Rubric
for Linked Learning Pathway Certification

A RUBRIC FOR

Self-assessing pathway quality.

Developing action plans for improvement.

Measuring progress.

ConnectEd
The California Center for College and Career

Certification Criteria

1. Pathway Design

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Rubric for Linked Learning Pathway Certification

This rubric was created to help pathway teams as they work together to develop and improve a comprehensive program of study. Specifically, the rubric can serve as a tool for…

- **Visioning**—pathway team members can gain a common understanding of what a high quality pathway looks like;
- **Self-assessment**—pathway teams can analyze the current status and quality of each element of the pathway;
- **Planning**—pathway teams can identify and set priorities for areas of improvement from which to develop annual work plans; and
- **Quality Review**—external reviewers can assess program quality.

ConnectEd designed this rubric to be used in coordination with the Certification Criteria for Linked Learning Pathways.

What Is a Pathway?

A Linked Learning pathway is a comprehensive program of high school study that connects learning in the classroom with real-world applications outside of school. It integrates rigorous academic instruction with a demanding technical curriculum and field-based learning—all set in the context of one of California's 15 major industry sectors, such as business and finance; building and environmental design; biomedical and health sciences; engineering; information technology; manufacturing; or arts, media, and entertainment.

Objective

Pathways are intended to increase student engagement, reduce high school dropout rates, raise student achievement, increase high school completion and postsecondary transition rates, and boost students' earning power after high school—in short, to transform the high school experience and prepare students for *both* college *and* career, not just one or the other.

Guiding Principles

1. Pathways prepare students for both postsecondary education and careers.
2. Pathways lead to a full range of postsecondary opportunities.
3. Pathways connect academics to real-world applications.
4. Pathways improve student achievement.

Core Components

1. **A challenging academic component** prepares students for success—without remediation—in postsecondary programs.
2. **A demanding technical component** delivers concrete knowledge and skills through a cluster of three or more technical courses.
3. **A work-based learning component** offers opportunities to learn through real-world experiences that enhance classroom instruction.
4. **Support services** include counseling and transportation, as well as additional instruction in reading, writing, and mathematics, to help students succeed with a challenging program of study.

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School Name: _____

Pathway Name:_____

Objective, Guiding Principles, and Core Components

CRITERIA	CRITERIA NOT MET	CRITERIA MET	CRITERIA EXCEEDED
	Pathway *does not* adhere to the Objective and Guiding Principles and/or does not include all four Core Components.	Pathway *clearly* adheres to the Objective and Guiding Principles and includes all four Core Components.	*In an exemplary way*, the pathway adheres to the Objective and Guiding Principles and includes all four Core Components.

1. Pathway Design

1.1	**Design Structure**			
1.1.1.	**Pathway theme**	Pathway theme is either (1) defined narrowly and, as such, limits postsecondary and/or career options for participants, or (2) is not designed to accommodate a full range of students regardless of their prior academic achievement and/or postsecondary aspirations.	Pathway represents a theme that is broad enough to appeal to and engage any student, regardless of his or her prior academic achievement and postsecondary aspirations. The theme has been selected based on at least student interest and one other criterion.	Pathway represents a theme that is broad enough to appeal to and engage any student, regardless of his or her prior academic achievement and postsecondary aspirations. The theme has been thoughtfully selected based on student interest and *several other criteria*, which may include teacher expertise, regional workforce needs, existence of related career and technical education (CTE) course sequences, articulation opportunities with nearby postsecondary institutions, and the interest of industry partners.
1.1.2.	**Program of study**	Pathway consists of a program of study that either (1) is not coherent, (2) spans less than 3 years, (3) includes fewer than three academic courses and one technical course per grade level, or (4) is not sequenced and coordinated.	Pathway consists of a coherent program of study that spans *at least grades 10–12* and includes *at least three core academic courses and one technical course* (or equivalent) in each grade level. By design, the curriculum is sequenced and coordinated.	Pathway consists of a coherent *4-year program of study* that includes core academic courses and at least one technical course at each grade level. By design, the curriculum is sequenced and coordinated.

CRITERIA		CRITERIA NOT MET	CRITERIA MET	CRITERIA EXCEEDED
1.1	**Design Structure (Continued)**			
1.1.3.	**Student recruitment and selection**	Pathway's student recruitment and selection process either (1) is not formalized, (2) does not provide open access, (3) assigns students, or (4) yields a demographic distribution that is substantially different than that of the school and district.	Pathway's student recruitment and selection process is *formalized* and *ensures open access* to students who volunteer for the pathway based on their interests. Pathway demographics reflect *relatively well* (within 20 percent of racial/ethnic, gender, and achievement groups) those of the school and district.	Pathway's student recruitment and selection process is formalized and ensures open access to students who volunteer for the pathway based on their interests. Pathway demographics reflect *almost exactly* those of the school and district.
1.1.4.	**Cohort scheduling**	Cohort scheduling is not implemented at a level that allows the vast majority of pathway students to participate in multidisciplinary projects.	Pathway students participate as a cohort in the academic and technical courses that are part of the Program of Study to enable flexible use of class time and instructional methodologies that promote multidisciplinary projects and work-based learning experiences.	Pathway courses are "pure" in order to enable flexible use of class time and instructional methodologies that promote multidisciplinary projects. *Scheduling keeps pathway students together for Advanced Placement and intervention classes*.
1.1.5.	**Staff collaboration**	Pathway staff either (1) do not operate as a professional learning community, (2) do not meet regularly, or (3) do not make effective use of collaboration time.	School and pathway leadership nurtures a professional learning community among staff, and the schedule provides *weekly collaboration time* for program coordination, the analysis of student work and data, curricular integration, and resolution of student problems.	School and pathway leadership nurtures a professional learning community among staff, and the schedule provides *daily collaboration time* for program coordination, the analysis of student work and data, curricular integration, and resolution of student problems.
1.1.6.	**Pathway preparation and orientation**	Students enter into a pathway with little or no orientation or transition services.	The pathway provides an orientation and other transition services for incoming students preferably beginning in middle school and involving parents.	For *two or more years* prior to pathway entry, parents and students are informed of pathway options and are *exposed to a sequence of activities* to ensure appropriate pathway selection, preparation, and smooth transition.
1.1.7.	**Postsecondary articulation**	Pathway may have connections with local postsecondary institutions, but formal agreements are either lacking or limited.	Pathway promotes a seamless transition *at least to local community college(s)* by putting in place articulation agreements, dual-enrollment, and/or other formal and informal activities. *Articulation with other institutions is planned or in progress*.	Pathway assures a seamless transition to *multiple* postsecondary education and training options through articulation agreements, dual-enrollment, and other formal and informal activities.

CRITERIA		CRITERIA NOT MET	CRITERIA MET	CRITERIA EXCEEDED
1.2	**Governance**			
1.2.1.	**Advisory board with broad representation**	An advisory board may exist, but either (1) is not active, (2) meets infrequently, (3) doesn't serve in an advisory capacity, or (4) includes limited stakeholders.	An active advisory board meets at least *quarterly* to set policies, develop resources, and advise the Program of Study. It includes representation from several involved stakeholders, including employers, educators, and community partners.	An active advisory board meets *monthly* to set policies, develop resources, and advise the Program of Study. It includes representation from involved employers, students, parents, higher education and community partners, pathway staff, and district and site administration.

2. Engaged Learning

2.1	**Standards Aligned Curriculum**			
2.1.1.	**Academic core**	The academic curriculum is not rigorous enough to lead to student mastery on standardized tests or other authentic assessment measures.	The academic curriculum is aligned to state standards and designed to lead to student mastery on standardized tests as well as on more authentic assessment measures.	The academic curriculum is aligned to state standards and *demonstrated* to lead to student mastery on standardized tests as well as on more authentic assessment measures.
2.1.2.	**Technical core**	The technical courses either (1) are limited to fewer than three courses or (2) are not aligned to state CTE or industry standards.	A sequence or cluster of three or more technical courses (or their equivalent) is aligned to state CTE standards and/or industry standards.	A sequence or cluster of six or more technical courses is aligned to state CTE standards and/or industry standards. *Multiple sequences offer specialization options for students.*
2.2	**Preparation for Postsecondary Options**			
2.2.1.	**Postsecondary preparatory curriculum**	The pathway Program of Study *does not adequately* prepare students for success—without remediation—in California's community colleges, universities, apprenticeships, and other postsecondary programs.	The pathway Program of Study prepares students for success—without remediation—in California's community colleges, universities, apprenticeships, and other postsecondary programs.	*As evidenced by several years of data*, the pathway Program of Study prepares students for success—without remediation—in California's community colleges, universities, apprenticeships, and other postsecondary programs.
2.2.2.	**Technical component**	A sequence or cluster of technical courses either (1) consists of fewer than three courses, (2) delivers basic *or* advanced industry knowledge and skills, but not both, (3) does not adequately emphasize industry-related knowledge and skills, or (4) does not use authentic applications.	A sequence or cluster of three or more technical courses delivers basic and advanced industry knowledge and skills. The focus is on preparing youth for high-skill, high-wage employment by emphasizing industry-related knowledge and skills, using authentic applications that bring learning to life.	A sequence or cluster of six or more technical courses delivers basic and advanced industry knowledge and skills. The focus is on preparing youth for high-skill, high-wage employment by emphasizing industry-related knowledge and skills, using authentic applications that bring learning to life.

CRITERIA		CRITERIA NOT MET	CRITERIA MET	CRITERIA EXCEEDED
2.3	**Real-world relevance**			
2.3.1.	**Real-world relevance**	Attempts at delivering academic core courses using career-related applications either lack authenticity or lower student expectations.	Academic core courses deliver standards-based content through authentic, career- or industry-related applications. Pathways alter how core academic subjects are taught; they do not lower expectations about what is taught.	Academic core courses deliver standards-based content through *complex*, authentic, career- or industry-related applications. *Students interact regularly with industry partners. Student assessment incorporates both academic and industry standards.*
2.4	**Integrated Curriculum**			
2.4.1.	**Multi-disciplinary integrated curriculum**	Use of inquiry-based instruction is *not yet common practice* among many pathway teachers and/or regular teachers. This approach actively fosters student development of communication and teamwork skills, among other Habits of Mind, SCANS, and 21st-Century Skills.	*Pathway teachers commonly use* inquiry-based instruction that enables students to experience authentic theme-based situations that require integrating knowledge and skills from several disciplines. This approach *fosters* communication and teamwork skills, among other Habits of Mind, SCANS, and 21st-Century Skills.	A *good portion* of the pathway curriculum is delivered through inquiry-based instruction that enables students to experience authentic theme-based situations that are integrated and multidisciplinary. Through this approach, students *master* communication and teamwork skills, among other Habits of Mind, SCANS, and 21st-Century Skills, *which are assessed and reported*.
2.4.2.	**Curricular alignment**	There is relatively *little curricular alignment* across disciplines and/or grade levels.	Teachers collaborate within and across disciplines and grade levels to provide students with a coordinated, coherent curriculum.	Teachers *use formalized processes and structures* to collaborate within and across disciplines and grade levels to provide students with a *highly* coordinated, coherent curriculum.
2.5	**Instruction and Assessment**			
2.5.1.	**Project-based approach**	Pathway students may participate in multidisciplinary projects, but they are either infrequent, include few disciplines, or are brief (i.e., days).	Each year, pathway students participate in *at least two extended* (2- to 4-week) multidisciplinary projects that integrate academic and technical course content. *Additional projects are planned or in development*.	Each year, pathway students participate in *several extended* multidisciplinary projects that integrate academic and technical course content.

CRITERIA		CRITERIA NOT MET	CRITERIA MET	CRITERIA EXCEEDED
2.5	**Instruction and Assessment (Continued)**			
2.5.2.	**Authentic assessment**	Pathway teachers rely almost exclusively on traditional or standardized assessments to measure student success, and they make little effort to design and use more authentic assessments.	To complement traditional or standardized student assessments, pathway teachers *periodically* design and use a variety of assessments to gain an accurate understanding of student learning. Assessments include opportunities for students to demonstrate skills and knowledge through real-world application.	To complement traditional and standardized student assessments, pathway teachers *regularly* design and use a variety of assessments to gain an accurate understanding of student learning. Assessments include opportunities for students to demonstrate *mastery of* skills and knowledge through real-world application.
2.6	**Work-based Learning**			
2.6.1.	**Coordinated, sequenced, and scaled work-based learning (WBL)**	Work-based learning (WBL) experiences are available to a *limited number of pathway students*. Plans are being developed to expand these opportunities.	Pathway offers *one or more* WBL experiences to a *large percentage of pathway students*. Pathway has *plans and resources to substantially expand* WBL experiences in the next year or two so that they become more coordinated, sequenced, and scaled.	Pathway offers real-world learning opportunities to *all pathway students* through a *4-year coordinated and structured sequence* of WBL experiences that progresses in duration and intensity and increases student expectations and independence.
2.6.2.	**WBL connected to academic and technical coursework**	*Students are left to their own devices* to make connections between WBL experiences and classroom learning.	*At least in limited ways (e.g., through reflection),* WBL experiences do not occur in a vacuum: they are connected to and reinforce classroom learning.	*In an intentional and structured way*, WBL experiences and classroom learning mutually reinforce one another.
2.7	**Support Services**			
2.7.1.	**Supportive atmosphere**	Pathway promotes personalization through limited size, teacher teamwork, and/or strong student-teacher relationships, but not necessarily all three.	Pathway maintains personalization through limited size, teacher teamwork, and strong teacher-student relationships. *Students feel supported*.	Pathway maintains personalization through limited size, teacher teamwork, and strong teacher-student relationships. *Students feel supported, highly valued, and part of a family*.
2.7.2.	**Student engagement**	Pathway staff *attempt to create, but have not fully succeeded in doing so*, a culture where students are actively engaged in their learning.	Pathway staff consciously and consistently work to create a culture where students are actively engaged in their learning, both in and out of the school setting.	*Evidence suggests that staff have succeeded* in creating a culture where students are actively engaged in their learning, both in and out of the school setting.

CRITERIA		CRITERIA NOT MET	CRITERIA MET	CRITERIA EXCEEDED
2.7	**Support Services (Continued)**			
2.7.3.	**Differentiated instruction**	Daily instruction may be differentiated by some teachers some of the time, but doing so is based on individual teacher training and inclination, rather than pathway staff collaboration and coordination.	*In a somewhat routine way*, daily instruction is designed with the knowledge that students vary in their preferred method of gaining information, understanding ideas, and demonstrating mastery. *Some pathway teachers* use multiple methods of presenting course content and assessing student learning to address each student's learning needs.	*Through formalized processes*, daily instruction is designed with the knowledge that students vary in their preferred method of gaining information, understanding ideas, and demonstrating mastery. *All pathway teachers regularly* use multiple methods of presenting course content and assessing student learning to address each student's learning needs.
2.7.4.	**Academic intervention**	Academic interventions are emerging and serve the needs of some students, but more must be done to address a range of needs for students.	Pathway students performing below grade level are supported by a range of services, which may include supplemental instruction, tutoring, credit recovery, before- and/or after-school programs, and academic support programs.	Pathway students performing below grade level are supported by a range of services that, *to the extent possible, are provided within the pathway and use the pathway's theme to motivate and engage students in learning. Evidence has demonstrated that these interventions have yielded substantial gains in student achievement.*
2.7.5.	**Guidance and counseling**	Pathway students are served by counselors, but they may be assigned alphabetically or by grade level, rather than by pathway.	Pathway has a designated counselor who knows pathway students and is familiar with the unique characteristics and needs of the pathway. The counselor participates actively in pathway team meetings.	Pathway has a designated counselor who knows pathway students *well* and is familiar with the unique characteristics and needs of the pathway. The counselor participates actively in pathway team meetings. *The counselor plays a lead role* in recruiting students, coordinating interventions, and aligning course selection and WBL experiences with student interests, among other roles.
2.7.6.	**College and career planning**	Each pathway student has a 4-year pathway Program of Study, but it may neither extend down to middle school nor ahead to postsecondary education, training, and career pursuits.	Each pathway student has a multiyear college and career plan that is informed by a range of college and career planning activities, extends through high school, and guides decisions about postsecondary education, training, and career pursuits.	Each pathway student has an *8- to 10-year* college and career plan that establishes a throughline from middle school career exploration activities to postsecondary degree attainment and career pursuits. It is informed by a robust set of college and career planning activities.

CRITERIA		CRITERIA NOT MET	CRITERIA MET	CRITERIA EXCEEDED
3. System Support				
3.1	**District Policies**			
3.1.1.	**Pathway choice, equity, and access**	Students are expected to attend their local high school. District and/or school policies and practices do not yet offer pathway of choice or placement equity.	District and school policies and procedures at least *allow* students to choose pathway options (within the school) and promote equity in placement of students in pathways. The district is addressing issues of school choice and transportation to ensure cross-district choice, equity, and access.	A range of district, school, and pathway policies and procedures support pathway development, implementation, and sustainability, including allowing students to choose pathway options; ensure equity in placement of students in pathways; and ensure that transportation issues do not preclude students from participating in the pathway of their choice.
3.1.2.	**Recruitment and hiring practices**	Administrators tend to assign pathway teachers without ample consideration of unique pathway staffing needs.	District and site administrators *do what they can* to meet the needs of pathway teams through recruitment, hiring, and retention of pathway teachers, but district policies and procedures do not yet guide these practices in a systemic way.	*District policies and practices value* the recruitment, hiring, retention, and evaluation of pathway team members, as well as the *need for pathway staff stability that supports ongoing pathway maturation and sustainability.*
3.1.3.	**Accountability and autonomy**	District policies *hold school sites and pathways accountable* for improving student outcomes, and in doing so may *mandate* certain curriculum, instructional methodologies, pacing, and scheduling *that is neither consistent with nor supportive of a pathways approach*.	District policies *hope* that pathways will improve student outcomes, and *allow for some degree of site and pathway autonomy* in determining the curriculum, instructional methodologies, pacing, and scheduling that will result in reaching those outcomes.	District policies *hold school sites and pathways accountable* for improving student outcomes, but allow for *substantial* site and pathway autonomy in determining the curriculum, instructional methodologies, pacing, and scheduling that will result in reaching those outcomes.
3.2	**Leadership**			
3.2.1.	**Support from school board and Superintendent**	Pathways develop in spite of the system, rather than with district support. As long as pathways are yielding student achievement gains, district administrators allow current functioning.	District leaders *support* pathways and *protect* their current level of functioning, but may neither serve as champions nor align resources, policies, and procedures to promote pathway quality and sustainability.	The district Board of Education and Superintendent are *champions* of a pathways approach, publicly endorse it, *offer active support, and align resources, policies, and procedures to promote pathway quality and sustainability.*

CRITERIA		CRITERIA NOT MET	CRITERIA MET	CRITERIA EXCEEDED
3.2	**Leadership (Continued)**			
3.2.2.	**Support from site leadership**	The high school principal and other administrators *do not get in the way of* pathway development and *are willing to support* pathway funding, facilities, staffing, and scheduling, *when these activities do not conflict with other site priorities*. Site leaders may have *limited understanding of and commitment to* pathways.	The high school principal and other administrators *generally support* the pathway and *cooperate to help secure* funding, facilities, staffing, scheduling, and support. Site leaders have a *common understanding of, vision for, and commitment to* pathways and their potential to improve student outcomes.	The high school principal and other administrators *publicly advocate for* the pathway and are *actively involved* in its funding, facilities, staffing, scheduling, and support. Site leaders have a common understanding of, vision for, and commitment to pathways and their potential to reduce high school dropout rates, raise student achievement, increase high school completion and postsecondary transition, and boost students' earning power.
3.3	**Professional Development**			
3.3.1.	**Teacher professional development**	The district requires participation in professional development activities that *may not be consistent* with the needs of pathway teachers and *may limit teacher participation* in professional development that is better aligned with their needs.	Site and district administrators *support* training for pathway teachers that is *aligned with their self-identified needs*. Support may be demonstrated by allocating resources, granting release time, and promoting a team approach.	Site and district administrators *provide or help arrange* training for pathway teachers in areas central to pathway quality, such as curricular integration, project-based teaching strategies, student support, and employer involvement.
3.4	**Qualified Staff**			
3.4.1.	**Skilled teachers**	The site principal either (1) does not acknowledge that pathway teachers must possess a unique set of skills and proficiencies or (2) does not set priorities for assigning, hiring, and retaining qualified teachers in the pathway.	The site principal acknowledges that successful pathway teachers must possess a unique set of skills and proficiencies, in addition to those required of all teachers. He or she hires and/or assigns qualified and willing teachers to fulfill these roles.	The site principal works *collaboratively with pathway teacher leaders to actively recruit and hire uniquely qualified pathway staff* that possess a unique set of skills and proficiencies. *Policies and/or practices are in place to keep the pathway team of teachers together* to promote pathway quality and sustainability.
3.4.2.	**Teacher leader/pathway coordinator**	The pathway lacks effective leadership and/or staff assigned to perform these functions and is not allocated ample time to do so effectively.	A pathway teacher has agreed to serve as the pathway leader/coordinator that is responsible for all pathway administrative and facilitative functions. The pathway lead *has ample time* to effectively perform these functions.	A pathway teacher has agreed to serve as the pathway leader/coordinator that *oversees* pathway administration. A *distributed leadership model involves many/most pathway staff in clearly defined leadership functions*.

CRITERIA		CRITERIA NOT MET	CRITERIA MET	CRITERIA EXCEEDED
3.5	**Partnerships**			
3.5.1.	**Active employer and community partnerships**	Partnerships may exist, but they may be mismanaged, intermittent, and of limited value or depth, and/or serve in roles that do not directly affect student learning.	The pathway has *several* strong partnerships with local employers, community groups, and individuals. These partners are actively involved in the pathway in a variety of capacities that might include serving as project mentors to students, being guest speakers, hosting field trips, and working with students doing service learning projects. Both through the advisory board and other interactions, there is evidence of a healthy partnership between the pathway/high school and its host community.	The pathway has *many formalized* partnerships with local employers, community groups, and individuals. *These partners voluntarily share responsibility for program effectiveness and student outcomes. A well-developed system has been designed to manage partnerships and ensure their effectiveness.*

4. Evaluation and Accountability

4.1	**Student Data**			
4.1.1.	**Data collection and reporting**	The pathway's data collection efforts are *insufficient* to describe pathway participants, make comparisons to the demographics of the school and district, and/or to report on students' performance on a variety of outcome measures.	The pathway regularly collects, analyzes, and accurately reports student assessment data including those necessary to describe pathway participants (e.g., grade level, gender, race/ethnicity), to make comparisons to the demographics of the school and district, and to report students' performance on a variety of outcome measures.	The pathway has a *system* in place to regularly collect, analyze, and accurately report student assessment data including those necessary to describe pathway participants (e.g., grade level, gender, race/ethnicity), to make comparisons to the demographics of the school and district, and to report students' performance on a variety of outcome measures.

CRITERIA		CRITERIA NOT MET	CRITERIA MET	CRITERIA EXCEEDED
4.1	**Student Data (Continued)**			
4.1.2.	**College and career readiness data**	Collection and analysis of data that indicate student readiness for college and career may be inadequate, inconsistent, inaccurate, or incomplete. As such, these data would not serve to examine evidence of impact.	The pathway annually collects, analyzes, and reports (*to at least its advisory board*) on *some* available indicators of both college and career readiness, which may include a-g completion rates, college enrollment data, SAT data, GPAs, CST scores, CAHSEE pass rates, graduation and dropout rates, pathway completion rates, occupational certification, proficiency through demonstration, completion of and grades in capstone technical courses, and end-of-course exams.	The pathway has a *system* in place to annually collect, analyze, and report *formally and broadly* on *many* available indicators of both college and career readiness (see list in column to the left).
4.2	**Pathway Evaluation**			
4.2.1.	**Evidence of impact**	The pathway either (1) does not conduct any analysis of pathway data, (2) does not use that analysis to make programmatic decisions and inform instruction, or (3) cannot demonstrate that the pathway retains its students and improves student performance.	*Annual* analysis of pathway data is used to make programmatic decisions and inform instructional practice. This analysis *demonstrates* that the pathway *retains its students* and that the pathway *improves performance* on *at least a few indicators of student achievement and readiness for college and career*.	*Ongoing, regular* analysis of pathway data is used to make programmatic decisions and inform instructional practice. This analysis *clearly demonstrates* that the pathway retains its students and improves performance on *most, if not all, indicators* of student achievement and readiness for college and career.
4.2.2.	**Periodic review and improvement plan**	Assessment of pathway functioning may be informal or anecdotal, neither based on hard data, completed in coordination with the advisory board, nor refer back to the pathway's underlying mission and goals.	Pathway *staff annually* assesses the pathway's functioning. These annual reviews result in the development of an *improvement plan*, whose action items refer back to the pathway's underlying mission and goals.	Pathway staff *and advisory board regularly and formally* assess the pathway's functioning. These periodic reviews result in the development of an improvement plan, whose action items refer back to the pathway's underlying mission and goals.
4.2.3.	**Postsecondary tracking**	Prior to students' graduation, pathway staff collect students' self-reports of their postsecondary plans, but the data indicate that pathway students do not continue to postsecondary education and training at high rates.	Prior to students' graduation, pathway staff *collect students' self-reports of their postsecondary plans*. Data *indicate* that pathway students *continue to postsecondary education* and training at *rates higher than* school site, district, and/or state averages.	Pathway staff conduct a *formal follow-up of students for several years after high school graduation* and use data collected for continuous improvement of the pathway. Data provide *clear evidence* that stated outcomes have been met.

Glossary

While terms in this Glossary may have additional meanings in other contexts, these definitions are intended to clarify each term's particular use in the Certification Criteria.

21st-century skills—The skills necessary for success in the 21st century are different from those needed previously. As our nation transitions from an "information age" to a "conceptual age," students must have critical-thinking, problem-solving, communication, and teamwork skills and creativity and awareness of the global economy to compete in today's work force.

Advisory board—An advisory board is a group of volunteers made up primarily of industry, postsecondary, education, and where appropriate, parent, student, and other community representatives that meets regularly to provide advice and support to the pathway. The advisory board builds the foundation for lasting partnerships.

Articulation—Articulation is the practice of aligning curriculum from one educational segment to another to encourage a seamless transition between courses, grades, and/or education institutions. Most commonly, high school courses articulate to community college courses that may allow high school students to earn college credit.

Capstone technical course—A capstone technical course is an 11th- or 12th-grade career and technical education (CTE) course(s) that allows students to "put it all together." Capstone courses provide students with an opportunity to use their knowledge and skills by integrating the material learned in beginning and intermediate CTE courses. Coursework generally includes advanced, industry-based skills and knowledge, internships, building a portfolio, and problem-/project-based learning.

Career technical education (CTE) course sequence—A multiyear sequence of CTE courses emphasizes technical skills and work-based knowledge while integrating the academic skills and knowledge necessary for the industry sector to provide students with preparation for the workplace and postsecondary education. The sequence typically includes beginning, intermediate, and capstone courses, as well as work-based learning (WBL) experiences.

Cohort scheduling—In cohort scheduling, a group of students with a defined educational need or focus are scheduled together in some or all of their classes.

Curricular integration—Integrated curriculum is an instructional methodology that breaks down traditional barriers between subjects to make learning more meaningful and engaging to students. Ideally, integrated curriculum includes a combination of various academic and CTE subjects and goes beyond textbook instruction by requiring students to use their skills and knowledge or acquire new learning in order to solve complex, real problems that are often industry-based.

Differentiated instruction—Differentiated instruction is an instructional approach in which the teacher adapts the content, process, and product of lessons to match each student's readiness, learning style, and interests. In differentiated instruction, the learning goals for all students are the same, but the required tasks, instructional approach, and materials used vary according to the needs of the individual students.

Dual enrollment—In dual enrollment, high school students enroll in college courses, which may be offered either on the high school or college campus, for which they may earn college credit.

Habits of Mind[1] —The Habits of Mind are a collection of 16 attributes people display when they behave intelligently. They were developed by Arthur Costa and Bena Kallick to help people develop their critical- and creative-thinking skills to become continuous learners and prepare for school, work, and life in the 21st century.

Inquiry-based instruction—Inquiry-based instruction is a student-centered, active learning approach driven more by learners' questions and critical-thinking and problem-solving skills than by teachers' lessons. It is associated with the idea "Tell me and I forget, show me and I remember, involve me and I understand."

Integrated curriculum—Integrated curriculum is a series of conscious and informed strategies used to connect the content of one or more academic and CTE courses so that what is learned in one discipline is combined with and reinforced in the other disciplines over an extended period of time.

Mission—A mission is a formal short written statement of the purpose and goals of an organization. It should guide the actions and decision making of the organization while providing a sense of direction. (See also "Vision" below.)

[1]Arthur Costa and Bena Kallick; *Discovering and Exploring Habits of Mind*; ASCD, 2000.

Multidisciplinary projects—When working on multidisciplinary projects, students are charged with finding viable solutions to real problems, or with achieving specific individual or group outcomes, through units of instruction that are horizontally aligned in several discipline.

Open access—All students, without regard to their past educational success, special education designation, socioeconomic status, English Language Learner designation, and race/ethnicity, etc., are provided equal access to educational opportunities including honors courses, Advanced Placement, and/or programs such as Small Learning Communities/academies/pathways. Open access supports increased participation of students in high quality, rigorous education by eliminating barriers and/or other restrictions.

Pathway—Pathways connect strong academics with CTE and real-world experiences in a wide range of career fields, using various program models, and prepare students for careers and postsecondary education.

Pathway theme—Pathway themes are generally based on one or more of California's 15 industry sectors. The theme is used to engage students and focus their learning on career and postsecondary goals.

Personalization—Personalization means that each student is known well by at least one adult in the pathway so that his or her learning needs are known and addressed. It also allows a student to choose a pathway theme and make curricular choices that match his or her career interests.

Postsecondary articulation—See "Articulation" above.

Professional learning community—A professional learning community consists of a collegial group of educators who are united in their commitment to student learning, share a vision, work and learn collaboratively, visit and review each other's classrooms, and participate in decision making together. Such a community has several possible benefits: it may reduce the isolation of teachers, lead to better informed and committed teachers, and result in academic gains for students. A professional learning community is seen as a powerful staff development approach and a strategy for school change and improvement.

Program of Study—A Program of Study is a prescribed curriculum sequence in which students are enrolled in a series of courses that ensures that they complete graduation requirements and an identified curriculum. Programs of Study can be designed for three or four years.

Project-based approach/teaching and learning—Project-based learning is a systematic teaching methodology that engages students by focusing on a complex question or problem and having them investigate answers to that problem over an extended period of time, often resulting in presentations and products.

SCANS (Secretary's Commission on Achieving Necessary Skills)—In 1990, the U.S. Secretary of Labor appointed a commission (the Secretary's Commission on Achieving Necessary Skills) to examine the demands of the workplace and determine the specific skills young people need to succeed there. The commission completed its work in 1992 and issued a report, *What Work Requires of School: A SCANS Report for America 2000*, now known as the "SCANS Report."

Supplemental instruction—Supplemental instruction provides an avenue for both students who are struggling and students who are excelling so that they can either catch up or expand their knowledge. Strategies may include modified curriculum such as shortened or lengthened assignments, targeted reading assignments, after-school instruction, tutoring, mentoring, reduction of class size, extended school year, summer school, etc.

Support services/systems—Support services/systems include various strategies and programs intended to assist students in reaching learning and performance goals and outcomes. These services/systems might include tutoring, academic intervention classes, CAHSEE support, supplemental instruction, counseling, advisory programs, AVID, credit recovery programs, health services, etc.

Technical content/component—Technical content or a technical component delivers industry-based knowledge and skills through a sequence or cluster of three or more CTE courses connected to the pathway's theme.

Vision—A vision describes how the future will look if an organization achieves its mission. A mission statement explains what the organization does, for whom, and the benefit(s). (See also "Mission" above.)

Work-based learning (WBL)—WBL is an educational approach that, by design, links learning in the workplace to learning in the classroom to engage students more fully and to intentionally promote their exposure and access to future educational and career opportunities. WBL includes all interactions with employers from career exploration discussions in the classroom to field trips, mentoring, job shadowing, internships, and actual work experiences.

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Rubric for Linked Learning Pathway Certification

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