

SECEP Design Principles Self-Assessment

STEM college-focused academic program Schools implement comprehensive, standards-based, STEM-focused curricula that provide a bridge to STEM postsecondary studies						
KEY DIMENSIONS	INDICATORS	CURRENT STATUS				EVIDENCE
		Not started	Initiated	In progress	Operational	
Each school has an approach for effective STEM education.	A range of people at the school works to develop an approach for effective STEM education.	1	2	3	4	
	A written statement about this design principle is created and used in making decisions.	1	2	3	4	
	An annual action plan is developed that includes this design principle.	1	2	3	4	
Each school creates a 4-5 year academic plan, including a sequence of STEM and non-STEM courses	Each school develops and regularly updates a 4-5 year academic plan that shows students' course sequences, including college courses.	1	2	3	4	
	Each SECEP school has one or more STEM curriculum maps that span 8th grade through the first year of college. The maps are linked to both partnering college majors and available career options.	1	2	3	4	
	Plans and maps are used in counseling students,	1	2	3	4	

	communicating with parents, and school planning.					
Systems are in place that allow the majority of students to earn 12 college credits while in high school.	Each high school allows most students to take 12+ free college credits, in STEM and other fields.	1	2	3	4	
	Colleges and high schools have systems in place related to logistics of college course-taking (advising, course registration, finances, awarding of credit, and handing problems).	1	2	3	4	
	Targeted numbers of students are participating in dual enrollment (and/or AP) and earning college credit.	1	2	3	4	
Math, science, and other teachers implement curriculum and instruction in alignment with best practices in STEM education.	Teachers implement comprehensive, standards-based, STEM-focused curricula and instructional methods that provide a bridge to STEM postsecondary studies.	1	2	3	4	
	Teachers produce or adapt high quality STEM curriculum rubrics that align with state standards and college goals.	1	2	3	4	
	Teachers implement student projects that provide a bridge to STEM postsecondary education and careers.	1	2	3	4	
	Teachers receive PD that enables them to improve STEM-related instruction and produce or adapt STEM curriculum rubrics.	1	2	3	4	
Students gain key college preparatory and navigational skills	Schools explicitly integrate college preparatory skills into selected courses.	1	2	3	4	
	Schools explicitly integrate college navigational skills into	1	2	3	4	

	selected courses.					
	Colleges provide substantive input into instruction on key preparatory and navigational skills.	1	2	3	4	

Student academic and social/emotional support Supports are offered to all students to meet their academic, social, and emotional needs in high school and the transition to college.						
KEY DIMENSIONS	INDICATORS	CURRENT STATUS				EVIDENCE
		Not started	Initiated	In progress	Operational	
Each school has an approach for effective academic and social/emotional support for students.	A range of people at the school work to develop an approach for effective academic and social/emotional support for students.	1	2	3	4	
	A written statement about this design principle is created and used in making decisions.	1	2	3	4	
	An annual action plan is developed that includes this design principle.	1	2	3	4	
Each high school has systems of support services tied to	Each high school has a map showing the supports available to students at each grade level and depending on their needs.	1	2	3	4	

student needs and their academic progression.					
	• High schools develop strategies to rapidly identify - and help - students in need of support.	1	2	3	4
	• High schools support students: 1) to stay on track academically, 2) to prepare for college, 3) in STEM coursework, 4) in college coursework, 5) in meeting socio-emotional needs.	1	2	3	4
	• High school students receive useful feedback on their progress toward college readiness.	1	2	3	4
	• High schools monitor utilization and effectiveness of student supports.	1	2	3	4
High school students receive support in the transition to college.	• All students are exposed to colleges that would be appropriate to their interests and talents.	1	2	3	4
	• All (most?) students are assisted to apply to at least one college and to apply for financial aid.	1	2	3	4
Middle and high school students have opportunities to make decisions on life directions.	• Students receive counseling and assistance to develop a college and career plan; STEM options are well understood and explained.	1	2	3	4
	• Students are exposed to a range of cultures and environments that broaden their understanding of the world	1	2	3	4
	• High schools develop/refine strategies to expose students to STEM options and opportunities.	1	2	3	4

Middle and high school students are exposed to college options and expectations	Schools develop and implement a plan for exposure of students to the culture and norms of college.	1	2	3	4	

High school/college collaboration High schools and colleges take joint responsibility for students' educational success.						
KEY DIMENSIONS	INDICATORS	CURRENT STATUS				EVIDENCE
		Not started	Initiated	In progress	Operational	
Each school-college partnership has an approach for how to work together on this initiative.	A range of people at the high school and college works to develop an approach for an effective partnership.	1	2	3	4	
	A written statement about this design principle is created and used in making decisions.	1	2	3	4	
	An annual action plan is developed that includes this design principle.	1	2	3	4	
Each high school has a formalized relationship with at least one college	- A formal Memo of Understanding (MOU) or other legal document is in place that outlines the roles and responsibilities of the partner entities. The MOU specifies - College course options.	1	2	3	4	

partner (directly or through the district or ISD).	○ Access of students to the college campus. ○ The division of financial and other responsibilities. ○ Provisions for sharing data.					
	• The college appoints a liaison who works at/with each high school to coordinate project-related partnership activities.	1	2	3	4	
Each high school has a mechanism for regular formal and informal communication with partnering college representatives.	• Regularly scheduled meetings allow for communication and interaction among administrators, counselors and faculty at the high school and college.	1	2	3	4	
	• There are regular opportunities to reflect on ways to strengthen the partnership.	1	2	3	4	
	• There is a clear system for collaborative work to reduce barriers to high school student participation in college courses.	1	2	3	4	
There is a clear system for review and update of STEM pathways as well as other course sequences.	• High school and college faculty in STEM and other disciplines meet regularly to improve student opportunities to study in STEM areas.	1	2	3	4	
	• Opportunities are sought to enable high school students to obtain STEM certificates and other valued credentials.	1	2	3	4	

Culture of continuous improvement

High schools and colleges engage in evidence-based discussions to continuously improve students' experiences and outcomes.

KEY DIMENSIONS	INDICATORS	CURRENT STATUS				EVIDENCE
		Not started	Initiated	In progress	Operational	
Each school has an approach for how to engage in continuous improvement, in partnership with a college.	A range of people at the high school and college works to develop an approach to creating a culture of continuous improvement.	1	2	3	4	
	A written statement about this design principle is created and used in making decisions.	1	2	3	4	
	An annual action plan is developed that includes this design principle.	1	2	3	4	
Schools and colleges engage in continuous improvement practices using data.	Schools receive data reports annually to be used in making data-informed decisions.	1	2	3	4	
	Schools and colleges engage in discussions on how to improve student experiences and outcomes, based on data.	1	2	3	4	
A process is undertaken to look at alignment between high school and college math, science, and research skills.	Selected teachers at each participating middle and high school learn about college expectations in STEM and other fields.	1	2	3	4	
	Middle, high school and college faculty in STEM and other fields work toward greater alignment of curriculum and	1	2	3	4	

	instructional practices.					
There are regular opportunities for project-related professional development (PD).	A plan for ongoing project-related PD is developed by each school, in collaboration with the district and coaches.	1	2	3	4	
	There are regularly scheduled project-related PD sessions that provide opportunities for cycles of improvement (i.e. not just one-off PDs).	1	2	3	4	
	Teachers are provided with common planning and discussion time to allow them to work in groups on project-related activities.	1	2	3	4	

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