

Integrating Core Academics into CTE: A professional reflection of Math Pathways in CTE

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Shoulder Partners



With a shoulder partner, discuss each question until time is called. We will then move to the next question.

1. Is there Core Content covered in CTE Courses?
2. Is CTE measured on Academic Performance?
3. What natural connections can be made from core to CTE content?
4. How might integrating courses improve student performance?



CTE Academic Performance Measures



Graduating Class of 2024-2025

	ELA	Math	Science
CTE Concentrators	44.1%	29.5%	46.3%
All Students	42.7%	28.1%	45.0%

- ATLAS (grades 8–10); Dynamic Learning Maps (grades 8–10); ACT (grades 11–12; uses 3-year best score; if no ACT is available, ATLAS will be used); ACT Aspire* (ACT Aspire scores are only used for students who do not have another more recent assessment). The ATLAS and DLM assessments are broken into four proficiency levels, and students with Level 3 or Level 4 are considered “proficient.” For ACT, the scores required to meet proficiency standards are: Reading = 22; Math = 22; Science = 23. As is done for ESSA/School Letter Grades, LEA score is determined by the percentage of students who meet proficiency standards.

Proven Integration Methods



- Act 242 of 2023
- TNTP Math Pathways
- Professional Learning Communities

Act 242 of 2023



[ACT 242 of 2023](#) created the process in which a public-school student may substitute comparable elective coursework pertaining to career and technical education for core academic classes that are required for graduation. The courses are identified annually through a crosswalk released by the Department of Education.

All course substitutions can only be utilized for one credit substitution.

All Math credits substitute for the 4th Math Graduation Requirement.

All Science credits substitute for the 3rd Science Graduation Requirement.

All History credits substitute for the Personal and Family Finance Standard - A.C.A.6-16-135.

Course Number	Course Name	Academic Credit Substitution				
		ELA Credit	Math Credit	Science Credit	History Credit	Other Credit
492110	Accounting II		✓			
492140	Advanced Databases Applications					Computer Science
491300	Agribusiness II					Oral Communication: Professional Communication
593040	AP Business with Personal Finance				✓	
565130	AP Computer Science A		✓	✓		Computer Science
565000	AP Computer Science Principles			✓		Computer Science
565210	AP Cybersecurity		✓	✓		Computer Science
494710	Architecture and Civil Engineering I					Fine Arts
495440	Architecture and Civil Engineering II		✓			
465430	Artificial Intelligence		✓	✓		Computer Science
492090	Banking and Finance I				✓	
593640	Business Intelligence					Computer Science
491630	CASE Ag Power and Technical		✓			
491470	CASE Natural Resources			✓		
491160	CASE Animal Science			✓		
491170	CASE Plant Science			✓		



- **Continuous Improvement** is the process through which districts will identify priority area(s) that are directly connected to root causes of the current gaps in students' Math skills.
- **E-W Framework** guides the design of continuous improvement cycles, providing guidance around relevant data points, enabling conditions and evidence-based practices, supporting the work of assessing and addressing disparities along the pre-K-to-workforce continuum.
- **State longitudinal data system informs the work**, connecting the K-12 experience with post-secondary outcomes, building understanding of the current state and considerations to inform improvement efforts.

Panelist Members



Manesseh Moore

Principal
Alma High School

Shannon Puckett

CTE Coordinator
SouthWest Arkansas Education Service Cooperative

Adam Musto

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Panel Question Areas



- Act 242 of 2023
- TNTP Math Pathways
- Professional Learning Communities

Panel Questions



- Act 242 of 2023
 - How has Act 242 benefited students?
 - How has Act 242 benefited your district's human capital capacity?
 - Do you have any concerns or reservations with students substituting courses with Act 242?
 - How can Act 242 strengthen a student's success plan?
- TNTP Math Pathways
 - How do you currently integrate core academic instructors and CTE instructors for vertical alignment?
 - What was the first step taken to bridge CTE and core academic educators?
 - How are you measuring academic growth outside of academic assessments?
 - What systems are in place to foster continual improvement?
- Professional Learning Communities
 - How are you creating intentional time for instructors to PLC over shared content?
 - How are students connecting their core academics and CTE courses through common formative assessments?
 - How are you measuring student data on a specific skill from multiple courses?

Panel Questions

Q&A

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