Imagining the Future of Education

In the dining room of the Career Tech Culinary Arts program, groups of Dover students, faculty, and citizens were working hard last Saturday to try to envision the future of education at the Dover High School and Career Tech Center. A group of 45 participants have spent long hours together over the last six weeks discussing education in the 21st century. They have been thinking about how learning takes place and exploring different pedagogical approaches to learning. Their goal is to begin to define how a renovated or new Dover High School and CTE can support student learning in the future.

The Visioning Process was initiated by the Dover's Joint Building Committee. The JBC was established by the City of Dover to pursue options for renovating, adding on to, or building a new Dover High School and Career Tech Center. The JBC is led by Robert Carrier, Dover's Deputy Mayor. Other members of the JBC can be found at http://www.dover.k12.nh.us/dhsctcbuilding. The JBC's planning process has just begun and the Committee is anticipating looking at a wide range of options. They are eager for community input and the Visioning Process provides one opportunity to engage community members in the overall planning process.

The JBC worked with HMFH Architects, Inc. to select Dr. Frank Locker to facilitate the visioning process. Dr. Locker focuses his international consulting practice on assisting school districts in incorporating 21st century learning into their school systems. He was awarded Planner of the Year by the Council of Educational Facility Planners International, and created and co-teaches the Harvard Graduate School of Education Learning Environments for Tomorrow course. Dr. Locker provided the visioning group with state of the art thinking on high school education, and then led a series of thoughtful discussions on the best educational models for Dover.

Participants were introduced to topics such as project based learning in which students explore real-world problems and challenges within their classes. When these projects also involve hands on activities they can be doubly effective learning experiences. The relevance of the experiences gained by the CTE students through their hands-on education quickly became apparent to the group and many discussed ways of integrating hands-on project within the DHS.

The participants also learned about interdisciplinary teaching and the potential for teachers from different disciplines to work together, allowing students to understand a topic from a broad perspective. Collaboration was discussed as a critical component of 21st century learning for students as well; finding opportunities for students to work in groups on projects and activities gives them an opportunity for real world problem solving and also allows students to learn from one another.

The group learned about flipped classrooms where students watch videos at home in the evening and then come into the classroom to pursue activities and exercises on the information introduced the night before. In this model the teacher acts as a guide to learning, available to answer questions and provide occasional guidance rather than acting as an expert lecturing on a topic. They heard about student initiated projects and how a student's personal and emotional connection to their work can lead to deeper understanding of the desired knowledge. The concept of mastery came up repeatedly where

students are required to demonstrate their knowledge of a subject through projects, presentations or performance.

In the final session on January 31st, the visioning group began to apply the information they had discussed to the future of DHS and CTE. When asked to select two words that best described the nature of the facility, the most repeated words were collaborative and flexible. The collective opinion was that the future learning will take many forms and that the new building needs to "be flexible and future proof."

The concept of collaboration applied to facilities for teachers as well as for students and the community. The group articulated a desire for a facility where teacher collaboration was supported and encouraged though teacher work rooms and through the logical adjacencies of teaching spaces. For students the need was seen for a variety of sizes and types of learning spaces. The range of spaces could span from quiet places for individuals and small groups to collaborative spaces where talking, brainstorming, and creating could take place. The building was also viewed as a place that would be welcoming and useable by all of Dover's citizens, whether for sports, theater, or to access publically focused CTE programs.

The group expressed an interest in building stronger connections between the CTE spaces and the academic space. They wanted to encourage more students to participate in the CTE programs and remove any perceived disparity between the programs. They also expressed interest in breaking the school into smaller learning communities, where each teacher would know all of their students personally.

Superintendent Elaine Arbour reported that, "There was a clear desire to make the school an inspirational place that both teachers and educators looked forward to walking into every day and where the excitement of learning was apparent." One suggestion to achieve that goal involved a learning commons. The commons would have the main book collection as well as a snack bar, comfortable furniture, IT help desk, a quiet area, a conference room, a teacher resource center, access to an outdoor courtyard, art displays and a maker space.

The participants all expressed excitement about the potential revealed through the process. The input from the Visioning Process will become a part of the parameters provided to the architects as they begin to analyze the opportunities for turning the DHS and CTC in to a facility for 21st century teaching and learning.

Next steps for HMFH Architects will include an in-depth review of the existing physical conditions of the current facilities to determine the building's potential for renovation and re-use. They will also be developing an educational space program defining all of the different rooms required for the school and exploring how those space requirements might be configured to fit either within the existing facilities, as an addition to portions of the existing building, or as a new stand alone building.