About Linked Learning

Linked Learning is an instructional approach that provides students with academically challenging pathways leading to careers in high-need, high-growth occupational sectors and prepares them to succeed in postsecondary educational institutions. By design, Linked Learning pathways aspire to develop students' academic and industry-related knowledge and skills by engaging them in projects and coursework that blend career and technical education (CTE) content with a traditional core curriculum (e.g., mathematics, English, and science). To do so, Linked Learning pathways are career-themed. They offer a sequence of rigorous coursework, integrated projects, and workbased learning experiences designed to develop students' abilities to pursue careers in a field of their choosing and in postsecondary education.

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Professional Learning for Linked Learning Series The Graduate Profile: A District Strategy for the Coherent Alignment of Student Outcomes

By Elle Rustique

n Linked Learning districts across California, the graduate profile is becoming a multi-faceted strategy for bringing coherence, clarity, and focus to practitioners and leaders at all levels of the system—classroom, pathway, school, and district. Long used by higher education as a framework to describe the attributes of college undergraduates, a graduate profile is essentially a comprehensive set of cross-disciplinary student learning outcomes that stakeholders within a district—educators, parents, students, community members, and industry representatives—agree all students must master by the time they graduate from high school.

Sometimes displayed as a one-page visual (see the Pasadena United School District's profile on the next page), a district's graduate profile organizes a comprehensive range of expectations for student learning into a clear, cohesive vision of college and career readiness. By starting with the end in mind—a high school graduate who is prepared for postsecondary learning and the 21st-century workplace—a district's graduate profile can help schools and teachers provide the instruction, work-based learning experiences, and authentic assessments that students need to demonstrate the knowledge and skills necessary for success beyond high school.

The profile highlights skills such as critical thinking, problem-solving, civic participation, and effective communication and invites stakeholders to learn what it means for a student to be college and career ready. It communicates equitable expectations for every student in the district, regardless of the school he or she attends.

The process of developing the graduate profile can help districts communicate these expectations in a way that is accessible to a diverse group of stakeholders. This shared understanding builds a common discourse and makes concrete the kinds of academic learning and work-based experiences that schools must provide to all students. This collective ownership is what can make the graduate profile a kind of "contract of educational goods and services" for which districts, schools, and teachers are responsible and accountable.

The Changing Context of College and Career Readiness

Across California and the United States, assessment and accountability policies are changing rapidly. In California, the implementation of the Common Core State Standards (CCSS) alongside the state's new Local Control and Accountability Plan (LCAP) and Local Control Funding Formula (LCFF) will require high levels of alignment among national standards, state policies, district goals, and school practices. As a result, district leaders, principals, and teachers must align their curriculum, instruction, and assessments with these state and national requirements to provide evidence of students' preparedness for college and work.

GRADUATE PRO

OUR GRADUATES...

CRITICAL THINKER -----

Analyze and evaluate information critically and competently

Propose solutions based upon studied data
Have the ability to quickly and easily adapt knowledge and skills to new environments (cognitive flexibility)

Demonstrate perseverance

Effectively solve problems

CREATIVE & INNOVATIVE THINKER

Create original work that demonstrates thoughtful and

reflective approaches

Provide original solutions to problems, analysis, modeling,

prototyping, and testing
Use obstacles and setbacks as opportunities to learn, reflect, and improve

COMMUNICATOR

Write with precision, clarity and coherence appropriate to task and Acquire multilingual verbal and written skills Advocate for their future and communicate personal values

audience

Listen effectively to decipher meaning, values, attitudes, and

Deliver information effectively in multiple formats

intentions

COLLABORATOR •----

Share responsibility for collaborative work, and value individual

contributions made by each team member Practice interpersonal and social skills in order to build positive

relationships with peers and adults

Build consensus while making decisions Work effectively on diverse teams



PREPARED FOR COLLEGE & CAREER

Demonstrate academic and professional excellence (including contentmastery and academic skills in reading, writing, and 向群特, filter and synthesize information from a wide variety

of sources

PUSD graduate profile is aligned to district and pathway initiatives. Our 21st Century Skills and college and career readiness. There are seven guidelines address rigor, relevance, relationships, major components to our graduate profile

Create new ideas based upon strong content knowledge Possess self-discipline and appreciate the importance of goal-setting

Acquire strong organizational skills to support academic and personal

Are prepared for the post-secondary program of their choice in college, Have the option to complete courses that satisfy A-G requirements for University of California and California State University career, vocation or employment

Are reliable, punctual and professional with proper etiquette Possess financial literacy and basic money management skills Are equipped with a range of interpersonal, academic

Possess career skills that will enable them to compete locally and globally vocational, and technological skills

CULTURALLY COMPETENT CITIZEN EXTERNAL & INTERNAL VALUES-

Are contributing members of society

Understand their own and others' cultural heritage

Use their cultural knowledge to engage in a diverse world. Value and use the arts as a fundamental form of human

Behave with integrity; are responsible for their behavior, actions and expression

choices

Are compassionate and have empathy toward others Volunteer and give back to the community
Value and support family and community

Connect learning to local, national and global events Return to PUSD community

HEALTHY MIND & BODY

Become lifelong learners and find joy and satisfaction in

Are positively motivated
Are internally driven and resilient to overcome challenges
Have respect for themselves and others
-Build self-confidence and pursue their passions

Are independent and self-sufficient Are resourceful and willing to take risks to reach their goals

The Need for Coherence

It will be no easy task to align these requirements with current efforts aimed at college and career readiness, such as Linked Learning. One challenge to implementing the CCSS's requirements is integrating them into schools' classrooms and teachers' practices in ways that both facilitate high-quality instruction and support more authentic assessments of student learning. Evidence regarding student outcomes, when organized into a coherent framework, can provide opportunities for teachers to refine their practice and make instructional shifts that enable students to think more carefully: to weigh evidence, make connections to the real world, reason mathematically, or solve everyday problems.

When teachers understand student outcomes and can use well designed performance assessments to gauge their students' progress toward mastery of specific student learning outcomes, they are able to make more informed, student-centered decisions. Having a firm grasp on students' progress—what they know and what they still need to learn—increases teachers' ability to align lessons, projects, and assignments with achievement goals. Further, this knowledge allows teachers to better understand their students' strengths, interests, and needs and to personalize students' learning opportunities in support of increased progress (Darling-Hammond & Falk, 2013).

When the required student outcomes are competing, vaguely defined, and inequitable, it is difficult for teachers to align the Common Core's standards with the curriculum and their lessons. Questions about where to start, which outcomes to prioritize, and how to distinguish between assessments' competing purposes are among the frustrations they encounter. In translating standards and outcomes into schools' and classrooms' practices, coherence matters.

An important role for districts, therefore, is not only providing coherence for those charged with implementing multiple reform strategies, but also translating policies into outcome-based language that teachers and schools can use to set goals and benchmarks for student learning. A district's instructional leadership is integral in providing both

What Research Found: Why Teachers Need Coherent Student Outcomes

Research compiled by the Stanford Center for Opportunity Policy in Education (SCOPE) examined teachers' use of student outcomes in designing performance-based assessments. Results showed that overlapping initiatives and multiple frameworks from which student outcomes were being derived created incoherence for teachers. This incoherence manifested in teachers' difficulties targeting specific skills, aligning skills and content, integrating standards into tasks and projects, and designing assessments mapped backwards from outcomes. The research concluded that, for teachers to use student outcomes to assess student learning in more authentic ways, teachers need: 1) a clear and common vision for college and career readiness; 2) compelling and meaningful standards; 3) student learning outcomes that are clearly communicated, mapped, and aligned to that vision; 4) collaborative teacher processes for designing curriculum and assessing students' skills and knowledge; and 5) participation in high-quality, continuous professional learning. (Darling-Hammond & Adamson, 2014)

clarity and coherence in the translation from desired student outcomes to instructional practices to high-quality learning opportunities to evidence of college and career readiness. Providing stakeholders across the system with a complete picture of what it means to be college and career ready gives schools and teachers a template for locating where they are in relation to where they want students to be.

What makes the graduate profile different from a conventional set of learning standards is that it provides a framework that does not limit teachers, but rather, can enable teachers by being adaptive, educative, and instructionally responsive. Under the right conditions, such as those found in a high-quality professional learning community or community of practice, a graduate profile can allow teachers to align their curriculum and instruction not only to the Common Core, but also to specific student and pathway goals. The profile can provide a district with a strategy for achieving coherence

and alignment when used to 1) engage stakeholders in developing a vision of college and career readiness, 2) bring awareness of what college and career readiness means, 3) guide authentic assessments of student learning, and 4) facilitate alignment to local accountability. Each of these components is discussed in more detail below.

1) Engaging stakeholders in a shared, districtwide vision of college and career readiness.

If a district's vision is to be supported by the community, its stakeholders should be engaged in developing that vision. Envisioning a high school graduate who is ready for college and career not only requires those stakeholders to understand what that readiness consists of, but also calls for some understanding of how students will demon-

strate levels of proficiency and how to assess evidence of that readiness. Facilitating this understanding among stakeholders paves the way for broader recognition of the changes and improvements in assessment that are needed in schools and classrooms. For a district, such understanding can lead to greater support and investment in initiatives like Linked Learning, which can help enact that vision.

The Pasadena Unified School District, Oakland Unified School District, Sacramento City Unified School District, Long Beach Unified School District, and Porterville Unified School District participate in California's Linked Learning District Initiative. In these districts, stakeholder engagement has been invaluable in raising awareness as well as strengthening ownership and deepening understanding of what it means for a student to be prepared for college and

Developing a Common Vision Among Multiple Stakeholders in the Pasadena Unified School District

Pasadena's district leadership, not wanting to "start from scratch," built on the previous work of community committees formed in 2010. Over four years, Pasadena's parents, students, business people, educators, and community leaders met in discussions facilitated by Linked Learning and district staff to define the skills, knowledge, and competencies important in the 21st-century workplace. "Different people bring different conceptions and expectations for students," observed Dr. Marisa Sarian, Director of College and Career Pathways, who facilitated many of these conversations, "The process of developing our graduate profile as a community, allowed people to put their views on the table and work toward a common vision and the understanding that this profile would describe all students in all Pasadena schools."

To create the graduate profile, the newly formed group of stakeholders began with the committee's original vision and language and shaped them into a more comprehensive vision. Transforming broad statements about values into student outcomes aligned to both pathway-specific learning outcomes and the Common Core was difficult work. Integrating these student learning goals into the language of multiple initiatives was complex, especially for those outside of education. "This was a challenging and consuming process," explained Dr. Sarian, "but it was well worth it."

With approval of the graduate profile by the school board this year, students can graduate with a basic "State Diploma;" and a set of options for A-G diplomas ("Classic Diploma," Math & Science Diploma," "Humanities Diploma," or "Global Education Diploma," and "Honors Recognition.") While these options are offered for all students, graduates of Linked Learning pathways can more clearly align their pathway's theme to an area of specialization reflected in their high school diploma. For the class of 2019, Pasadena's new graduation requirements now include 20 hours of work–based learning, 20 hours of community service, and a senior portfolio and defense. The integration of work–based learning into district high school graduation requirements is just one example of how the graduate profile has encouraged districts to define the importance of career readiness through policy, widen options while raising graduate requirements, and recognize that work-based learning provides a vehicle for students to gain these skills and experiences.

the workplace. Each district created participatory structures and multi-year processes at various levels of decision-making. As each district developed drafts of their graduate profile, they solicited input from educators, board members, students, parents, business industry representatives, community members, and faculty from higher education.

The power of community participation in developing these districts' graduate profiles lies in harnessing what a group of diverse stakeholders care about: equipping their children with the skills and knowledge they need to become responsible and productive citizens and providing a process that builds relationships and facilitates collaboration. Building a common vision together has allowed multiple stakeholders, with different roles and backgrounds, to participate in conversations. For those involved, being part of a common experience can increase awareness and commitment to the districts' and schools' efforts.

Engaging the entire community in education has benefits: Stakeholders from many backgrounds now better understand what skills, knowledge, and competencies constitute students' readiness for their futures and have become invested in what is being taught in schools. Community members are also more aware of the ways in which a student can demonstrate evidence of that readiness. Building this understanding has helped Pasadena and other Linked Learning districts pave the way for broader recognition and support for such initiatives as Linked Learning, which can help enact that vision.

2) Redefining college and career readiness.

The graduate profile is also expanding awareness and transforming perceptions of what college and career readiness means. Each district's profile lists the required experiences for high school students (e.g., community work), students' attitudes toward learning (e.g., valuing lifelong learning), and students' recognition of their role in the world (e.g., global citizen or leader). While each district may define and describe its high school graduate in a unique way, emphasizing particular skills and attributes, these profiles collectively describe graduates who are prepared

for employment and education. For example:

- The Oakland Unified School District's graduate profile uses the notion of experiences; engagement; and social, emotional, and physical health and defines a graduate as being an essential communicator, who can apply acquired skills in every situation, with everyone. Being able to think about one's future is valued. One of Oakland's high school graduation requirements is that students have a post-high school plan in hand.
- The Pasadena Unified School District requires graduates to display collective responsibility and ownership. The profile describes a graduate as having a healthy mind and body and being a lifelong learner, independent, and self-sufficient. The profile also describes the desired culturally competent citizen as one who is a contributing member of society, capable of understanding one's own and others' cultural heritage.
- The Porterville Unified School District requires the workplace skills of leadership, self-management, and organization that are obtained through real-world applications and community involvement. The graduate profile states, "Through authentic experiences, graduates will successfully collaborate, meet deadlines, and continue to develop leadership skills while designing and implementing a long-term plan."
- In the Long Beach Unified School District, a successful high school graduate is one who has become [an] effective communicator and collaborator; college and career-ready scholar; critical and innovative problem solver; adaptable and productive citizen; and ethical decision maker. A graduating student's readiness in these areas is determined by proficiency: "All students will attain proficiency in the core content areas" and "will become proficient in new areas through research and inquiry."

In each of these districts, the graduate profile reinforces a message of equitable expectations, signaling to the community that high school graduation is expected for every student. In the traditional comprehensive and academically tracked high schools, it was common to have low expectations for students who were enrolled in a career technical/vocational education: These students' coursework did not pro-

vide the credits they needed for admission to California state universities. The graduate profile emphasizes that success after high school requires the skills, knowledge, and competencies required for both college and career. This message reinforces expectations in which work-based knowledge and skills are equally as important as academic knowledge and skills, and that both are part of college or career readiness. The expectation that all students leave high school prepared for work and college expands the opportunities for all students to be successful. It is especially important that districts communicate this message when setting high expectations for those students who have been underserved by the comprehensive model of high schools in the past.

3) Authentic assessments in learning.

New assessments that are emerging with the Common Core State Standards may be somewhat more supportive of deeper learning goals, particularly if they are used to inform instruction and improve learning, rather than to sort and label students, teachers, and schools. But even if these assessments are much better than current tests, they will not provide as deep a set of experiences and insights as the schools' existing performance assessments and portfolios do. It will be important for states and districts to incorporate these kinds of performance-based assessments in their overall conception of the assessment and accountability system (Darling-Hammond et al., 2014, p. 10).

The graduate profile points to the need to shift from standardized tests to more authentic forms of assessments. Unlike multiple choice and short answer exams, an authentic approach to assessment, also known as performance-based assessment, allows an individual student to demonstrate the depth, breadth, and application of his or her learning through various forms of "performances." These can include exhibitions, presentations, and defenses of a student's work. The evidence produced by these student-centered assessments gives teachers authentic information about what a student knows and is able to do, as well as how he or she thinks, draws conclusions, and makes decisions. In Linked Learning, this kind of information is critically important for assessing pathway students' college and career readiness as

well as the "deeper" forms of their learning, such as mastering core academic content, thinking critically and solving complex problems, communicating effectively, working collaboratively, learning how to learn, and developing academic mindsets (http://hewlett.org/library/hewlett-foundation-publication/deeper-learning-defined).

The graduate profile is helping districts develop assessments by highlighting the need for assessments that will measure attributes such as Pasadena's "cultural competence" or identify Long Beach's "innovative problem solver." To assess the graduate profile, teachers are turning to more authentic assessment practices, such as requiring portfolios of student work, encouraging project-based learning, and using interdisciplinary teaching. To develop these assessments, teachers and schools look to the graduate profile, which guides districts in designing performance tasks and common rubrics that enable students to demonstrate and produce evidence of their knowledge, skills, and readiness for college and career.

The domains of the graduate profile are guiding the Sacramento City Unified School District as it develops student benchmarks including: 1) critical thinking and problem solving; 2) creativity, innovation, and entrepreneurship; 3) communication and collaboration; 4) media evaluation and application; and 5) life and leadership skills. Theresa McEwen, Director of High School Redesign and director of Linked Learning for Sacramento describes these benchmarks as "developmental check points" along a K-12 continuum that occur in key transition years (see Table 1, page 7).

Pasadena's New Graduation Requirement: The Senior Portfolio

The Pasadena school board recently approved the redesign of the district's high school graduation policy and requirements that now include a senior portfolio and defense. Specifications of the portfolio are in development and being piloted with students, who have asked about how these new pieces will be graded, the specific rubrics that will be used to assess their work, and the contents of the graduation portfolio. Where were students told to look? The Graduate Profile.

Table 1: SCUSD Graduate Profile: Developmental Benchmarks for Critical Thinking & Problem Solving

I. Critical Thinking	3rd Grade	6th Grade
and Problem Solving: Demonstrating intentional meta- cognition in prob- lem solving and decision-making.	Student can articulate his/her thinking when questioned.	Student articulates his/her thinking about the connection be- tween choices, ac- tions, behaviors, and outcomes.
8th Grade	10th Grade	12th Grade
Student is able to articulate what makes choices in actions and behaviors result in the control over situations and begins to make knowledgeable decisions.	Student is able to execute self-inquiry prior to making a decision.	Student reflectively articulates and accepts the responsibility of his/her thinking and actions and focuses on positive choices and behaviors.

4) Informing local accountability.

As districts [in California] transition to the Local Control Funding Formula and develop their Local Control and Accountability Plans (LCAPs), the linkages between student outcomes, program funding, and reporting requirements are more important than ever (Linked Learning Alliance, 2014).

According to the Linked Learning Alliance (2014):

An effective plan of action for a district's LCAP builds from the end it seeks to attain. One way to frame this is to consider the ideal qualities, competencies, and experiences that high school graduates should have—in other words, to define a graduate profile. Community input is a natural starting point, and intersects well with requirements for the public vetting of a proposed LCAP. What is the ultimate goal for students in the district? What does college and career readiness mean to the community? Through focus groups, polls of the community, town meetings with students, teachers, parents, local employers, postsecondary representatives, and other community members, a graduate profile can be developed that both reflects community needs and support community action to meet those needs.

The Graduate Profile is a framework of accountability. As Gretchen Livesley, Director of the College and Career Readiness Office in Oakland Unified School District sees it:

The Graduate Profile is being used as an organizing principle . . .[It] is driving the structures in our system. The Graduate Profile is not simply a set of standards against which we are judging students; it's a metric for a system for which adults are being accountable. We are not holding them (students) accountable to these outcomes. This is very important because it is not how our districts are using it. By "accountable" it means what we need to be sure we provide, what we need to be mindful that we do, what we have to create for this happen. The GP is the outcome, not the judgment. The Graduate Profile is not for students, it is for us.

Operationalizing the Graduate Profile for All

The transformational potential of the Graduate Profile as a driver for systems coherence lies in the context of implementing the work (Lutzenberger-Phillips & Rustique, forthcoming).

In Linked Learning districts, leaders working on the graduate profile are realizing the depth of change required by the standards articulated by the profile. Having created the profile, districts must next develop strategies that support the deep and systemic change in the way schools operate to meet the profile's goals. Linked Learning districts envision change through the graduate profile. The synthesis of policy and the graduate profile into coherent actionable instructional practice at all levels of a district is essential to support continued improvement in instruction. For teachers, this coherence is critical. Equally important is seeing the graduate profile as a tool for facilitating adaptive change (Lutzenberger-Phillips & Rustique, forthcoming).

Systemic coherence exists as long as the opportunities and experiences that make up students' day-to-day learning in the classroom are in tune with the district's vision of a graduate outlined in the graduate profile. In Pasadena, Sacramento, Long Beach, Porterville, and Oakland, the profile is used successfully to articulate student outcomes, largely due to the cohesion that Linked Learning brings. A summary of advice for district directors is summarized below.

However, if teachers view the graduate profile as a mandate that is imposed, rather than a vision that is defined and owned by the schools and the community, teachers will view the profile as "just another" set of standards and assessments within the stifling framework of No Child Left Behind's old accountability. Parents and students will then treat the profile as a fixed and rigid checklist that they expect to have completed upon graduating from high school. If the graduate profile is seen as a catalyst for a set of complex "operationalizing" actions as well as a vision for informing decisions made throughout different levels, it can lead districts and schools, with the support of stakeholders, toward more innovative ways of preparing students for the lives they will lead after high school.

Developing a Graduate Profile: Advice from the Linked Learning Directors of the California Linked Learning District Initiative*

- 1. View the graduate profile as a process and a product. How you get there is as important as what is produced.
- 2. Be visionary and comprehensive in identifying outcomes.
- 3. Be inclusive. Involve a broad representation of stakeholders whose input will be included.
- 4. Be student-centered. Use language that students can understand.
- 5. Be patient. Engagement and buy-in takes a lot of time when many voices are at the table.
- 6. **Be aligned**. Align the graduate profile to language of pathway student outcomes, the CCSS, and to locally developed indicators of accountability.
- 7. **Be accountable**. Use the graduate profile not only to define what students should strive to achieve by graduation, but also to articulate the educational opportunities that districts must provide.
- 8. Don't reinvent the wheel. Form networks, share successful strategies, exchange ideas, and learn from each other.
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