

Center Grove STEM ATF

SWOT Analysis – March 16, 2015

Strengths		Weaknesses	
<ul style="list-style-type: none"> • Technology Support • Multiple STEM Opportunities • Staff/Admin. Support • Collaboration • Knowledgeable Teachers • Clubs • Staff Enthusiasm • Student/Community driven projects • Diverse Course Offerings • Resources • Computer Programming Hour of Code • Extra-Curricular Activities • Block Time for Labs • Red Alert Robotics • Culture of technology • Integrated curriculum • Willingness to move forward with STEM focus. • Cutting edge in technology hardware • Students “jump-in” • Student choice • Variety • Cross-Curricular PBL • Pathways link to careers • Hands-on learning • C9 programs 	<ul style="list-style-type: none"> • Community Partners • Critical thinking/communication • Learner engagement/excitement • Amount of technology available • Parent volunteers • Local resources available • College connection for dual credit • Robotics boosters & mentors • Grants available from CG Ed. Foundation • Infrastructure present • CGCSC dedication to technology • Networks • Invested stakeholders • Exploratory opportunities • Early access to tech. • Applying tech skills to problem solving critical thinking and global awareness • Understanding process is as important as getting an answer 	<ul style="list-style-type: none"> • Offerings not organized. What do the offerings lead to? • Education of counselors on current offerings • What do the names of the programs really mean? • Education of what’s going on between schools • Presentation of class offerings to parents • Working with people from community. Student driven / community driven projects. • How course offerings are presented • Public awareness (better PR) • Common STEM definition • PBL not embedded K-12 • Time/scheduling constraints • No cohesive plan or problem solving between teachers and grades • Developing solutions without too much adult guidance • Not having wide-spread understanding of STEM • What does STEM mean to CG? • Need PD (in house) related to STEM • Different levels of ability and comfort n staff • Lack of vertical articulation from K-12 • How do all available opportunities “go together” to develop one or more paths? • Sequencing of science classes 	<ul style="list-style-type: none"> • Student/career counseling • Technology training • After AP classes? • Rigor at every level (ex. General Chemistry and Honors Chemistry) • K-5 limited STEM opportunities • K-12 missing any articulation (No defined CG STEM experience) • Counselors lack time to help students find passions and improve transitions; Elementary – Middle School; Middle School-High School • No chance for students who are “unsure” to explore • Funding levels • State constraints hinder creative teaching • Some Teachers, have no team time, want no team time, have no expertise depth, have expertise spread thin across several courses • Work-world mentoring too infrequent • No built-in connection(s) to other key teachers • Guidance not always effective
Opportunities		Threats	
<ul style="list-style-type: none"> • Outreach to organizations such as Lilly, Cummins, Anthem, etc. to visit CG and see what we have to offer. • STEM leader in the state • Possible STEM associate degree similar to Early College • Polytech Schools – combination of industry, public school, and universities • Teacher buy-in • No study hall? Use more effectively • Holistic approach • Vertical communication between grade-level instructor • Exciting to be on the “front” of something new • Learning about how current students learn • Utilize Clubs: “Coders with Class” –HS (Ehresman); “App Club” –MS (Snodgrass) • Use Global Campus to help kids take courses to “free-up” time in their schedules to take more electives • C9 	<ul style="list-style-type: none"> • PLTW • C9ish programs at middle school • More help with planning-HS departments guide students • Continue “Keystone” each year • Align vertically technology needs with curriculum • Define a STEM experience @ CG • PLTW @ all grades • Develop a “Course Fair” @ Middle School; Ease transition to HS • Parent support and career context • Collaboration • Mentoring relationships (Teachers-working professionals) • Co-teaching opportunities using working professionals • Highlight for kids-variety of course offerings and career opportunities • Exploratory courses • Returning recent alumni give feedback 	<ul style="list-style-type: none"> • Course offerings (timing during the day) • Level of consistency across the state on what STEM really is • Lack of understanding from CG teachers on what STEM is • \$ • Compare with other school districts or charters • Working to stay current on the latest and greatest • Student sustainability (making it through all years of program) • Teachers/buildings-being territorial • Studying technology and not problem-solving • Time spent testing instead of learning • Change, in general, is scary for some • Turning subjective grading into a rubric-challenging • State focus on standardized testing diverts teacher focus • Over reliance on technology 	<ul style="list-style-type: none"> • Student becoming too focused and specialized-so not adaptable • Planning and collaboration time for integration • PLTW • Change In science standards • Funding for professional development and time to develop experiences. • Change in how counseling works @ CG • Any negative move in funding • Politicians setting or shifting standards • Economy • More pressure on testing