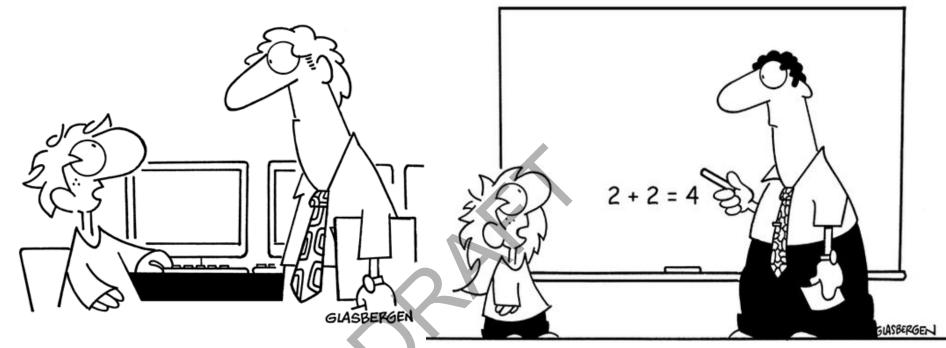


Camdenton R-3 State of Technology & STEM Education

March 13, 2017



"I won't be impressed by technology in the classroom until you figure out how to install Google directly in my brain."

"How can I trust your information when you're using such outdated technology?"

"We need technology in every classroom and in every student and teacher's hand, because it is the pen and paper of our time, and it is the lens through which we experience much of our world." - David Warlick



DISTRICT TECHNOLOGY COMMITTEE

Everyone Learning.....

CAMDENTON R-III STRATEGIC PLAN 2015-2020

After teaching all day, if you didn't learn anything, you probably didn't teach anything.

-Don Taylor

...Every Day!



"The need to know the capital Technology-Rich Curriculum of Florida died when my phone learned the answer: Rather, the students of tomorrow need to be able to think creatively: they will need to learn on their own, adapt to new challenges and innovate Fund on-the-fly." - Anthony Chivetta, high school student in Missouri Student-Centered Learning Quality Technology Proficient Access to Technology Staff

OUR DAILY ROAD MAP..... CR-3 STRATEGIC PLAN 2015-2020

VISION STATEMENT

EVERYONE LEARNING EVERY DAY

•MISSION STATEMENT

 The Camdenton R-III School District will create a learning community that maximizes each individual's performance for future success.



Camdenton R-III District TECHNOLOGY Plan

GOAL

A connected learning community will be developed through a comprehensive technology plan that identifies, develops, and provides access to the digital tools, devices, and support that will expand visionary administrative leadership, improve teacher effectiveness, and raise student achievement.

COMPREHENSIVE DISTRICT TECHNOLOGY PLAN

Created last year (2015-2016)

Collaborative effort with many stakeholders (students, parents, teachers, community members, etc.)

Supports District Strategic Plan (2015-2020)



Camdenton R-III District TECHNOLOGY Plan GOAL

A connected learning community will be developed through a <u>comprehensive technology plan</u> that identifies, develops, and provides access to the digital tools, devices, and support that will expand visionary administrative leadership, improve teacher effectiveness, and raise student achievement.

GOAL AREAS - STRATEGIES AND ACTION STEPS

Innovative Teaching and Learning

Connected and Collaborative Learning Community

Ethics, Responsibility, and Equity

Systems and Procedures



Framework for assessing and evaluating progress - example

Goal Area: Innovative Teaching and Learning

Objective: <u>To effectively integrate technology into instruction to enhance learning for all stakeholders and ensure college and career readiness.</u>

Strategy	Action Step	2016-2017 Focus Area	Artifacts	Persons Responsible
Enhance learning opportunities for staff on how to effectively integrate technology.	Identify and implement instructional practices (such as project-based learning, Project Lead the Way, S.T.E.M.) that inherently require the integration of technology into the teaching and learning process.	PLTW Staff PD Training (Launch) STEM Committee Site Visits GOCSD Innovation Summit GOCSD PD Opportunities	PLTW Training certificates and district certification Site Visit Meeting Minutes Innovation Summit agenda, conference guides, presentations PLTW Training certificates and district certification	PLTW Teachers, STEM Committee, Library Media Specialists, Instructional Coaches, Director of STEM Education

Camdenton R-III District TECHNOLOGY Plan

Current and Future Initiatives

- District 1 1 Student Device Plan
- BrightBytes Survey Tool & Analysis
- 5 year Teacher & Lab Device Plan
- 5 year IT Infrastructure Plan
- District Technology Safety & Security

Camdenton R-III District TECHNOLOGY Plan

District 1 – 1 Student Device Plan

- Goal: 3:1 (K − 2), 2:1 (3 − 4), and 1:1 (5 − 12)
- Phased approach Goal achieved by 2020
- Reallocation of older devices + new devices
- District managed leverages volume purchases
- Device follows student until EOL
- Funded by budget reallocation (priority mod's)

Camdenton R-III District TECHNOLOGY Plan BrightBytes

- Technology data acquisition tool
- Student, Teacher, Parent input
- Baseline data & assess and evaluate progress
- Supports Tech., STEM, IT, PD, Curriculum
- Performed annually
- GOCSD and National comparisons
- Research based resources for improvement

Emerging 900-999

Beginning 800-899



Exemplary 1200-1300

Advanced 1100-1199

CASE" Score

1056 Proficient

BENCHMARKS DATE OVERALL CLASSROOM ACCESS SKILLS ENVIRONMENT

All Technology & Learning As of Dec 28, 2016 1063 978 1180 1128 1082

Service Agency Districts Schools

SERVICE AGENCY	DATE RANGE	OVERALL	CLASSROOM	ACCESS	SKILLS	ENVIRONMENT
Greater Ozarks Cooperating School Districts	2016 - Present	1058	977	1163	1121	1079

Service Agency Districts Schools

DISTRICTS	DATE RANGE	OVERALL	CLASSROOM	ACCESS	SKILLS	ENVIRONMENT
Camdenton R lii	Jul 1, 2016 to Present	1056	987	1148	1130	1058

Emerging 900-999 **O** Bright**Bytes**

- Exemplary 1200-1300
- Advanced 1100-1199

Beginning 800-899

> 1056 Proficient Skills Classroom Access Environment == Use of the 4Cs Access at School Foundational The 3Ps Teachers Teachers Teachers Support Students Students Students Professional Learning Access at Home Digital Citizenship Online Beliefs Teachers Teachers Teachers Students Students Students Multimedia Assessment Teachers Assistive Technology Students

Camdenton R-III District STEM Plan

Strategic Plan STEM Strategies / Goals / Objectives (College & Career Ready Curriculum)

- 1. S.T.E.M. courses will increase in number by the 2016-2017 school year, will be equivalent to peer districts by the 2017-2018 school year, and will offer at least one unique course in this area (not available in all peer districts) by the start of the 2020-2021 school year.
- 2. A district team (faculty, staff, administration, students, etc.) will be selected to be responsible for researching leading-edge S.T.E.M. courses in regional peer districts, statewide and, where appropriate, nationally.



"I expect you all to be independent, innovative, critical thinkers who will do exactly as I say!"



Camdenton R-III District STEM Plan

- District STEM Committee formed 2015-2016
- Defined STEM & District STEM Snapshot
- Researched STEM Frameworks (Carnegie)
- Developed Action Plan (PLTW)
- 2016-2017 Site Visits & Course Additions
- PLTW Re-certification effort



Camdenton R-III District STEM Achievements

- Added new STEM Courses
- Site visits to Blue Springs, Liberty, Nixa, West Plains (future implementation & training visits)
- Completed study of K-6 STEM framework have recommended PLTW Launch
- Proposed Launch Phase 1 Plan to Principals
- Track progress via Carnegie STEM Pathway



Camdenton R-III District *STEM*Course Additions 2017-2018

- PLTW Engineering Design & Development (HS)
 - 1. Engineering Capstone Course
- PLTW Principles of Biomedical Science (HS)
 - 1. PLTW Biomedical Science Pathway
 - 2. College credit available for each course (MS&T-Rolla)

- PLTW Gateway (Middle School)
 - 1. Computer Science



Camdenton R-III District STEM

PLTW 100% Student Access Award





Emerging 900-999

Beginning

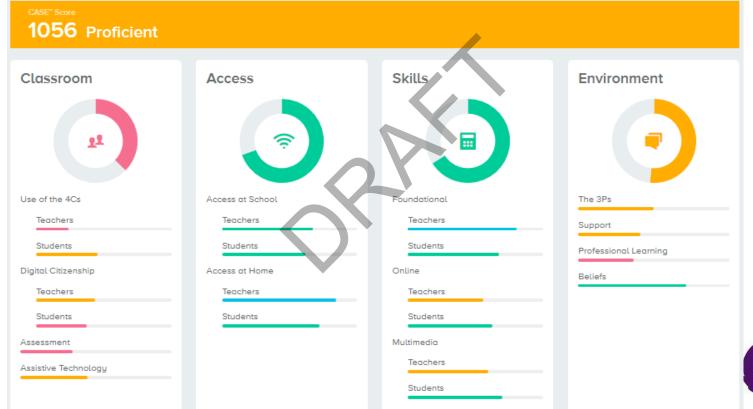
800-899

Camdenton R-III District STEM

BrightBytes Baseline Data

Exemplary 1200-1300

Advanced 1100-1199





Camdenton R-III District STEM Plan - FUTURE

- Implement STEM K 6 framework (PLTW Launch)
- Framework phase I plan, schedule, budget
- Curriculum integration & standards alignment
- Monitor, evaluate, assess progress to plan
- District alumni longitudinal STEM data analysis
- Support HS & MS PLTW programs



