators and endlessly working to improve our curriculum.

As with any positive change, this is a process for us and we are nowhere near done with it. We have begun introducing the graduate profile to the rest of our team, but many of the teachers are still trying to wrap their brains around what this looks like in their curriculum. In speaking to current pathway students, we are still seeing similar definitions of the purpose or goals of the pathway. Students are able to articulate the value of active citizenship, but many are still missing the element of the inclusion of law and legal practices. There is however, a glimmer of hope. We walked around campus this morning as the first bell to head to class rang, one freshman stated "to teach us about the law, and to encourage us to be advocates for the future" and a senior said "to make the social justice system better". We still have work to do in developing common language and usage of new pathway materials. Many years have gone by since our team has truly had devoted collaborative planning time, so we are asking for it now. We need to give our entire team a chance to see not only the big picture, but also how each of us is able to work towards meeting our graduate profile. It's important to see that this is a shared responsibility and that, as a team, it's achievable. We hope that these small glimmers of hope will develop over the next few years in our pathway resulting in empowered, college and career ready seniors graduating with skills to help them be successful in legal services, community activism, and in their future adult lives.

Chapter 7

Administrator Support in and for Linked Learning Settings



CHAPTER 7

Administrator Support in and for Linked Learning Settings

Erin Biolchino
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Problem of Practice

As a reform movement in secondary education, Linked Learning requires that schools change their structures and practices in order to provide students with college and career readiness experiences aligned to the core components of Linked Learning. Accordingly, Linked Learning also poses a challenge for teachers and administrators who seek to provide the new type of educational context that Linked Learning requires.

Much work has been done to equip teachers for teaching in Linked Learning contexts; however, school administrators are often left out of professional development (PD) and other training opportunities related to Linked Learning. In my experience with Linked Learning over the past decade as a teacher, pathway lead, instructional coach, administrator, and university instructor, I have attended ample Linked Learning PD for teachers but not for administrators. Administrators may be invited to attend professional development alongside their teaching staff, yet they are often unable to stay for an entire training as site-based duties often call them back to campus. And even then, the content of that PD is focused on a classroom teacher rather than a site administrator. While the classroom-based instruction that teachers provide is central to Linked Learning success, Linked Learning also requires school- and district-wide changes that administrators must be equipped to lead. There has also been little Linked Learning research focusing on administrators (Rustique & Rutherford-Quach, 2012; School Redesign Network, 2010; Warner et al., 2016; Wood, 2015).

Introduction

Linked Learning is an approach to secondary reform based on the principle that students should be prepared for both college and career—this preparation for both future trajectories equips students with knowledge and skills necessary to chart their own course beyond high school. Linked Learning disrupts existing models of tracking where students who are on a college-prep track typically do not have room in their schedule to take career-technical education (CTE) courses, and students on a vocational education track do not have opportunities to take college-prep courses. By providing all students with access to both CTE courses and a college-prep curriculum, with the enhancements of work-based learning and imbedded supports, Linked Learning provides an increased opportunity for all students to pursue a post-secondary path of their choosing (Warner et al., 2016). The implementation of high-quality Linked Learning pathways for students requires a change in practice not only for teachers but also for the administrators leading this work. Given that major structural shifts that Linked Learning requires, administrators must be prepared for implementation. My experiences with a lack of support for and research around Linked learning administrators led me to explore the following questions:

"Much work has been done to equip teachers for teaching in Linked Learning contexts; however, school administrators are often left out of professional development (PD) and other training opportunities related to Linked Learning."

What are the experiences of Linked Learning administrators in implementing Linked Learning?

From the perspective of administrators, what are best practices for Linked Learning implementation and sustainability?

As a Linked Learning practitioner and researcher, I wanted to learn about the context and experiences of administrators who are on the front lines of Linked Learning implementation at school sites and in districts so that their stories—their challenges and their successes—can be shared as examples for other Linked Learning leaders.

Multi-layered Linked Learning Support: Administrative Implementation of Linked Learning

My exploration of the topic of Linked Learning leadership has taken several forms as I have transitioned from a K-12 practitioner to a full-time university faculty member. First, as a Linked Learning coach, I saw firsthand the leadership vacuum that is created when administrators don't receive training in Linked Learning. I sought to remedy this by providing coaching for teachers *and* administrators related to implementing Linked Learning Pathways. Second, as a researcher, I gathered qualitative data about best practices in Linked Learning leadership by interviewing Linked Learning administrators across the California. Each of these experiences is discussed below.

Coaching

When I was hired by a California school district to provide instructional coaching for Linked Learning teachers, I did not know that I would also end up coaching administrators; however, the need for administrator support related to Linked Learning emerged early in my coaching experience. The context of my Linked Learning coaching was an urban school district in California with four comprehensive high schools. The district had eleven different Linked Learning pathways, but the majority of the district's high school students did not participate

in Linked Learning. Each high school had between one and four Linked Learning pathways, and each pathway had begun at a different time. For example, one pathway was in its first year with only freshmen, while another pathway was in its sixth year with grades 9-12 and two years of alumni. Accordingly, each pathway across the district was in a different stage of implementation.

The staggered implementation of Linked Learning in the district meant that all of the teachers, counselors, and administrators involved in Linked Learning had different experiences with professional development (PD). When the district's initial Linked Learning pathways began, there was a comprehensive series of PD for teachers. Administrators and counselors were invited to this PD, but most administrators could only attend for a few interspersed hours of training, due to responsibilities back at their sites. As additional teachers were hired and additional pathways developed, there were sporadic opportunities for PD, focused solely on teachers. While there was ongoing monthly PD for pathway lead teachers to which administrators and counselors were invited, site administrators rarely attended such PD opportunities.

I focused my efforts at one school site and provided coaching for the Linked Learning teachers related to classroom-level issues (such as project-based learning). Concomitantly, I also provided coaching to the principal and assistant principal about how they could be effective leaders of Linked Learning. The principal and assistant principal were in their second year as administrators at the school; the principal had many years of prior experience as a principal but not in a Linked Learning context, while the assistant principal was a brand new administrator. Two significant areas of focus in the Linked Learning coaching I provided for the administrators were: to deepen the administrators' knowledge of Linked Learning, and to help them see themselves as instructional leaders.

Previously, the administrators did not see the value of attending teacher PD that was focused on instruction at the classroom level. However, what our work together helped the administrators to realize was that, in order to effectively supervise and support teachers in their efforts to implement high-quality instructional experiences for students, the administrators had to know what instruction in a Linked Learning pathway should look like. At my urging, the administrators and I attended the project-based learning (PBL) PD for teachers at the start of the year. This was especially critical for the assistant principal whose background was a counselor and not a classroom teacher. I also encouraged the administrators to attend the district's monthly pathway lead teacher PD meetings, and I attended these meetings with them. After the meetings, we would sit together (ideally for an hour during the same week as the meeting) to answer any questions they had and to develop a plan to follow-up on the content of the meetings. Sometimes this follow-up was as simple as remembering to pass messages from the district office on to the teachers, but sometimes the work was a bit more involved, like the creation of a system of classroom walkthroughs that I discuss below. Initially it was difficult to get the meetings and the follow-up session on the administrators' calendars, but I was persistent. Through their participation in these PD activities, the administrators deepened their knowledge of project-based learning and Linked Learning. Over time, as the administrators got used to attending these meetings and saw their value, I was able to pull back on the level of support in this area (and stop sending calendar reminders about the meetings). What also occurred over time was the administrators' sense of ownership of Linked Learning at their site as they looked for ways to take what they had learned at the district office and implement it at their school according to their vision for Linked Learning.

Another significant goal of my coaching was to have the administrators act as instructional leaders through being present in classrooms and leading the school in a process of improving instruction. I worked with the school's leadership team (administrators and teacher leaders) to create a classroom walkthrough checklist of what administrators should see during a visit to a Linked Learning classroom. Ideas for this checklist came from the PBL training and accompanying handbook (Larmer, Ross & Mergendollar, 2009) and the four core components of Linked Learning. The process of creating a classroom walkthrough checklist was itself a learning experience for the administrators as they had to deeply understand the core components of Linked Learning in order to develop a checklist of what they would hope to see in a Linked Learning classroom. For example, when the administrators understood the role that project-based learning—especially interdisciplinary projects focused on a pathway's industry theme—they added several items related to interdisciplinary PBL to the walkthrough checklist. One of the most telling checklist items the administrators developed required those conducting the walkthroughs to talk to students (if possible without interrupting class): "Students can articulate a connection between their class work and their pathway."

I coached the teachers and administrators at this school for two years, conducting classroom walkthroughs utilizing the checklist we created and creating a system of teacher-led classroom walkthroughs utilizing the same checklist. At the end of my first year of coaching we began to look at data from the walkthroughs to determine campus-wide areas of need and plan site-based PD based on areas of need with follow-up instructional coaching for teachers who requested additional support. The classroom walkthrough data showed that in most cases outside of their CTE classes students were not able to articulate a connection between their work and their pathway. The teachers, guided by the leadership team, came to consensus that this was their area to focus on for improvement. The process of improving the connection between class instruction the pathways required teachers to go through a similar process of deepening their understanding of what a Linked Learning classroom was supposed to look like that the administrators had gone through earlier that year. To support all of this leadership work, the leadership team participated in a book study (Wagner et al., 2006). One of my most significant tasks as a coach was to keep the administrators (and thereby, the teachers) focused on a single area of change at a time so that teachers did not become overwhelmed, which is a key principle taken from our book study: "Simply put, the individual teacher, school, or district with ten priorities has none" (Wagner et al., 2006, p. 66). My presence at the school site several days a week served as a continual reminder to stay focused in our school improvement efforts.

Research

After I left the world of Linked Learning practitioners to become a full-time university faculty member, I continued my exploration of Linked Learning leadership. I wanted to hear the perspectives of Linked Learning administrators at a variety of school districts as they grappled with the difficult task of leading Linked Learning in their organizations so that collectively these experiences could impact practice. I conducted 20 interviews with site- and district-level Linked Learning administrators across the state of California, asking them a series of questions related to their perceptions of best practices in Linked Learning implementation and sustainability. This study was an expansion of the earlier work of a doctoral student who had examined principal perceptions of leadership (Wood, 2015). The interview protocol also relied heavily on a framework for building a Linked Learning pathway from ConnectEd California (now known as Connect Ed: The National Center for College and Career) (Atterbury, 2013) and the four core components of Linked Learning. The administrators who participated in my study overwhelmingly shared what I had experienced in practice: there was little, if any, Linked Learning PD targeting administrators, and administrators are often thrown into a Linked Learning setting without any prior training or background in Linked Learning.

The Importance of Principal Knowledge and Leadership

Findings from my experiences as a coach and qualitative researcher can be organized into two major themes related to administrators and successful Linked Learning implementation: (1) principals need a deep understanding of Linked Learning, and (2) principals must take an active role in creating structures at the school site to support Linked Learning.

One of the most significant findings from my own Linked Learning experiences as well as my interviews with Linked Learning administrators is that leaders, especially principals, need to deeply understand and believe in Linked Learning in order for it to be successfully implemented at a school site. Across all of my interviews, district- and site-level administrators reiterated the need for the principal to "buy in" to Linked Learning. From my coaching experience, I learned that simply having a passion for Linked Learning is not enough but that a deep understanding of Linked Learning is also required to be an effective instructional leader in a Linked Learning context. I was fortunate to coach two administrators who were very passionate about Linked Learning and believed in its potential to transform education for their students; however, they initially lacked some of the basic knowledge about Linked Learning that they needed in order to be successful Linked Learning administrators. By taking the time to attend Linked Learning PD alongside teachers, participate in district pathway leadership meetings, and visit classrooms regularly, the administrators I coached were able to increase their confidence and ability to be instructional leaders.

Findings from my experiences as a coach and qualitative researcher can be organized into two major themes related to administrators and successful Linked Learning implementation: (1) principals need a deep understanding of Linked Learning, and (2) principals must take an active role in creating structures at the school site to support Linked Learning.

Principals also must be deeply involved with creating structures at their school sites to support Linked Learning. During an interview, one principal shared that the advice he would give to other Linked Learning principals is to be involved in every facet of Linked Learning, especially in the first three years of implementation. In several interviews, other leaders echoed this idea of the principal needing to manage—in a hands-on fashion—many aspects of Linked Learning pathways at the outset including building relationships with industry partners, creating master schedules and other school structures to support Linked Learning, and working with the district to secure needed funding. These interviews reinforced what I had seen in practice: when a principal initially delegated all areas of Linked Learning to someone else—whether that designee was an assistant principal or teacher leader—the Linked Learning pathways at that school site struggled to develop. While, eventually, a principal should create a system of distributed leadership, in the initial Linked Learning implementation phase, the principal must be intimately involved with several facets of pathway development. The principal should be involved in the initial decision of which industry sectors to develop pathways in as this requires knowledge of the expertise of the teaching staff, students' interests, and the local industry context. The principal should also be involved in the early tasks related to pathway creation (creating courses of study, writing pathway learning outcomes, building pathway culture, and fostering industry partnerships) so that the principal and teachers are part of the same team creating Linked Learning structures together. Finally, the master schedule is the most obvious structural element at a school site that has a significant impact on Linked Learning, and it is critical for a principal to be involved in creating a master schedule every year that supports pathways. Two of the main ways that the master schedule can support pathways are to cohort students into pathway-alike class sections and to provide teachers with common planning time for their pathway team.

Implications: Linked Learning Professional Development for Principals

There are several implications for school districts and for university administrator preparation programs stemming from my experiences and research. From my experiences as a Linked Learning coach and researcher, it is clear that principals need support, including PD, related to Linked Learning from their districts. A good first step is to have administrators attend Linked Learning PD alongside their teachers. Attending PD with teachers is a tangible way that administrators can show support for teachers (building a "we're in this together" mentality) and is a way to deepen administrators' understanding of Linked Learning and its instructional implications. If administrators are going to provide support for teachers as they implement Linked Learning in the classroom, administrators must first understand what a Linked Learning classroom looks like.

Additional PD that is targeted for Linked Learning site administrators is also needed. For new administrators who are initially placed at a Linked Learning site or experienced administrators who are moving to a Linked Learning site for the first time, some form

of training related to Linked Learning at the outset (e.g., "Linked Learning 101") is needed. Following this initial PD, ongoing PD focused on specific Linked Learning components and structures are also necessary. Suggested topics include developing partnerships with industries in the community aligned to pathways, creating a master schedule that supports Linked Learning, and leading instructional improvement that supports Linked Learning.

Several administrators also expressed a desire for a professional learning community (PLC) of Linked Learning administrators from schools across their district or even across several districts. This PLC could be a place for administrators to share best practices and challenges with Linked Learning implementation. Two possibilities emerge for structing these PLCs in a way that would be beneficial for administrators. The first option is for administrators who are in similar roles with similar levels of experience to meet together as a form of support and take turns facilitating the PLC meetings—there wouldn't be a PLC leader, but participants could alternate with each meeting who took the lead sharing a problem of practice or a best practice. Alternatively, a more experienced Linked Learning administrator (perhaps an administrator at a gold certified Linked Learning pathway) could lead a regional PLC for less experienced Linked Learning administrators.

As a university faculty member who prepares future school administrators, it is critical that I share my experiences from practice and research with my students. Linked Learning is not an explicit part of our administrator preparation curriculum, but I can use Linked Learning as an example of several important leadership lessons in class with my students. Even if a school or district does not operate Linked Learning pathways, some of these lessons from Linked Learning are transferrable to other school programs or areas of educational reform that may require significant oversight from the principal. For example, when my students become principals they must not completely delegate critically important tasks, especially if they personally lack knowledge or skills in that area. Linked Learning can be one of the examples I use when teaching this to my students.

Additionally, the need for principals to be instructional leaders is not confined to Linked Learning contexts. My experiences can be a lesson for my students about how to develop their confidence and skills as instructional leaders both inside and outside of Linked Learning contexts. Principals often comment that they wish they could attend more PD alongside their teaching staff and wish they could be in classrooms more frequently but that other more urgent tasks pull them away. I want to impart a sense of urgency about being instructional leaders to my students so that they understand they must make time to develop their skills in this area and be present in classrooms.

Conclusion

Linked Learning requires systemic change at a district and school site level, and administrators must be actively involved in every detail in this process of change. As I have observed in practice and as several administrators shared through interviews, when Linked Learning pathways try to operate within a school without changing any structures to support Linked Learning, those pathways struggle to flourish. The Linked Learning Alliance announced their first gold certified pathways at their March 2019 Convention, and these pathways are examples of best practices in Linked Learning, including leadership. Perhaps the administrators affiliated with those gold certified pathways could facilitate a series of PD for other Linked Learning administrators. Topics where administrators would benefit from support include building a master schedule that supports pathways, leading instructional improvement in Linked Learning Pathways, and developing and nurturing industry partnerships. It seems like this recommendation may already be in motion as the Linked Learning Alliance just announced it will host its first two-day Linked Learning Institute in March 2020 led by experienced Linked Learning leaders and designed to support Linked Learning practitioners and leaders. Perhaps this convening can also be a launch site for a system of Linked Learning administrator PLCs so that administrators can build ongoing relationships with other leaders engaged in the same work. Additional qualitative research should be conducted focusing on the district- and site- leadership of these gold standard pathways so that their experiences and best practices can be shared broadly.

"Linked Learning requires systemic change at a district and school site level, and administrators must be actively involved in every detail in this process of change . . . when Linked Learning pathways try to operate within a school without changing any structures to support Linked Learning, those pathways struggle to flourish."

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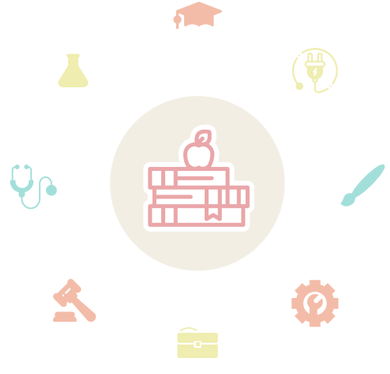
Chapter 8

Supporting Cohesive Work-Based Learning Experiences for Students in LL Pathways



CHAPTER 8

Supporting Cohesive Work-Based Learning Experiences for Students in LL Pathways

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Problem of Practice

How can districts, universities, and industry partners work together to provide meaningful, cohesive work-based learning experiences for students in Linked Learning pathways and to support current and prospective pathway teachers?

As post-secondary educators working in professional programs, we come to this chapter with a commitment to authentic, meaningful work-based learning opportunities for secondary students and their teachers. Having both come from careers outside of the university (in secondary school teaching and nursing) into professional preparation contexts, we have seen firsthand the importance of students having authentic opportunities to engage in work-based learning opportunities.

The first part of our problem of practice focuses on cohesive work-based learning experiences for Linked Learning (LL) pathway students with industry partners. How can students in LL pathways take the 21st century skills and work-based learning principles they are engaging with in the classroom and bring them into a real workplace? Specifically, we'll discuss the mentoring/ simulation partnership between the California State University Long Beach (CSULB) School of Nursing (SON), Long Beach Memorial/ Miller Children's Hospital (LBM/MCH) and Long Beach Unified School District (LBUSD) which had a goal of introducing LBUSD health pathway students to a variety of careers in the health/ medical pathways. In addition to the clear connections between 21st century skills (including the 4Cs: collaboration, communication, critical thinking and creativity) and work-based learning, this model also sought to provide student-centered learning opportunities through 1-on-1 mentoring with a health professional and was grounded in providing equitable access to work-based learning opportunities for all health pathway students including those who might not have personal connections with health care practitioners.

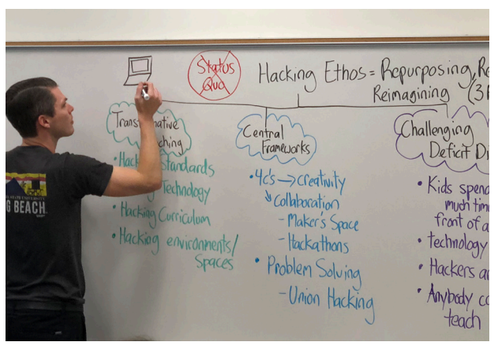
The second part of our problem of practice focuses on cohesive professional learning opportunities for LL pathway teachers and those interested in pursuing careers in LL pathway schools. For this part of our problem of practice, we considered the ways in which teacher preparation at the university could connect to LL and college and career readiness (CCR) initiatives in LBUSD and other local districts.

In order to equitably provide access to our preservice candidates, we look at how essential elements of LL pathways could be integrated into our existing teacher education courses. To support LL pathway teachers, through funding, we also examine a strand of our Curriculum & Instruction Masters program focused specifically on CCR pedagogies and LL principles.

How Do We Connect Professional Learning and Secondary Schooling?

Recently, over lunch, we began talking about the "constructed pressures" that can come in traditional school settings. As parents, we have seen our own children (in secondary settings) stay up until the wee hours of the morning doing homework for multiple rigorous classes that are perhaps in fields completely unrelated to those which they hope to pursue in post-secondary contexts. This reminded us of a previous lunch conversation when we realized that we were both doing Linked Learning work in collaboration with LBUSD in different ways: Melissa through a formalized partnership between LBUSD, the CSULB school of nursing (SON) and Long Beach Memorial/ Miller Children's Hospital (LBM/MCH) and Betina somewhat less formally through ongoing collaborative efforts between LBUSD and the CSULB College of Education (CED) single subject credential (SSCP) and Curriculum & Instruction (C&I) Masters programs. This chapter stems from our experiences in these contexts.

As university-based professional educators, working with our district and community partners is essential in bringing authenticity both to our work and to learning opportunities for students.



As university-based professional educators, working with our district and community partners is essential in bringing authenticity both to our work and to learning opportunities for students. Establishing reciprocal pipelines and work-based networks (secondary → post-secondary; and post-secondary → secondary) to support professional development for pre-career students and career professionals helps to strengthen our work at both levels and build cohesion across far-too-often siloed institutional entities. In different ways, through our partnerships, we hope to offer insights into the ways in which community-based partnerships (district/university/ industry) can promote a more cohesive and empowering experience for secondary and post-secondary students, as well as provide enduring connections between educational institutions and their community partners.

District-University-Professional Partnerships

In this chapter, we explore two types of university-district career partnerships. The first is the direct

collaboration between LBUSD Linked Learning health pathway students, the California State University School of Nursing (CSULB SON) and Long Beach Memorial/ Miller Children's Hospital (LBM/MCH) professionals; the second is the ongoing collaborative work between LBUSD (and other districts) as it informs teacher preparation and professional learning at the California State University College of Education (CSULB CED), specifically with preservice teacher candidates in the Single Subject Credential Program (SSCP) and with teachers who participated in the CSULB CED Secondary Curriculum & Instruction Masters Program focused on Linked Learning (C&I-LL). While these district-university-professional partnerships are distinct, we find them both to be important in considering possible collaborations that can solidify understandings of LL in secondary contexts.

CSULB SON - LBUSD - LBM/MCH Partnership

In July, 2014, Long Beach Memorial/Miller Children's Hospital (LBM/MCH) was awarded a grant from the James Irvine Foundation to begin a Linked Learning project aimed at preparing HS students from the Long Beach Unified School District (LBUSD) for careers in health care through work-based experiences. As the third largest school district in California, LBUSD represents one of the most diverse student groups in the country, both ethnically and socioeconomically. For example, 56.14 % are Hispanic, 13.5% are African American, and 69% come from socioeconomically disadvantaged homes (LBUSD, 2016). The CSULB SON, like many of the programs at CSULB has a large percentage of students from LBUSD and works in close partnership with community hospitals including LBM/MCH.

Secondary students selected for the LBUSD-CSULB SON-LBM/MCH program are paired with health professionals from LBM/MCH in various health disciplines (e.g. nursing, medicine, social work, respiratory therapy). Over the course of nine weeks (twice a week after school), students attend classroom lectures where they learn about the various health professions and experience hands on simulation in the lab with their health professional mentor. These students also participate in a trauma scenario that unfolds over time and covers the various stages from admission in the emergency department to the intensive care unit and medical surgical unit. Students spend the entire nine weeks getting to know their personal health profession mentor and work side-by-side with them during the simulations, with a focus on their professional role and interdisciplinary collaboration, rather than simply learning isolated tasks. The HS simulation mentorship program provides a more in-depth experience compared to traditional work day shadowing/touring option. The program culminates with a professional poster presentation of their assigned health profession to faculty, family, and health professionals.

The goal of this district-university-professional partnership is to give students an opportunity for a meaningful professional experience that extends their learning beyond their high school classrooms, into a medical professional setting. Often students can be so busy with traditional academic work that they don't have time or the structures to be exposed to various health-related careers. The exposure they gain in the program and interaction with various medical professionals helps them to make more meaningful career choices earlier. While students may have other opportunities to engage in health-related volunteering, the unique opportunity of being partnered with a mentor and engaging in the trauma simulation activity helps them to learn through doing, and not simply through observation. The simulation gives them a taste of challenges of the medical profession including emergency situations and interaction with families, which are critical professional skills that may not be covered in traditional academic curriculum.

The partnership thrives because of the initial investment of both human and financial capital. The central team of collaborators was key in building the foundation for the program over the first few years. Melissa served as the initial CSULB SON liaison to the project, helping to support initial coordination between the three entities for this program which continues into its fifth year. She was fortunate to work with a team of collaborators including the director of education at the hospital and the assistant superintendent who were all committed to this partnership, well-connected with human and community resources beyond the school level and had access to the necessary funding to sustain the project in its initial implementation. This team worked hard to get people in their organizational communities and the local community to be excited about this work. Workforce development, in fact, became a city initiative and something that was a commitment beyond each individual entity.

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CSULB SSCP/ C&I – LBUSD/ LL Partnership

The CSULB CED and LBUSD have a historically strong connection given that a large majority of LBUSD teachers are credentialed through the CSULB CED credential programs. Through ongoing funding from the James Irvine Foundation beginning in 2011, the CSULB CED SSCP began exploring ways in which college and career readiness through Linked Learning (LL) pedagogies could be integrated into teacher preparation, given LBUSD's adoption of the LL model and movement towards "wall-to-wall" LL pathways at the high school level. Over the course of 8 years, LBUSD and CSULB CED leadership engaged in ongoing conversations and multiple formations to support preservice candidate learning about LL pedagogies to prepare them for teaching in pathway schools.

The first of these formations included embedding cohorts of SSCP teaching candidates at various LL high school sites around the district for preservice core courses. Working with site leadership, teacher candidates were partnered with mentor teachers on site whom they could observe and ideally student teach. Concurrent with embedding candidates on LBUSD campus sites, SSCP faculty were trained by LBUSD district personnel on LL curricular design principles.

After several embedded LL cohorts, the decision was made to infuse LL principles into all sections of three SSCP core courses housed in the CSULB CED. This was done through further professional development sessions for all SSCP faculty with LBUSD and

SSCP co-leads, as well as the introduction of course materials and integrated cross-disciplinary, Career Technical Education (CTE) aligned projects into these core courses. SSCP faculty from the CSULB CED and other colleges on the CSULB campus (who were affiliated with the program) were brought together in joint large group professional development with a focus on cross-curricular CTE-aligned unit design. Professional learning opportunities were also extended to teacher candidates, both alongside faculty members and as returning teachers after entering the field.

In 2016, again through assistance from the James Irvine Foundation, CSULB CED launched a specialized secondary cohort of its C&I Masters program focused on LL and CCR pedagogies (C&I-LL). Courses in the program were modified to focus more heavily on key components necessary for success in LL settings: 21st century skills, technology integration, equity and social justice, student-centered learning, work-based experiences, innovation and educational leadership. Over half of the second C&I Masters cohort was comprised of LBUSD secondary teachers, including five teachers from the same LBUSD pathway who undertook pathway revisions and alignment as part of their integrated coursework.

While much has been accomplished through the LBUSD-CSULB CED partnership over the time of the James Irvine grant funding, there were challenges in this District-University-Professional partnership in terms of sustainability. In contrast with the LBUSD-CSULB SON-LBM/MCH collaboration which has benefitted from consistent leadership over time, the nature of faculty appointments, retirements and transitions to new positions has led to less stable project leadership over time. Further, sustainability has been challenged by competing initiatives both on the LBUSD and CSULB CED side. Because LBUSD and the CSULB CED are close collaborators on many initiatives, rather than a specific focused project like the health pathways project, it has been more challenging to fully focus on strengthening the LL professional partnerships. Further, because LL and the CTE-aligned, cross-curricular pedagogical approach was such a departure from traditional schooling configurations, not all faculty bought into the initiative over time. Many faculty, as career educators who had not previously engaged with the core tenets of LL, had never worked in other industries. Further, some faculty had been out of secondary contexts for many years. This led to struggles in providing authentic CTE-aligned work-based curriculum. Additionally, first-career teacher candidates shared the struggle of finding authentic CTE-aligned applications of their disciplines, particularly in cross-curricular projects, given that they had a compressed timeline in which to develop units or assessments which were very different than the traditional instruction to which most of them were accustomed. Finally, while the C&I-LL Masters program was successful and developed a rich curriculum grounded in practice and the core tenets of Linked Learning, sustainability in a competing market of Masters programs, with a focus that was somewhat non-traditional made the sustainability of the program, following grant funding, difficult.

Moving Forward: Building, Continuing, and Strengthening District-University-Professional Partnerships

The LBUSD-CSULB SON-LBM/MCH partnership continues to thrive. There are cohorts during the academic year as well as through the summer. Despite changes in leadership at the CSULB SON and LBM/MCH, a well defined program structure and clear roles for each partner has resulted in a seamless continuation of the program. The LBUSD-CSULB CED partnership also continues on, in its own ways. Many core SSCP faculty retain a strong insight and grounding in LL pedagogies, including the faculty who lead course development and instruction in the CSULB CED SSCP core courses for the credential program. These faculty have initiated and provided models and their own professional development for new faculty in the program. Over time, through Betina's involvement in both the LL preservice course development and the C&I-LL Masters programs, she has learned from LL educators and second-career teacher candidates, allowing her to develop a deeper and more authentic understanding of LL principles. Many CSULB SSCP graduates are teachers in LBUSD LL pathway schools, as both core curriculum teachers and CTE specialists. Further, the relationships developed through the LL preservice and Masters program work have led to several of the chapters of this guidebook, helping to contribute to a greater professional understanding of LL in secondary contexts from practitioner perspectives.

Reflections on Our District-University-Professional Partnerships

In discussing our different experiences with our respective district-university-professional partnerships, we recognized several important lessons. Personally, we have learned about the power of professional collaboration, reaching beyond our university walls and even our professional connections to partner with the work of teachers in classrooms. We have seen the power of ongoing reflection, continued review and data-driven learning opportunities that support learning across secondary and post-secondary classrooms as well as professional learning. We have also realized the importance of consistent leadership and investment in focused initiatives. Partnerships require sustained interest by all sides and a somewhat singular focus. When a few key players have the right synergy and are working with a specific goal, the results can be more powerful learning for secondary students, educators and professional partners. However, when even well-established partnerships have a broad focus, shifting initiative leadership, and struggle to engage all participants, promising collaborative efforts may struggle to remain sustainable, despite initial successes.

When a few key players have the right synergy and are working with a specific goal, the results can be more powerful learning for secondary students, educators and professional partners.

Our experiences, however, show that district-university-professional partnerships are possible. While they do require time, energy and financial investment initially, these investments do not necessarily need to be extensive in order to institutionalize important

changes related to Linked Learning. Our experiences with both the LBUSD-CSULB SON-LBM/MCH partnership and the LBUSD-CSULB CED SSCP partnership, indicate that at least three years are necessary to promote lasting, sustainable changes in programs.

Implications for Ongoing District-University-Professional Partnerships

For LL districts, the power of having a central district leader collaborating with administrators at partner university and professional sites can contribute to making a sustainable partnership. Instead of collaborating with prospective professional partners as

individual school or pathway entities, the institutional strength of drawing from multiple health pathways across the district and building a strong relationship with the school of nursing which itself has close ties to a local hospital makes the LBUSD-CSULB SON-LBM/MCH partnership so powerful. If the LBUSD-CSULB CED collaborations could have developed the same deep and focused relationships, it is likely that the impact of LL on the CSULB CED could be even stronger. However, because of the strength of the partnership that was formed, many CSULB CED SSCP graduates had an emergent understanding of pathways and an initial commitment to collaboration that benefits the LBUSD secondary pathways.

For the field of LL, our experiences show the power of district-university-professional partnerships as well as the complexity of these partnerships and how important ongoing, sustained, focused relationships are in order to sustain change. While both partnerships have had success, the greater sustainability of the LBUSD-CSULB SON-LBM/MCH shows that scope and synergy matter among partners. The LBUSD-CSULB CED partnerships, although they continue to make an impact for individual teachers and classrooms within the district were challenged by competing demands on both the district and the college's time and resources, preventing deeper change.

District-university-professional partnerships require further investigation by researchers. While work has been done on partnerships between K-12 schools and teacher education programs (Chorzempa, Isabelle, & de Groot, 2010; Martin, Snow & Torrez, 2011; Moran, Abbott & Clarke, 2009; Zeichner, 2009) and additional work has been done on the importance of mentorship and internships in health-based careers (Boekeloo, Jones, Bhagat, Siddiqui, & Wang, 2015; Keselman, Ahmed, Williamson, Kelly & Dutcher, 2015; Pilkington, Singh, Prescod & Buettgen, 2013; Zayas & McGuigan, 2006), there has been relatively little literature focused on the ways in which systematized district-university-professional partnerships can work across multiple contexts to promote greater learning and growth for all parties involved. We hope that our experiences can begin conversations on district-university-professional partnerships across a variety of career contexts.

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