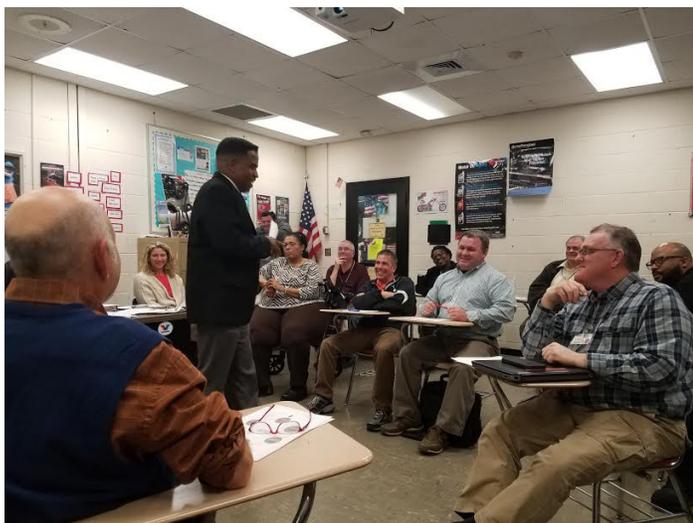


CTE Mid-Year Collaboration
February 7-9

The mission of Rockingham County Schools' CTE program is to connect student talents and interests with 21st Century Careers."



Meeting at MHS on February 9, 2017

Rock-ATOP

The name that is given to Rockingham County School's CTE Advisory Committee is "Rock-ATOP" (Rockingham Apprenticeship & Technical Opportunities Partnership). The group's purpose is to review and advise our CTE program. They are responsible for designing our Career Pathways. The Committee is comprised of RCC staff, RCS staff, Government Officials, Business and Industry leaders, and a CTE student. While a core of committee members remain from year to year, the business and industry representatives change pending on the sector of the economy in which the committee chooses to focus on during that year. The minutes from past Rock-ATOP minutes can be found at: <http://www.rockcte.org/RockATOP.html>

Higher Order Thinking

The Revised Blooms Taxonomy (below) is a good way to conceptualize higher order thinking. Project based learning and questioning emerged during our meetings as two categories that indicated that our students are thinking (and we are teaching) at a high cognitive level. Project based learning and the design process are; therefore, prominently addressed in our CTE local plan. There are many ways to conceptualize the Design Process, the process is generally comprised of similar steps. The Design Process that we utilized in the meeting is pictured on the following page. In the most general sense, we are helping our students navigate a sequence of steps that will allow them to effectively transition ideas from their heads and into the real world. The first steps of the process speak to the definition of the problem and the accumulation of relevant information necessary to fully understand the problem. This process moves up the Blooms hierarchy as students begin to entertain ways of solving the problem and evaluating the success of each idea in relationship to the constraints of the given problem.

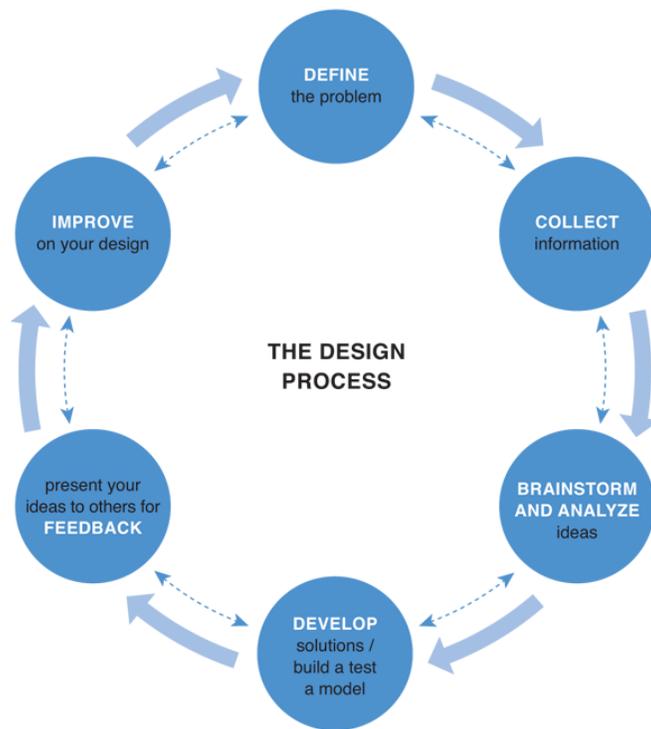


Revised Bloom's Taxonomy

Please note that operating at the lower levels of blooms is essential. Vocabulary and the memorization of critical content is absolutely necessary, because such instruction lays the ground work that make the higher order thinking processes possible. Our students must have at least a basic understanding of the content delivered before they can hope to think more deeply about it or much less create something new from it. Such content knowledge with the vocabulary included constitute integral parts of the first step of the Design Process. Our students not only need to acquire relevant information but they also need to develop the skill of locating relevant information. The point is that the memorization of content knowledge is certainly necessary but far from sufficient.

Student Led Critiques

The evaluation step in the Design Process deserves special attention. The execution of student critiques provides an excellent opportunity to evaluate students' understanding of content within project-based instruction as well as the opportunity for our students to gain the critical employability skill of effective communication. The critique process can help our students learn to confidently present and defend their ideas. The process would also grant them the experience of receiving critical feedback and will allow students practice communicating in a way that is clear and kind. A good explanation of the critique process can be found here: <https://www.youtube.com/watch?v=8vaVClpS5H4>. The critique process is also prevalent within our Local Plan and will continue to be an emphasis going forward. It addresses fundamental ELA objectives and addresses one of the critical "soft skills" that our business leaders have identified as critical to the success of their respective operations.



The Design Process

Questioning

Secondly, higher order thinking skills often manifests themselves in the types of questions that our students ask. "What" questions generally indicate that our students are operating on the lower rung of the Bloom's hierarchy.

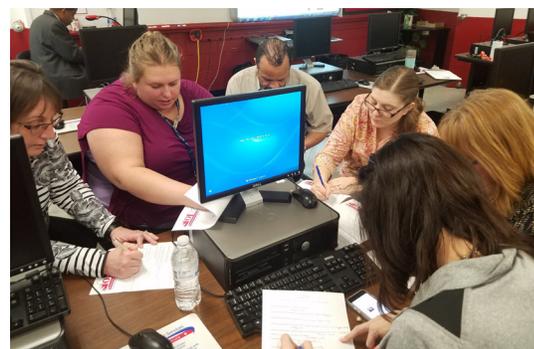
"What" questions are generally related to "remembering" or "understanding" information. "How" questions are an indication that they are in the process of "applying" such knowledge. "Why" questions are an indication that our students are critically thinking and evaluating the content that is presented. All of these questions set up the prospect that students will begin to ask "what if" questions or "why not" questions. These questions suggests that our students are beginning to think creatively. They have understood the content well enough to actually extend the content learned and take it in an original direction.



Meeting at RCHS on February 8, 2017

The book that all teachers were provided in August, "Most Likely to Succeed," underscores the importance of students engaging in such work. The book identifies a future of education that is aligned with the core of CTE. A documentary film was created based on the book. A screening of the film will be shown within the district during one of the required workdays in June. The movie trailer can be found here: <https://www.youtube.com/watch?v=JE5XRrfetu4>.

CTE has to play a pivotal role in influencing the direction of the county. We will join with RCC and our business community to "create a workforce that is the envy of the state." We hope to Reset the priorities of the district by insisting that we focus on not only graduating students "from" high school, but on graduating students "with" the critical technical skills, work experiences, credentials, thinking skills and soft skills necessary for success in the work force and thereby graduating students "to" rewarding careers and additional education/training.



Meeting at MHS on February 7, 2017