COBB COUNTY SCHOOL DISTRICT

SCIENCE•TECHNOLOGY•ENGINEERING•MATHEMATICS

STEM Cobb Instruction Look Fors

1. Rigorous and Relevant STEM Learning Culture		Very Evident	Evident	Somewhat Evident	Not Observed
1.1 School/program has clearly established STEM culture of learning that is evident throughout the school/program.	Clear shared vision and mission for STEM culture	4	3	2	1
	STEM culture can be seen and "felt" within the school. (STEM program is branded, evidence on the walls and in classrooms throughout).	4	3	2	1
1.2 Learners are intentionally provided unique STEM focused interdisciplinary instructional experiences aligned to relevant math and/or science standards.	STEM instruction integrates multiple STEM disciplines. Relevant GSE for math **and/or** science are the focus of the learning. Additional content disciplines (ELA, social studies, technology, fine arts, etc.) are integrated as applicable.	4	3	2	1
1.3 School/program engages in proactive strategies to recruit and support engagement from students traditionally under-represented in STEM fields.	Evidence of clubs, groups, learning tasks, etc. that promote awareness and provide access to STEM professionals often under-represented in STEM fields.	4	3	2	1
	Program Only Schools – Participation in STEM program is representative of the demographic population of the school.	4	3	2	1
1.4 STEM educators serve as facilitators who provide guidance and support of rigorous student-centered learning experiences.	Educators serve as a facilitator of learning.	4	3	2	1
	Learners are confronted with complex problems/projects which require them to think in complex ways and apply the knowledge and skills they have acquired.	4	3	2	1
2. STEM Learning Experiences and Outcomes		Very Evident	Evident	Somewhat Evident	Not Observed
2.1 Learners work independently and collaboratively in an inquiry-based learning environment that encourages finding creative solutions to authentic (real-world) and complex problems using the engineering design process.	Learning integrates the 4Cs – Creativity, Communication, Collaboration, Critical Thinking as well as developing soft skills and teamwork.	4	3	2	1
	Learners engage in investigative research **and/or** apply the Engineering Design Process to develop solutions to real-world problems.	4	3	2	1
	Students have opportunity to participate in: Robotics teams; Science Olympiad; Recycling Clubs, Gardening Clubs; Tech Team; Mathletes; Science & Engineering Fair; STEM Club; Regional Technology Competition; or other locally developed clubs, teams & competitions (These are options, not a required list of clubs/extracurricular activities).	4	3	2	1

2.2 Learners conduct investigative research to make claims, collect evidence, analyze data and communicate their findings using digital and non-digital resources.	Digital portfolios and written journals contain evidence of learners engaging in short and long-term investigative research projects. Journals reflect evidence of student thinking and attempts to make sense of data collected.	4	3	2	1
	Learners are producers and not merely consumers of technology through the development of multi-media products, digital journals, BLOG posts, websites, coding and programming, robotics, augmented/virtual/mixed reality tools, Apps, digital probes to collect data, O365 tools, etc.	4	3	2	1
	Learners encouraged to self-assess (using rubrics, checklists, etc.) and reflect on their learning.	4	3	2	1
3. Teacher Collaboration and Professional Learning		Very Evident	Evident	Somewhat Evident	Not Observed
3.1 STEM educators and leaders meet on a regular and frequent basis to plan, revise and improve learning experiences.	Formal structure with dedicated STEM planning and collaboration time for all STEM educators weekly to plan integrated lessons, share/co-create STEM activities, and plan learning outcomes	4	3	2	1
	Evidence of STEM PBLs being implemented across courses and classrooms; STEM learning isn't limited to a single classroom/course.	4	3	2	1
3.2 STEM educators and leaders participate in ongoing STEM-specific professional learning designed to improve content knowledge of STEM disciplines and practices.	List of STEM focused professional learning opportunities and educators who have participated	4	3	2	1
	Evidence of strategies learned in professional learning implemented/ integrated into classroom instruction	4	3	2	1
4. STEM Community Engagement		Very Evident	Evident	Somewhat Evident	Not Observed
4.1 Multiple business, community and post-secondary partnerships are on-going, intentionally connect to STEM learning experiences and promote awareness of STEM careers.	Partners participate in learning in person or virtually through career fairs, interviews, sponsors, judges, mentoring, and students share evidence of learning from STEM PBLs in other ways.	4	3	2	1
	Learners have multiple formal, age-appropriate opportunities to engage with STEM practitioners, community experts and/or other STEM partners to help them connect new learning with real-world examples and workforce readiness.	4	3	2	1
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