

STEM Report for the BOE

What is STEM?

The Colorado Department of Education describes STEM as,

“An interdisciplinary approach to learning where rigorous academic concepts are coupled with real-world lessons as students apply science, technology, engineering and mathematics in context that make connections between school, community, work, and the global enterprise, enabling the development of STEM literacy and with it the ability to compete in the new economy.”

- Tsupros, Kohler, & Hallinen, 2009

In Jeffco, we describe the mission of STEM as follows,

“To support student success in the fields of Science, Technology, Engineering and Math, Jeffco STEM students will engage in an interdisciplinary approach to learning Jeffco’s curriculum and put their content knowledge into action to solve real-world problems.”

Jeffco STEM programs implement the following to ensure that our academic programming is rigorous and grounded in CCAP, our guaranteed and viable curriculum.

- **PBL:** “In Project Based Learning (PBL), students go through an extended process of inquiry in response to a complex question, problem, or challenge. While allowing for some degree of student “voice and choice,” rigorous projects are carefully planned, managed, and assessed to help students learn key academic content, practice 21st Century Skills (such as collaboration, communication & critical thinking), and create high-quality, authentic products & presentations.”
- Buck Institute for Education.
- **PBL matched to CCAP:** PBL (Project Based Learning) is grounded in the Colorado Academic Standards. PBL experiences are aligned with CAP for all content areas. PBL teachers in Jeffco will work to find connections between existing units and within the pacing guide identified in our YAAG (Year at a Glance) to ensure our curriculum is implemented with fidelity in a project based setting.
- **Instructional Practices (Facilitation of Learning):** STEM education is an instructional approach that integrates the rigorous content and skills of science, technology, engineering, math, and literacy. Inviting students to create a need to know (relevance) helps to engage students in their own learning. Although there is a time and place for lecture in a STEM classroom, delivery of content is not born out of teacher presentation until students recognize a “need to know”.
- **Elevate Role of Reading and Writing:** Reading and writing throughout the STEM curriculum allows students to become more experienced and proficient in drawing inferences, analyzing data, solving complex problems and deepening their knowledge. Students use writing to process their own thinking and create documentation to support their understanding of projects. Relevant texts tie directly to a student’s “need to know.” Students engage with texts born out of inquiry. Teachers help students to comprehend this information per identified project outcomes.

- **Engineering component (NGSS Science and Engineering practices, 21st Century Skills, Grade Level Concepts):** The Jeffco STEM Engineering Elective is a project-based program designed to challenge and engage all students. This program is hands-on and based in real-world experience. This elective will have a rigorous spiral progression of the science, engineering and math practices between grades 6, 7, and 8 with cross-curricular connections to CCAP aligned to every course project. Students will be engaged in focused and relevant study so that they develop their innovative, collaborative, critical thinking and problem solving skills. They will envision, design and test their ideas with advanced modeling software such as Computer Aided Design, 3D printing, etc.
- **Technology ISTE (International Standards for Technology in Education):** Through the use of various digital tools, STEM teachers will facilitate and inspire student learning and creativity. STEM teachers will model digital-age work and learning and promote and model digital citizenship and responsibility. STEM students will demonstrate creative thinking, construct knowledge, and develop innovative products and processes using technology. STEM students will use digital media and environments to communicate and work collaboratively, including at a distance to support individual learning and contribute to the learning of others.
- **Project Database:** A project database is being developed for a variety of topics and levels showing connections between contents. The projects in this database are for use or manipulation by the teachers to meet the needs of their students. As projects are developed, they will be housed in CCAP for teachers to share.
- **Student Email and use of Google Docs, Schoology:** Each student will use their Jeffco email address to access a common suite of google resources. This tool will be used by teachers and students to support evidence of student learning, planning, and identified projects. Schoology will be used as a tool to support collaboration of students as they complete cross content projects. Schoology will also be used to support teachers in collaborating with colleagues and students.
- **Grading Expectations (Assessment):** Students in STEM programs within Jeffco are evaluated in reference to the Colorado Academic Standards. We are also in the process of developing rubrics to evaluate 21st Century Skills. Authentic Assessment is a component of STEM that helps students to understand learning expectations at a deep level. Teachers partner with other schools, community members, local experts, businesses, and local universities to create an authentic audience for our students. Throughout the project, teachers help students to prepare for a presentation of their learning. Students are expected to reflect on their learning at the end of each project. Their reflection includes considerations of growth per 21st century skills and Colorado Academic Standards.
- **Community Partnerships:** To support authentic experiences for our STEM students, partnerships have been created with Challenger Space Center (Colorado Springs), Colorado School of Mines (upcoming), Warren Tech, and NASA. For NASA, students are creating science experiments to potentially be run on the CASIS (Space Station).

- **Data Connections:** We are tracking STEM students and comparing to non-STEM students in the same environment. To consider the success of STEM students, we are looking at data from a number of assessments including Jeffco summative and formative tests, common content assessments, and perceptual surveys. STEM students are also expected to complete district and state assessments as any other Jeffco student would be expected to complete.
- **Role of Teacher:** STEM teachers facilitate the learning in their classrooms by transferring control of the learning process to the students. STEM teachers foster curiosity in the classroom through open-ended questions and posing problems, rather than answers, that guide students on a search for solution. STEM teachers engage students in inquiry and provide experiential and hands-on learning experiences that have real world applications. STEM teachers expect collaboration among students. This is done by actively teaching and evaluating teamwork skills and working with students to increase awareness of their team behaviors and ways of interacting with the class. STEM teachers also learn in a community through collaborative work with their colleagues.
- **Characteristics of STEM Teachers:** STEM teachers are described as student-centered and inquiry based. They value discovery and formative practices when planning to facilitate learning. Many STEM teachers pride themselves on being flexible, innovative, creative, and collaborative. Working together with their teaching colleagues, STEM teachers plan for cross content projects to support a variety of learners.
- **Team Teaching:** Team teaching is strongly encouraged in a STEM, project based setting. Partnering with a colleague to support cross content connections and facilitate inquiry adds value to the STEM experience for students.
- **Description of Student:** All students can be successful in a STEM program. Students who are in STEM are hands-on learners and see a real-world purpose for their learning. STEM students collaborate with peers for the purpose of solving a real world problem while employing the 21st century skills. All populations are invited to participate including G/T students, IEP students, ESL students, 504 students, etc.
- **Current number of students as of 1/15/14:**

At Deer Creek:

8th Grade	63
7th Grade	116
6th Grade applications	36 (<i>Included, pg. 23</i>)

At Bell:

8th Grade	51
7th Grade	59
6th Grade	67 (students voluntarily select to take the STEM elective course)

- **Role of SPED, GT, and ESL:** STEM does not exclude these learners from the program. Regardless of student needs, students qualifying for Special Education, ESL, or ALP services will receive their services within any Jeffco STEM program.

Why is STEM beneficial to students?

- Experts say that technological innovation accounted for almost half of U.S. economic growth over the past 50 years, and almost all of the 30 fastest-growing occupations in the next decade will require at least some background in STEM.
 - (<http://changetheequation.org/why-stem>)
- Students are able to connect, apply and transfer their learning to real-world experiences that are cross-curricular. Students have a purpose and are given the opportunity to see how they can make a difference in the world in which they live.
- Students who engage in a STEM program will develop the essential skills that are needed to ensure students are competitive in the global marketplace for the numerous STEM careers that are/will be available. STEM programs also produce the next generation of innovators.

STEM in Jeffco

- Jeffco staff were strategic in identifying middle school as the level to implement the STEM program. These are the years we need to capture our students' attention and offer options as they are beginning to think about their career choices. It makes perfect sense to place the STEM program in our middle schools.

Identification and Community Support to Implement STEM at Bell Middle School

- The program's inception was in the Central area at Bell Middle School. During the 2011/2012 school year, parents in the Golden feeder area approached the principal of Bell about starting a STEM program for several reasons: Meet the 21st century needs of students in Golden; Give the Golden area families another reason to stay in Golden and in Jeffco; and Build partnerships with STEM related companies and organizations (Colorado School of Mines, NREL, Golden Schools Foundation, etc.) After surveying a broader segment of the community and receiving significant support and after Golden City Council identified education and STEM as two of their top three initiatives to support the development of their city during 2012, Bell was approached and asked to consider this option. Administrators at Bell worked with central administrators to start this work. Parents, local area businesses, Red Rocks Community College, Colorado School of Mines, and Warren Tech High all rallied around this initiative. Grants were pursued and awarded to start this work. Teachers were identified and trained to start professional development and training to support STEM at Bell. Bell Middle School implemented STEM in the 2012-2013 school year.

Identification and Community Support to Implement STEM at Deer Creek Middle School

- In the South area as a principal group, led by the Community Superintendent, the quadrant explored ways to keep our 6th graders (and middle school students) from leaving the district to attend Douglas County schools, Littleton Public schools, etc. The principal group concluded one way to prevent this was to offer more options at the 6th grade level. A proposal was developed to take the cap off of 6th grade enrollment at Falcon Bluffs MS. At the same time, Deer Creek Middle School principal, Rob Hoover, discussed the popularity of his 8th grade

STEM pilot program and how parents were requesting that he expand this choice offering. This led to Principal Hoover's proposal to implement a 6-8 STEM program for Deer Creek Middle School.

A community survey was conducted to ascertain interest. The survey was sent to the 294 6th grade families of students attending Bradford Intermediate, Ute Meadows and Stony Creek elementaries in January 2013. Of the 119 responses, 110 replied (92.4%) that they would be interested in enrolling their student in a 7th grade STEM program at Deer Creek MS for the 2013-14 school year. Based on this overwhelming interest by the community, STEM was implemented for 7th and 8th graders at Deer Creek MS with the plan to add 6th graders the following year (2014-15 school year).

Due to the interest of South area families in the Douglas County 6-12 STEM charter in Highlands Ranch, the STEM program at Deer Creek was conceived to offer the community a Jeffco alternative, to include 6th grade students. Offering the 6th grade STEM option at Deer Creek for 2014-15 would then align with Bell Middle School's 6th grade STEM program, allowing for the joint development of the 6th grade STEM curriculum and district training of staff. This effort would become the template for future expansion of STEM programs in other areas of Jeffco. From there, the meetings outlined below show the evolution of the STEM program, as well as the expansion of the 6th grade program at FBMS.

Identification and Community Support to Implement STEM in a North Area Middle School

The next step is to expand into the north area. Discussions with north area middle school principals are currently taking place so that a site can be identified. Anticipated implementation of STEM in the north areas for the 2015-16 school year.

How do Students Apply and Become Accepted to STEM?

- Interest is the primary prerequisite to participate in STEM in Jeffco. All students who express interest in STEM will be allowed to participate in our STEM programs if space is available. There are no barriers for students during this process. All IEP, GT, ILP, ESL, and every other population are invited to participate in STEM.
- Interested students are asked to fill out a short information sheet and respond to questions describing why STEM is a good fit for them and to assess their ability to be collaborative. If space is limited, all students who formally express interest in a STEM program will be put into a lottery to determine placement.
 - Application process is available on the following websites:
 - <https://sites.google.com/a/jeffcoschools.us/deer-creek-stem/>
 - <https://sites.google.com/a/jeffcoschools.us/istem-at-bell-middle-school/>

STEM Pathway at Chatfield and Golden High Schools

- Many high schools in Jefferson County have electives to support STEM as part of their course offerings (see examples below). As a result of the growing interest in the Golden and Chatfield areas, both high schools have worked with the middle schools in their areas and our central office staff to design pathways to support the group of incoming 9th graders. In addition to expanding course offerings to match student interest, 9th and 10th grade teachers at both Golden and Chatfield are interested in being trained to ensure their instructional approach is similar to the inquiry based, project based practices that students have grown accustomed to at the middle school.
- Student interest guides the pathways offered at both Golden and Chatfield High Schools. Golden and Chatfield's STEM Pathways include courses in engineering, CAD, architecture, business, English and technology. (*Flyer Included, pgs. 24-25*)
- Training will be given to high school teachers with STEM students to continue the Problem-Based Learning approach.
- Students wanting to pursue the STEM Pathway will be placed in the appropriate Math and Science class based on previous course work.
- STEM-related course offerings are continually reviewed and expanded to better prepare students for STEM-related careers.
- Warren Tech also offers a variety of STEM courses to students from Golden and Chatfield High Schools. These courses are also available to all other Jeffco students.

Courses include:

Science

Earth Science
Earth Science Honors
Biology
Biology Honors
Chemistry
Chemistry Honors
Physics
Physics Honors
AP Biology
AP Chemistry
AP Environmental Science (Chatfield Only)
Anatomy and Physiology Honors (Chatfield Only)
Marine Biology
Astronomy (Golden Only)
AP Physics (Golden Only)
Technological Processes (Golden Only)
Environmental Science (Golden Only)
AP Environmental Science (Golden Only) *

Technology

Computer Apps (Chatfield Only)
Drafting General (Intro to CAD)
Drafting - Architectural (CAD)
Drafting –Technical/ Mechanical (CAD)
Woodworking Beginning
Woodworking Intermediate
Woodworking Advanced
Construction Comprehensive (Chatfield Only)
Interior Design

Graphic Design

Graphic Design II
Computer Science** (Chatfield Only)
Video Editing* (Chatfield Only)

Engineering

Renewable Energy (in partnership with NREL; for Juniors)*** (Chatfield Only)
Engineering Principles (for Juniors)***
Intro to Engineering (for Seniors)
Robotics**
Robotics Advanced**
Engineering Design and Development (Golden Only)
Aerospace Engineering (Golden Only)
Civil Engineering and Architecture (Golden Only)
Biotechnical Engineering (Golden Only)

Math

Algebra I
Geometry
Geometry Honors
Algebra II
Algebra II Honors
Trigonometry
Trigonometry Honors

Technology continued

Math Analysis Honors

AP Calculus AB

AP Calculus BC

Statistics

AP Statistics

Discrete Math

Algebra III

* This course will be offered starting with the 2014-2015 school year.

** These courses will be offered starting with the 2015-2016 school year.

Cost of Jeffco STEM Program

As noted earlier, the STEM Program utilizes an integrated, project based pedagogical approach to delivering the course work all Jeffco students are required to take and therefore does not increase the teacher staffing required to deliver the program. Jeffco is utilizing one full time Assistant Principal to support the implementation of the STEM program for all middle schools. This administrative position currently supports both Bell and Deer Creek and provides site based training, administration, evaluation, assessment, and student support as well as serving as a liaison between CDE, CTE, Bell and Deer Creek Middle Schools, and Jeffco Schools. In addition to the revenue from grants noted, the program has the potential to produce additional CTE monies from the State which, in time, could result in one additional FTE funded by CTE dollars for every four FTEs directly tied to STEM education.

While the teacher FTE (staffing allocation) is cost neutral, the program does incur training and instructional costs outlined below.

The following cost estimates do not attempt to include the impact of revenue loss due to Jeffco 6th or 7th grade students choosing to leave the district to enroll in STEM programs in neighboring school districts (these programs begin in 6th grade) nor the additional revenue of the reverse.

Revenues

Grants

Golden City Council	\$15,000
NSTA Award Energy Audit	5,000
Biological Science Initiatives	1,000
Sea Perch Grant	4,500
RISE Red Rocks Community College	6,945
Golden Economic Council	5,000

Donations

Anonymous	\$4,000
Hoovler Family	250
Jones Family	500

Total Revenues Directly Associated with STEM	<u>\$42,195</u>
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Expenses

PBL Handbook- Resource for STEM teachers to plan project based curriculum. This resource was also used for training teachers during two days in August 2013 and one half day on January 7th.	\$1,251
3 half day subs to support development of Engineering Elective curriculum at a unit cost of \$65 per teacher three teachers.	\$195
Assistant Principal to support the STEM programs at Bell and Deer Creek. The position is split between the two schools supporting the implementation of STEM. Cost includes salary and benefits for the 2013/2014 school year.	\$75,000
Sub-total	<u>\$76,446</u>

Estimated additional costs associated with the expansion of STEM to 6th grade at Deer Creek Middle School

Classroom FFE (desks, chairs, tables, etc.) for five classrooms. Three core classrooms, one science classroom and one technical educational classroom. <i>NOTE: These costs assume utilizing surplus material on site; however, the cost may be further reduced through acquisition of surplus materials off-site if available</i>	\$9,000
Curriculum resources for 6th grade students. Examples: Big Ideas textbooks and consumables for math instruction, literary, social studies and science resources appropriate for 6th grade curriculum. Costs are estimated. <i>NOTE: These costs may be reduced through the elementary schools surplus of existing resources to follow the students to Middle School</i>	\$12,500
Additional technology expenses directly associated with the addition of 6th grade STEM will include: teacher computer; document camera; short throw projector. At this time, DCMS does not see a need to add additional technology exclusively for 6th grade students. Estimated cost for three classrooms	\$5,400
Sub-total	<u>\$26,900</u>

JCEA/Teacher Concerns

Lisa Elliott, Executive Director of JCEA, was notified of the decision on 12/13. She states that as of 1/14/14, she has received no concerns from teachers related to STEM or staffing. On January 7th, a meeting was scheduled with Ms. Elliott to discuss a possible MOU regarding the potential impact to 6th grade teachers. This meeting is scheduled to be held on 1/23/14.

STEM Impact on Student Achievement

STEM Programs at Bell & Deer Creek Middle Schools Preliminary Results of Math Acuity from Fall 2013

Table 1 compares the percent of students in Tiers 3 & 4 from Acuity Math Forms A and B administered in fall 2013. Notice that the percent of eighth grade students in Tiers 3 & 4 increased 37% from A to B. It is possible that this large increase is due to students being in their second year of the STEM program.

For students in their second year of STEM at Bell Middle School, these data are promising but still preliminary. Given that the Deer Creek STEM program has only been implemented for one semester, it is likely that there may be program impacts that are not demonstrated until year 2. Further program evaluation is needed to make conclusions about program effectiveness.

**Table 1: STEM Compared to Non-STEM
Percent of Students in Tiers 3 & 4 in Acuity Mathematics**

Bell Middle School

		Acuity A	Acuity B	Difference
Grade 7	STEM	65%	69%	+4%
	Non-STEM	28%	26%	-2%
Grade 8	STEM	40%	77%	+37%
	Non-STEM	24%	36%	+12%

Deer Creek Middle School

		Acuity A	Acuity B	Difference
Grade 7	STEM	79%	75%	-4%
	Non-STEM	32%	28%	-4%
Grade 8	STEM	89%	94%	5%
	Non-STEM	54%	63%	8%

*Numbers are slightly off due to rounding.

Student Achievement Impact on 6th Grade Students in Jeffco Middle Schools

During the 2010-2011 school year, the district convened a task force to study grade level configurations. To inform this work, the committee considered national research, conferred with experts across districts, and reviewed an analysis of middle school performance in Jeffco Schools.

The matched comparison group design for the Jeffco Schools middle schools analysis calculated CSAP scaled score and median growth comparisons. Performance for students from K-8 and 6-8 schools was paired with students' performance in K-6 schools with matched demographics and previous CSAP scaled score data to ensure baseline comparisons were comparable.

Results from this analysis did not conclusively identify a preferred configuration for middle school learning. In some cases K-8 and 6-8 configurations outperformed or match the performance of 7-8 configurations, and in others 7-8 configurations outperformed their counterparts. Based on the results of this study, as well as the national research, the grade level configuration task force concluded that instructional best practices are the key to high performance, regardless of grade level configuration of the school.

The best practices identified in the task force findings included such things as implementation of rigorous curriculum aligned to standards, systemic use of goal-setting and progress monitoring data to adjust instruction, aligning educators' professional learning to identified needs based on data, etc.

This grade level configuration study can be updated with an examination of trends over time if the district requires this information for program decision-making.

Timeline of Jeffco STEM Program

- 1/12, Bell Middle School
 - Attendees:
 - Golden City Council Members,
 - Principal at Bell Middle: Bridget Jones
 - Assistant Principal at Bell Middle: Andrea Oreskovich
 - Purpose: Golden City Council presented results of a survey listing support of local schools and STEM education as two of their top three priorities for the coming years.
- 3/12, Education Center
 - Attendees:
 - Bridget Jones, Principal at Bell Middle School
 - Andrea Oreskovich, Assistant Principal at Bell Middle School
 - Brenda Carlson, Community Superintendent
 - Dr. Heather Beck, Chief Academic Officer
 - Purpose: Dr. Beck called a meeting to discuss the STEM opportunity at Bell. Bridget and Andrea laid out their hopes for the program. Connections were made with Warren Tech to work toward vertical alignment for STEM education with Jeffco.

- 3/12, Bell Middle School
 - Attendees:
 - Bridget Jones, Principal at Bell Middle School
 - Andrea Oreskovich, Assistant Principal at Bell Middle School
 - Tracy Camp, Colorado School of Mines
 - John Trefny, Former President of Colorado School of Mines
 - Greg Pulous, Parent and Founder of Golden Schools Foundation
 - Lizette Clemens, Parent
 - Liz Cox, Red Rocks Community College
 - Soirse Graves, Golden City Council member
 - Purpose: Community Steering committee was developed to support engagement within Golden.

- 3/12, Bell Middle School
 - Attendees:
 - Bridget Jones, Principal at Bell Middle School
 - Andrea Oreskovich, Assistant Principal at Bell Middle School
 - Susan Arntson, Central Employee
 - Jesse Swift, Teacher
 - Shanna Atzmilller, Teacher
 - Jen Brozovich, Teacher
 - Brian VanVoorhees, Teacher
 - Lori Ranney, Teacher
 - Purpose: Teachers were identified to support this work based on their level of interest and willingness to engage in PBL instructional practices.

- 4/12, Bell Middle School
 - Attendees:
 - Kris Kraft, Instructional Coach
 - Liz Cox, Red Rocks Community College and Colorado School of Mines.
 - Bridget Jones, Principal at Bell Middle School
 - Andrea Oreskovich, Assistant Principal at Bell Middle School
 - Susan Arntson, Central
 - Purpose: Bridget and Andrea started writing grants partnering with Colorado School of Mines and Red Rocks Community College. Received grant money for Computer Science with CSM. Bell Middle also received a grant from RRCC for Sustainability. (RISE grant).

- 5/12, Golden City Offices
 - Attendees:
 - Bridget Jones, Principal at Bell Middle School
 - Andrea Oreskovich, Assistant Principal at Bell Middle School
 - Julie Brooks, Golden Economic Development Council
 - Golden City Council Members
 - Golden Economic Development Council Members

- Purpose: Multiple presentations to the Economic Development Council and Golden City Council (Julie Brooks) to link Bell with the community to support the City Councils initiative to advance STEM education at Bell and local area businesses. The council helped to target local businesses and community members to support STEM at Bell.
- June/July 2012, Various Locations
 - Attendees:
 - Bridget Jones, Principal at Bell Middle School
 - Andrea Oreskovich, Assistant Principal at Bell Middle School
 - Susan Arntson, Central Employee
 - Jesse Swift, Teacher
 - Shanna Atzmiller, Teacher
 - Jen Brozovich, Teacher
 - Brian VanVoorhees, Teacher
 - Lori Ranney, Teacher
 - Purpose: Worked to learn more about STEM by attending conferences and visiting other STEM schools.
- 7/12, Colorado Springs
 - Attendees:
 - Bridget Jones, Principal at Bell Middle School
 - Andrea Oreskovich, Assistant Principal at Bell Middle School
 - Susan Arntson, Central Employee
 - Jesse Swift, Teacher
 - Shanna Atzmiller, Teacher
 - Jen Brozovich, Teacher
 - Brian VanVoorhees, Teacher
 - Lori Ranney, Teacher
 - Purpose: STEM Boot Camp at Air Force Academy.
- 11/30/12, Education Center
 - Attendees:
 - Community Superintendent: Dan Cohan
 - Executive Director of School Management: Deb O'Neill
 - Deer Creek Middle Principal: Rob Hoover
 - Purpose:
 - Plan for expanding the DCMS "Engineering Program" for select 8th graders into a STEM program for 7th and 8th graders for 2013/2014
 - Discuss long term plan for possibly adding 6th graders to STEM for 2014/2015
- 12/10/12, Falcon Bluffs Middle
 - Attendees:
 - Community Superintendent: Dan Cohan
 - All principals from Chatfield articulation area
 - Most principals from Columbine and Dakota Ridge articulation areas

- Purpose:
 - Discuss 6th grade options in the South Area of Jeffco in line with our common goal using Dr. Stevenson's words "Jeffco wants to keep our kids and provide good options for them." So, our goal is to increase options for 6th graders in the South area.
 - Discuss lifting the cap off of 6th at FBMS
 - Evaluate impact of expanding Engineering program at Deer Creek Middle into a STEM program for 7th/8th 2013/2014 and possibly adding 6th in 2014/2015
 - Beginning discussions on the future of 6th grade GT, possibly at Ken Caryl Middle
 - Beginning discussions on the feasibility of a 6th pilot option at Summit Ridge Middle
- 12/17/12, Education Center
 - Attendees:
 - Superintendent: Cindy Stevenson
 - Community Superintendents:
 - Brenda Carlson
 - Dan Cohan
 - Tony Giurado
 - Peg Kastberg
 - Purpose:
 - STEM Vision in Jeffco
 - District-wide perspective (South, Central, North)
 - Plan for meeting with High School feeders to discuss High School STEM pathway
- 1/9/13, Education Center
 - Attendees:
 - Superintendent: Cindy Stevenson
 - Chief Academic Officer: Heather Beck
 - Community Superintendents:
 - Brenda Carlson
 - Dan Cohan
 - Principals
 - Rob Hoover, Deer Creek Middle
 - Bridget Jones, Bell Middle
 - Assistant Principals
 - Susan Arntson, Deer Creek Middle
 - Andrea Schulz, Bell Middle
 - Purpose: Define the future of STEM in Jeffco (Vision, Program model, CAP alignment, Data, Funding/Resources, what other districts/CDE are doing)

- 2/20/13, Education Center
 - Attendees:
 - Superintendent: Cindy Stevenson
 - Chief Academic Officer: Heather Beck
 - Community Superintendents:
 - Brenda Carlson
 - Dan Cohan
 - Executive Director of School Management:
 - Eric Everding
 - Deb O'Neill
 - Principals
 - Rob Hoover, Deer Creek Middle
 - Bridget Jones, Bell Middle
 - Joe Shaw, Warren Tech
 - Purpose:
 - STEM update at Bell and DCMS (# of S's, Training, Staffing)
 - Developing Vision of STEM in Jeffco
 - Ascertain role of ERD
 - High School STEM pathways
- 4/3/13, Education Center
 - Attendees:
 - Superintendent: Cindy Stevenson
 - Chief Academic Officer: Heather Beck
 - Community Superintendents:
 - Brenda Carlson
 - Dan Cohan
 - Executive Director of School Management: Eric Everding
 - Executive Director of Curriculum and Instruction: Priscilla Straughn
 - Director of Curriculum and Instruction: Matt Flores
 - Principals:
 - Rob Hoover, Deer Creek Middle
 - Bridget Jones, Bell Middle
 - Assistant Principal, Andrea Schulz, Bell Middle
 - Purpose:
 - STEM Staffing updates
 - Plan for 6th graders and STEM at Bell
 - Matt Flores leading team on communicating with all Vision, Philosophy
 - STEM professional development plan
- 6/6/13, Deer Creek Middle
 - Attendees
 - Principals:
 - Rob Hoover, Deer Creek Middle
 - Bridget Jones, Bell Middle
 - Director of Curriculum and Instruction: Matt Flores

- Assistant Principals:
 - Susan Arntson, Bell and Deer Creek Middle Schools
 - Andrea Oreskovich, Bell Middle
 - Todd Rago, Golden High School
 - Jeff Stephens, Chatfield High School
 - Purpose:
 - Organize and plan summer training for teachers
 - Include conversations around high school support
- 8/14/13 and 8/15/13, Deer Creek and Bell Middle Schools
 - Attendees
 - Principals:
 - Rob Hoover, Deer Creek Middle
 - Bridget Jones, Bell Middle
 - Director of Curriculum and Instruction: Matt Flores
 - Assistant Principal of Deer Creek and Bell: Susan Arntson
 - Bell STEM Teachers
 - Deer Creek STEM Teachers
 - Content Specialists, Tera Schnaker, Chalee McDougal, Marna Messer
 - Purpose:
 - STEM teacher training
 - 21st century skills professional development
 - PBL practices
 - Plan upcoming projects for First Semester
- 9/24/13, Bell Middle
 - Attendees:
 - Principal: Bridget Jones
 - Assistant Principal: Susan Arntson
 - Director of Curriculum and Instruction: Matt Flores
 - John Trefny, Retired President School of Mines
 - Greg Poulos, Scientist and past president of Golden Schools Foundation
 - Mike DuVarney, entrepreneur and parent
 - Lizette Clemmons, Nasa link and community member
 - Soirse Graves, Golden City Council liaison
 - Purpose: Collaborate with community members to support the Bell STEM program
- 9/26/13, Deer Creek Middle
 - Attendees:
 - Executive Director of School Effectiveness: Dan Cohan
 - Achievement Director: Terry Elliott
 - Director of Curriculum and Instruction: Matt Flores
 - Principal: Rob Hoover, Deer Creek Middle
 - Assistant Principal: Susan Arntson, Deer Creek Middle

- Purpose:
 - Status of 7th/8th STEM program at DCMS
 - Continue discussion from prior year regarding the feasibility of expanding STEM program to 6th grade - Why is it a good idea? Preliminary Numbers, Logistics, etc.
 - Status of MS/HS STEM Pathway work
 - Set up meeting with Chatfield and South area principals
- 10/3/13, Education Center
 - Attendees:
 - Superintendent: Cindy Stevenson
 - Chief School Effectiveness Officer: Marcia Anker
 - Executive Director of School Effectiveness: Dan Cohan
 - Achievement Director: Terry Elliott
 - Purpose:
 - Discussed expanding STEM to 6th grade
 - Options for making this happen
 - Timeline of communicating with stakeholder groups to solicit input
- 10/15/13, Education Center
 - Attendees:
 - Executive Directors of School Effectiveness:
 - Brenda Carlson
 - Dan Cohan
 - Tony Giurado
 - Achievement Directors:
 - Terry Elliott
 - Mike Musick
 - Director of Curriculum and Instruction: Matt Flores
 - Principals:
 - Brian Conroy, Golden High School
 - Rob Hoover, Deer Creek Middle
 - Bridget Jones, Bell Middle
 - Wendy Rubin, Chatfield High School
 - Assistant Principals:
 - Susan Arntson, Deer Creek Middle
 - Jeff Stephens, Chatfield High School
 - Continue discussions related to STEM pathways at Chatfield and Golden High Schools
 - Discuss the 6th grade option
- 10/21/13, Education Center
 - Attendees:
 - Superintendent: Cindy Stevenson
 - Chief School Effectiveness Officer: Marcia Anker

- Executive Directors of School Effectiveness:
 - Brenda Carlson
 - Dan Cohan
 - Tony Giurado
 - Purpose:
 - Develop recommendations to Cindy and Cabinet around 6th graders in STEM for next year
 - Status of STEM at the middle school
 - Planning for HS STEM pathway
- 10/25/13, Deer Creek Middle School
 - Attendees:
 - Director of Curriculum and Instruction, Matt Flores
 - Assistant Principal, Susan Arntson
 - Purpose: Site visit to learn from kids and teachers about their experiences and needs in STEM classrooms.
- 10/25/13, Ute Meadows Elementary
 - Attendees:
 - Executive Director of School Effectiveness: Dan Cohan
 - Director of Curriculum and Instruction: Matt Flores
 - Achievement Directors:
 - Terry Elliott
 - Luann Schwartz
 - Principals:
 - John de la Garza, Stony Creek Elementary
 - Karla Hankins, Mortensen Elementary
 - Gene Lewis, Bradford Primary
 - Sam Palamara, Bradford Intermediate
 - Amanda Pierorazio, Coronado Elementary
 - Gina Rivas, Shaffer Elementary
 - Steve Weigum, Ute Meadows Elementary
 - Purpose:
 - Review status of lifting cap for 6th graders at Falcon Bluff Middle
 - Discuss status of STEM for 7th/8th graders at Deer Creek Middle
 - Proposal for adding 6th grade STEM at Deer Creek Middle
 - Impact on each school
 - All 6 principals said they could support it (1 principal absent)
 - Discussed common messaging, next steps
- 11/5/13, Education Center
 - Attendees:
 - Community Superintendent: Dan Cohan
 - Principals
 - Gene Lewis, Bradford Primary
 - Sam Palamara, Bradford Intermediate
 - Purpose:
 - Discuss impact of middle school STEM program on elementary schools

- 11/8/13, Education Center
 - Attendees:
 - Executive Director of School Effectiveness: Dan Cohan
 - Achievement Directors:
 - Terry Elliott
 - Mike Musick
 - Director of Curriculum and Instruction: Matt Flores
 - Teacher on Special Assignment:
 - Chalee McDougal
 - Tera Schnacker
 - Principals:
 - Brian Conroy, Golden High School
 - Wendy Rubin, Chatfield High School
 - Assistant Principals:
 - Susan Arntson, Deer Creek Middle
 - Todd Rago, Golden High School
 - Jeff Stephens, Chatfield High School
 - Purpose:
 - Status of development of High School STEM pathways
 - Learning opportunity from each other
- 11/13/13, Education Center
 - Attendees:
 - Chief School Effectiveness Officer: Marcia Anker
 - Executive Director of School Effectiveness: Dan Cohan
 - Achievement Directors:
 - Terry Elliott
 - Mike Musick
 - Kristopher Schuh
 - Matt Walsh
 - Director of Curriculum and Instruction: Matt Flores
 - Purpose: Update on status of district STEM vision and continue planning for 6th grade expansion
- 11/14/13, Education Center
 - Attendees:
 - Superintendent: Cindy Stevenson
 - Chief School Effectiveness Officer: Marcia Anker
 - Executive Director of School Effectiveness: Dan Cohan
 - Achievement Directors:
 - Terry Elliott
 - Luann Schwartz

- Principals:
 - John de la Garza, Stony Creek Elementary
 - Karla Hankins, Mortensen Elementary
 - Rob Hoover, Deer Creek Middle
 - Gene Lewis, Bradford Primary
 - Sam Palamara, Bradford Intermediate
 - Amanda Pierorazio, Coronado Elementary
 - Gina Rivas, Shaffer Elementary
 - Wendy Rubin, Chatfield High School
 - Steve Weigum, Ute Meadows Elementary
 - Ryan West, Falcon Bluffs Middle
 - Purpose:
 - Discuss 6th grade in the South area and proposals including the consideration of moving all 6th graders to DCM
 - Each member share out current thoughts about plan for 6th graders
 - Solicit input from all principals
- 11/18/13, Chatfield High School
 - Attendees:
 - Chief School Effectiveness Officer: Marcia Anker
 - Executive Director of School Effectiveness: Dan Cohan
 - Achievement Directors:
 - Terry Elliott
 - Luann Schwartz
 - Principals:
 - John de la Garza, Stony Creek Elementary
 - Karla Hankins, Mortensen Elementary
 - Rob Hoover, Deer Creek Middle
 - Gene Lewis, Bradford Primary
 - Sam Palamara, Bradford Intermediate
 - Amanda Pierorazio, Coronado Elementary
 - Gina Rivas, Shaffer Elementary
 - Wendy Rubin, Chatfield High School
 - Steve Weigum, Ute Meadows Elementary
 - Ryan West, Falcon Bluffs Middle
 - Purpose: Follow up from 11/14/13 meeting to bring group to consensus regarding 6th grades for 2014-2015 and 2015-2016 school years
- 11/20/13, Chatfield HS AP/Honors/STEM parent and student meeting (*Flyer Included, pgs. 24-25*)
 - Attendees
 - Interested parents and students
 - Purpose: To provide information regarding AP, Honors, and STEM choices for students

- 11/22/13, Education Center
 - Attendees:
 - Chief School Effectiveness Officer: Marcia Anker
 - Executive Director of School Effectiveness: Dan Cohan
 - Achievement Directors: Terry Elliott
 - Purpose: Debrief of 11/14/13 meeting and identify next steps

- 12/2/13, Chatfield High School
 - Attendees:
 - Chief School Effectiveness Officer: Marcia Anker
 - Executive Director of School Effectiveness: Dan Cohan
 - Achievement Directors:
 - Terry Elliott
 - Deb O'Neill
 - Luann Schwartz
 - Principals:
 - John de la Garza, Stony Creek Elementary
 - Karla Hankins, Mortensen Elementary
 - Gene Lewis, Bradford Primary
 - Sam Palamara, Bradford Intermediate
 - Amanda Pierorazio, Coronado Elementary
 - Gina Rivas, Shaffer Elementary
 - Steve Weigum, Ute Meadows Elementary
 - Purpose:
 - STEM decision meeting - 6th STEM option at Deer Creek Middle School will be offered 2014-2015 school year
 - Communicated the "why" behind the decision
 - Details about "hold harmless" on staffing, capping the enrollment, Talking points, MOU's with staff, etc.
 - Majority of principals were in support of moving forward with the STEM 6th grade option and all agreed that they can promote their own schools
 - Plan for a meeting with Chatfield High School feeder principals and parents in key leadership roles

- 12/5/13, Chatfield High School (*Agenda Included, pg. 26*)
 - Attendees:
 - Chief School Effectiveness Officer: Marcia Anker
 - Executive Director of School Effectiveness: Dan Cohan
 - Achievement Directors:
 - Terry Elliott
 - Deb O'Neill
 - Luann Schwartz
 - Director of Curriculum and Instruction: Matt Flores

- Principals:
 - John de la Garza, Stony Creek Elementary
 - Karla Hankins, Mortensen Elementary
 - Rob Hoover, Deer Creek Middle
 - Gene Lewis, Bradford Primary
 - Sam Palamara, Bradford Intermediate
 - Amanda Pierorazio, Coronado Elementary
 - Gina Rivas, Shaffer Elementary
 - Wendy Rubin, Chatfield High School
 - Steve Weigum, Ute Meadows Elementary
 - Ryan West, Falcon Bluffs Middle
- Parent/Community Members:
 - Bradford Primary/Intermediate:
 - Meg Hollingsworth, PTA President
 - Krista Newton, Accountability Chair
 - Coronado Elementary:
 - Jenn Husted, PTA President
 - Mortensen Elementary
 - Kris Bartuska, 4th grade teacher/Shaffer Elementary parent
 - Michelle Mueller, Accountability committee member/parent/ para educator for ASD program
 - Mike Ross, PTO member/parent
 - Shaffer Elementary:
 - Kelly Bergman, Accountability Co-Chair
 - Kim Lott, PTA President
 - Stony Creek Elementary: Autumn Teff, PTO President
 - Ute Meadows Elementary:
 - Cindy Monroe, PTA/Para Educator
 - Chuck Oppenlander, Accountability
- Purpose:
 - Share STEM decision; distribute Talking Points and discuss
 - Q & A with parents and principals
 - Develop To Do's and Next Steps with parent and principal input
- Outcome:
 - Parents asked questions mostly related to STEM. No concerns were raised by parents at this meeting. The overall comments were in support of the decision to move forward.
- 12/16/13, Letter sent to Chatfield Area 5th grade parents informing them of 6th grade options at Falcon Bluffs Middle and STEM at Deer Creek Middle Schools (*Letter Included, pg. 27*)

- 12/17/13, Deer Creek Middle School
 - Attendees:
 - 7th grade STEM students and parents
 - Rob Hoover, Principal at Deer Creek
 - Amy Dehne, Science Teacher
 - Michael Rohrer, Social Studies
 - Tatum Sullivan, ELA
 - Susan Arntson, Assistant Principal
 - Norm Hanne, Engineering Elective Teacher
 - Matt Flores, Director of Curriculum and Instruction
 - Purpose
 - Student showcase of work they had completed during the first semester
 - Hundreds of parents and community members in attendance
 - Students presented cross content projects to parents and community members
- 12/18/13 at Drake Middle School
 - Attendees:
 - Achievement Director: Kristopher Schuh
 - Principal: Rod Pugnetti
 - Assistant Principal:
 - Director of Curriculum and Instruction: Matt Flores
 - Instructional Coach: Gretchen Kronfield
 - Purpose: Consideration of Drake as an option for the north area STEM program
- 1/14/14, Education Center
 - Attendees:
 - Achievement Director: Kristopher Schuh
 - Principal of North Arvada Middle: Dana Ellis
 - Director of Curriculum of Instruction: Matt Flores
 - Purpose: Consideration of North Arvada Middle School as an option for the north area STEM program

6th Grade Deer Creek Middle School STEM Applicants as of 1/15/14

Q3. Current elementary school of attendance:		
Answer Options	Response Percent	Response Count
Bradford Intermediate	13.9%	5
Stony Creek Elementary	25.0%	9
Ute Meadows Elementary	16.7%	6
Coronado Elementary	5.6%	2
Mortensen Elementary	5.6%	2
Shaffer Elementary	11.1%	4
Montessori Peaks Academy	5.6%	2
Collegiate Academy	2.8%	1
Westridge Elementary	2.8%	1
Red Rocks Elementary	8.3%	3
Peiffer Elementary	2.8%	1
	Total	36

Chatfield Senior High School STEM

Science · Technology · Engineering · Math



Chatfield offers a wide range of courses in STEM areas, including engineering, CAD, architecture, business, and technology. The math and science departments offer many honors and AP courses. The Accelerated Options program allows qualified 9th graders to enroll in Biology. STEM-related course offerings are continually reviewed and expanded to better prepare Chatfield students for STEM-related careers.

Science	Technology	Engineering	Math
<ul style="list-style-type: none"> • Earth Science • Earth Science Honors • Biology • Biology Honors • Chemistry • Chemistry Honors • Physics • Physics Honors • AP Biology • AP Chemistry • AP Environmental Science • Anatomy and Physiology Honors • Marine Biology 	<ul style="list-style-type: none"> • Computer Apps • Drafting General (Intro to CAD) • Drafting - Architectural (CAD) • Drafting – Technical/ Mechanical (CAD) • Woodworking Beginning • Woodworking Intermediate • Woodworking Advanced • Construction Comprehensive • Interior Design • Graphic Design • Graphic Design II • Computer Science** • Video Editing* 	<ul style="list-style-type: none"> • Renewable Energy (in partnership with NREL; for Juniors)*** • Engineering Principles (for Juniors)*** • Intro to Engineering (for Seniors) • Robotics** • Robotics Advanced** 	<ul style="list-style-type: none"> • Algebra I • Geometry • Geometry Honors • Algebra II • Algebra II Honors • Trigonometry • Trigonometry Honors • Math Analysis Honors • AP Calculus AB • AP Calculus BC • Statistics • AP Statistics • Discrete Math • Algebra III

* This course will be offered starting with the 2014-2015 school year.

** These courses will be offered starting with the 2015-2016 school year.

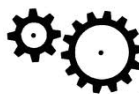
*** Being developed for the 2015-2016 school year.



Chatfield Senior High School Mission Statement:

To foster intellectual curiosity and encourage academic success in order to prepare all students to become viable and productive members of a global community.





Chatfield STEM Facts

Science

- Wide range of experience outside of education, including research, internships, and employment at Los Alamos National Laboratory, National Renewable Energy Lab (NREL), Colorado School of Mines, U.S. Geologic Survey, U.S. Forest Service, Department of Defense, National Geographic, and Rocky Flats.
- Bachelor's and Master's degrees in a variety of science fields, including biology, physics, chemistry, soil science, geological engineering, and aerospace engineering.
- Honors received by members of the science department include Boettcher Teacher Recognition, 9News Teachers Who Care Award, and Rhodes Scholar Finalist.
- Last year, 94% of the AP Biology students passed the AP exam with a 3, 4, or 5.

Technology

- Teacher with Bachelor's degree in Technology Education with emphasis in Architecture and Construction. 10,000+ hours of work experience in the residential construction field, dealing with everything from foundations to finish construction.
- Woodworking lab is roughly 2200 sq. ft. with a variety of hand and power tools.
- Computer lab dedicated to CAD and Engineering.

Engineering

- Two members of the science department and one member of the math department have degrees in engineering.
- Yearly visit to the NREL wind site.
- Yearly facilities tour of multiple labs at Lockheed Martin.

Math

- Bachelor's and Master's degrees in a variety of math fields, including math, statistics, engineering, and finance.
- Honors received by members of the math department include Boettcher Teacher Recognition, National Board Certification, and Colorado Council of Teachers of Mathematics (CCTM) Outstanding Secondary Teacher Award.
- During the past 5 years, 100% of the AP Calculus BC students received a 5 on the AP exam. During this same time, 99.75% of the AP Calculus AB students passed the AP exam with a 3, 4, or 5. Of those who passed, 90.48% received a 5.
- Last year, 85.1% of the AP Statistics students passed with a 3, 4, or 5. This is well above the national pass rate of 57.7%. Chatfield's pass rate has been well above the national average every year that AP Statistics has been offered.
- The math department is one of only two high schools in Jefferson County which has adopted the use of Texas Instruments' most up-to-date technology tool, the TI-Nspire graphing calculator. Every year, several members of the math department attend teacher workshops hosted by Texas Instruments.

Chatfield Area 6th grade STEM choice Talking Points

Marcia Anker, Dan Cohan, Terry Elliott, Matt Flores, Rob Hoover, Luann Schwartz
Office of School Effectiveness ~ 303-982-6939 Deer Creek Middle School ~ 303-982-3820

- Our school district provides numerous choices for our students. One of these choices is the STEM program.
- STEM is currently offered for 7th and 8th grade students in the central area at Bell Middle School and in the south area at Deer Creek Middle School. We plan to add a STEM program in the north area in the near future.
- The long-range plan has been to expand the STEM program to include 6th graders.
- As leaders in your school, we wanted to bring you together to let you know about this choice for your students at Deer Creek Middle School beginning the 2014-2015 school year.

So, what is STEM?

- STEM is an acronym for science, technology, engineering, math. It is an interdisciplinary approach to teaching Jeffco's curriculum based on the application of project-based learning. Students work in collaborative teams to put their content knowledge into action to solve real-world problems in science, technology, engineering, and math.

FAQ on the Process:

- How will parents and students know about this program for their current 5th graders?
 - A letter will be sent to all current 5th graders this coming Monday, December 9th.
 - Additionally, there is a STEM link from the Deer Creek Middle School website's home page @:
<https://sites.google.com/a/jeffcoschools.us/deercreek-ms/>
- Who can apply for STEM?
 - All 5th grade students who currently reside in the Chatfield articulation area.
 - If seats are still available after meeting the demand from Chatfield 5th graders, the 5th grade students in the Bear Creek, Columbine, and Dakota Ridge articulation areas will be offered an opportunity to apply.
- How does a student apply?
 - By completing a STEM interest form.
- How does a student access the form?
 - The interest form is on Deer Creek Middle School's website. <https://sites.google.com/a/jeffcoschools.us/deer-creek-stem/home/documents>
 - The interest form can also be accessed via the letter that is being sent on Monday.
- What is the application process?
 - The interest form needs to be completed and submitted to Deer Creek Middle School by January 24th, 2014.
- How do families learn more about the program?
 - The STEM information night is January 16th, 2014 @ 6:00 pm @ Deer Creek MS.
 - An open house to learn about Deer Creek Middle School in general is Tuesday, December 10th at 5:30 pm. This meeting is focused on incoming 7th and 8th grade students and will not address the 6th grade STEM option.
 - There is a STEM link from the Deer Creek Middle School website's home page.
<https://sites.google.com/a/jeffcoschools.us/deercreek-ms/>
- How are students selected?
 - For the 2014-2015 school year, the selection process is:
 - By lottery for 5th grade students who currently reside in the Chatfield articulation area.
 - Should that not fill the 90 seats, 5th grade students residing in the Bear Creek, Columbine, and Dakota Ridge areas will be offered the choice, again by lottery.
- How will this impact our elementary school?
 - For the 2014-2015 school year, STEM will not impact teacher librarians, art, music, and physical education staffing.

December 2013

Dear Chatfield area 5th grade parents,

As principals in the Chatfield High School educational community, we would like to take a minute to let you know about some of the choices you have for your student as they get ready to transition to 6th grade next year. As parents you have the opportunity to allow your student to continue his/her attendance in an elementary school or select one of two distinct choices as to where your child will attend 6th grade. Falcon Bluffs Middle School is one of six middle schools in Jeffco that offers a traditional 6th grade program. Deer Creek Middle School will offer a 6th grade STEM program for interested students next school year. Bradford, Coronado, Mortensen, Stony Creek, and Ute Meadows will continue to offer 6th grade in their K-6 schools. Shaffer Elementary is already a K-5 school and sends all of their 5th grade students (104 students for the 2014-15 school year) to Falcon Bluffs.

At all of the middle and elementary schools in the Chatfield area, we would like to get an idea as soon as possible as to which schools 6th graders will be attending for the 2014-2015 school year in order to enable us to begin our planning, staffing, and budgeting processes. The 'First Round' of Choice Enrollment opens on January 8, 2014 and closes on January 24, 2014.

- Any 5th grade student who is interested in attending Falcon Bluffs for 6th grade must turn in a First Round Choice Enrollment form to the main office at Falcon Bluffs during that 17-day window (Shaffer ES students are excluded from this requirement). All Jeffco Schools' students submitting their form during this window will be accepted. Falcon Bluffs Middle School will host a parent information night for 5th grade parents on January 8th @ 6:30 p.m.
- Any 5th grade student who is interested in the 6th grade STEM program at Deer Creek is encouraged to attend an information night on January 16th, at 6:00 at DCMS. Applicants are required to fill out an online STEM interest form. [CLICK HERE](#) to be redirected to the DCMS STEM information page.
- If your 5th grade student would like to stay at Bradford, Coronado, Mortensen, Stony Creek, or Ute Meadows for 6th grade, you do not need to do anything and you will automatically roll into 6th grade at the school you already attend.
- [CLICK HERE for a copy of the First Round Choice Enrollment form](#)
- [CLICK HERE for the Jeffco Schools enrollment page](#)

We believe that every student is different and that he/she should attend school in the environment that is best for them, so we are pleased to be able to provide choices. This is a decision that should be made by parents and students together.

Please contact your principal in the Chatfield Articulation Area if you need more information.

Sincerely,

Chatfield articulation area principals