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March 27, 2015

Dear Dover Community,

The Joint Building Committee (JBC) is currently engaged in conducting a feasibility study to determine the future of the Dover High School (DHS) and Career & Technical Education Center (CTC) campus: renovation, renovation and new construction, or new construction. The JBC has hired HMFH Architects to lead this process, and we have currently completed the Visioning Report and Part I of the Existing Conditions Report.

We held six Visioning sessions with approximately 45 members of the community, including students, parents, non-parent residents, business leaders, teachers, administrators and JBC members. The purpose of the sessions was to help the Dover School Community explore the current state of education in Dover and future trends in education that will enable the Dover School District to prepare students to be effective collaborators and problem solvers in a dynamic work environment.

The Visioning sessions and resulting report were designed to transition the community and JBC from abstract educational concepts to a beginning picture of the type of facilities we need to enable us to meet our goals within the DHS/CTC campus.

We look forward to using both the Visioning Report and the technical reports found in the Existing Conditions documents to develop a variety of educationally sound and cost effective options for the DHS/CTC revitalization project. Please feel free to contact me at e.arbour@dover.k12.nh.us or 516-6802.

Sincerely,

Elaine M. Arbour, Ed.D.
Superintendent of Schools

Dover School District Mission Statement
Strengthening our community by educating every child, every day!

Educational Visioning

Dover High School + Career Technical Center
Dover School District
Dover, NH

January 2015
Frank Locker Educational Planning

Contents + Acknowledgements

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ACKNOWLEDGEMENTS

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Kristine Baber	Non-Parent Resident
John Cogan	Non-Parent Resident
Katy Cox	Public School Parent
Adam Houghton	Public School Parent
Jake Johnsen	Arts Commission
Al Lawrence	Business Leader
Tim Mallard	Non-Parent Resident
Marty McCammom	Public School Parent
Liam Murphy	Former Student
Ashley Rennie	Former Student
Annette Studebaker	Business Leader
Lin Tamulonis	Non-Parent Resident
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Amanda Russell	School Board Member

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Dr Frank Locker

Executive Summary

INTRODUCTION

This Educational Vision reflects the work of a Visioning Team; approximately 45 teachers, administrators, students, parents, community members, and board members. HMFH Architects, chosen as architects for the new or renovated Dover High School (DHS) and Career Technical Center (CTC), was represented in the process. Created through intense facilitated workshops over six days, it is intended to guide the long-term development of both education and facilities for DHS and CTC.

Much of the work was conducted by Table Teams, small groupings of six participants each. They brainstormed, debated, and attempted to reach consensus on most of the defining issues. Generally the Table Teams were interdisciplinary, with participants at each table representing teachers, administrators, students, and parents.

The work of the Visioning Process is composed of two parts, the Educational Vision and the Facility Concept. The following summary describes the outcome of those two parts.

EDUCATIONAL VISION

Guiding Principles

The *Guiding Principles* presented here were created to express the values, beliefs, and concepts developed by the Visioning Team which examined educational trends, best practices, and issues affecting the delivery of 21st century education. These *Guiding Principles* present the essence of that inquiry. They are not policy but they address the overarching themes identified by participants. They may serve as a foundation for planning the future of DHS and CTC. As such, they are intended to form the basis of future educational delivery and facilities planning. Staff professional development is crucial to the successful implementation of the educational concepts outlined here.

The overarching *Guiding Principles* are:

- Integrate CTC and DHS through facilities planning and as much as practical, course offerings
- Create flexibility in facilities, thinking, scheduling, and curriculum

- Provide communication, leadership, and staff professional development to continue shifting the educational model to one that is research-based, employing innovative student-centered practices
- Prepare students for success in the 21st century, an emerging world of global competition, uncertain employment prospects, infinite access to information, and rapid change in technology
- Teach 21st century skills at the same time as traditional content
- Foster relationships in all aspects of school, including paying conscious attention to building relationships with students, families, and communities through school structure and programs
- Aspire beyond the Common Core to do what is best for student learning, and to instill a life-long sense of wonder and purpose. Create independent, life-long learners
- Establish a program of staff professional development to support the educational deliveries outlined here
- Make all learning and facilities design student-centered
- Increase opportunities for project-based learning

The Guiding Principles are expressed in full in Ch 3, Educational Vision.

FACILITY CONCEPTS

Key Words for Facilities

Visioning Team participants were asked to identify one word that best represented their individual thoughts about the future facilities.

Their most commonly cited key words were:

- Flexible
- Open
- Diverse

See Ch 4, Facility Concepts for the full listing.

Places for Learning

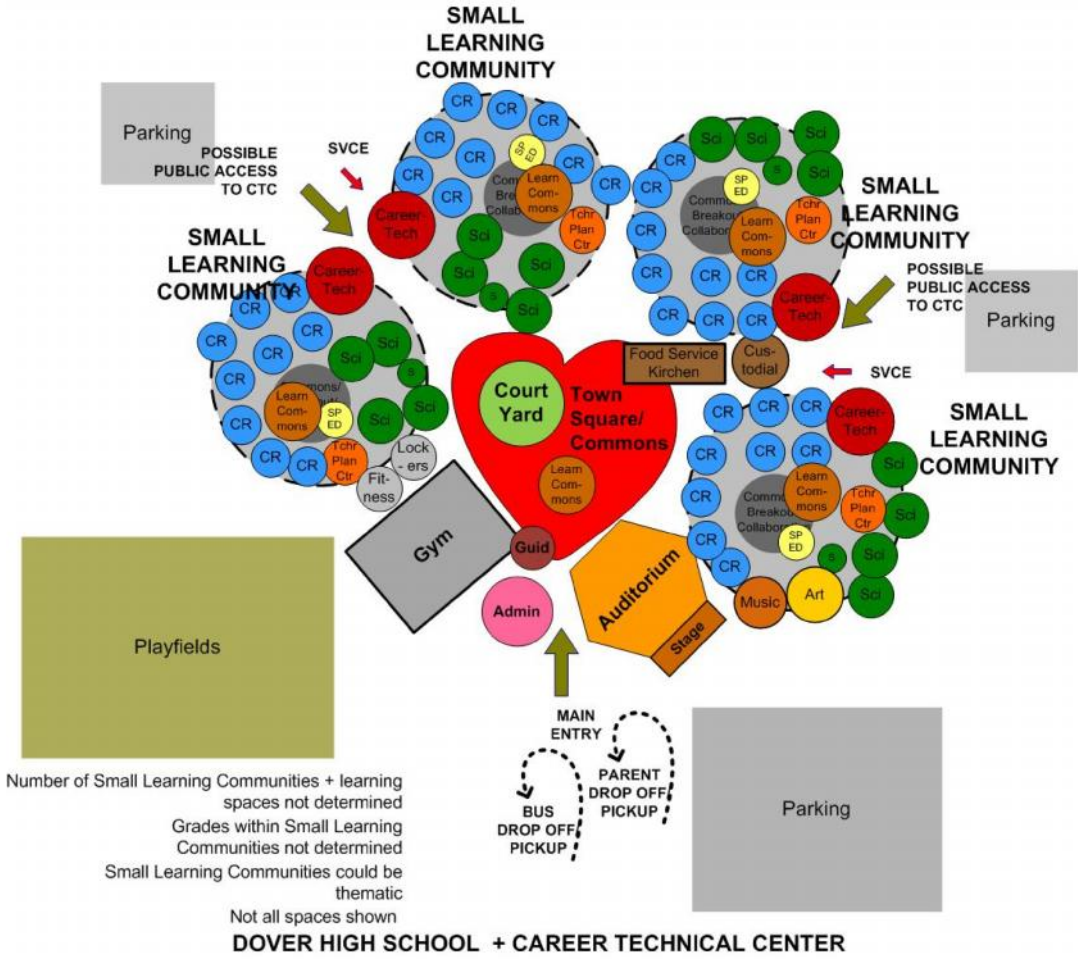
The Visioning Team reviewed fourteen exemplar schools from the USA, the United Kingdom, and Australia. Working in Table Teams they ranked the schools for appropriateness for the future DHS and CTC. Four of the schools were cited for their specific concepts. The concepts from those models were included in further discussion of school organization ultimately leading to a diagram of the school organization. The critical concepts from the models and from the discussion are:

- A centralizing space which could be called Commons or Town Square. Public Access to this space will be encouraged
- Spaces most likely to have public access require special care in planning to maintain safety and security. Coordinate public access to these destinations with controlled access doors, as few as possible
- School organized into Small Learning Communities (SLCs).
- Academic and CTE spaces should be integrated within the SLCs
- Integrate public facing CTE programs such as culinary, cosmetology and the school store into the centralizing space
- SLCs must be flexible and adaptable to operate either in a thematic mode or an interdisciplinary mode.
- Encourage a high level of visual connection throughout.

For a full description of their entire list of most appropriate and least appropriate exemplars, see Ch 4 Facility Concepts.

Overall School Organization Diagram

Workshop participants guided Frank Locker in the drawing of an overall school planning diagram, shown on the next page.


SMALL LEARNING COMMUNITY
Parking
POSSIBLE PUBLIC ACCESS TO CTC
SVCE
SMALL LEARNING COMMUNITY
SMALL LEARNING COMMUNITY
POSSIBLE PUBLIC ACCESS TO CTC
Parking
Food Service Kirchen
Cus-todial
SVCE
Court Yard
Town Square/ Commons
SMALL LEARNING COMMUNITY
Gym
Guid
Admin
Auditorium
Stage
Music
Art
Playfields
MAIN ENTRY
PARENT DROP OFF PICKUP
BUS DROP OFF PICKUP
Parking
Number of Small Learning Communities + learning spaces not determined
Grades within Small Learning Communities not determined
Small Learning Communities could be thematic
Not all spaces shown
DOVER HIGH SCHOOL + CAREER TECHNICAL CENTER

Educational Vision

VISION COMPONENTS

The Educational Vision for the future DHS and CTC are described here through several components:

- **Guiding Principles** establish broad parameters for educational delivery, school structure, and facilities
- **Key Words for Education** expresses concepts for future education and facilities
- **School Transformation + Development Map** (ST+DM © 2015 Frank Locker Inc) relates educational delivery and facilities to national practices, both today and projected into the future
- **Most Important Concepts for the Future** identifies the 21st Century issues most important to the future schools
- **Learning Modalities** identifies the most effective and appropriate ways for teachers to reach students with curriculum delivery
- **School Organizational Structure** defines preferred approaches to the overall relationships of people and programs

GUIDING PRINCIPLES

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The *Guiding Principles* are:

Overarching Principles

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- Make all learning and facilities design student-centered

Educational Delivery

Educational Delivery addresses overarching themes required to provide a 21st century high-performing educational experience for all students.

INSTRUCTIONAL MODELS

- Employ project-based learning
- Support interdisciplinary learning through schedules, programs and initiatives, and collaborative teaching
- Create opportunities for students to grow socially and emotionally through daily classroom activities
- Integrate curriculum deliveries through simultaneous, seamless student exploration of multiple curriculum-content areas
- Teach 21st century skills, especially the "four C's", collaboration, communication, creativity, and critical thinking, while simultaneously meeting standard curriculum goals
- Group students in small learning groups to foster communication, collaboration, and improved social skills
- Create opportunities for students to make things as part of their learning
- Create an internship program with local businesses and institutions
- Create regular opportunities to grow students' oral communication skills, through presentations of their work to peers, teachers, and community members

TECHNOLOGY INTEGRATION

Our world is dependent on technology implementation in all aspects of life. Students must be provided with the technological skills and knowledge which will enable them to function successfully in a global context. Technology should include:

- Explore use of computers to personalize learning for each child
- Wireless capability in all spaces in future school buildings
- Deploy mobile devices in lieu of desktop devices
- Integrate new media effectively in student learning: mobile devices, social networking, virtual worlds
- Create places and learning goals for students to learn using new technologies
- Support teachers who wish to utilize blended learning as an alternative classroom delivery with training and resources
- Explore the powerful learning potential of technology-based adaptive learning programs

Technology must not be viewed as an add-on, but rather, as an effective tool to be utilized in meaningful instruction that is relevant and rigorous

PARENT/COMMUNITY RELATIONS AND RESOURCES

- Make the school a Community Center, serving area residents of all ages and interests through a variety of cultural, educational, and recreational programs and spaces
    - School isn't a school. It's a community building. One of the things it does is educate

Educational Structure

Educational Structure establishes the organizational patterns necessary to group students and teachers in the most effective ways.

ORGANIZATION

- Position educators to better know their students through the size and strategic placement of learning spaces

RELATIONSHIPS

- Organize schools as Small Learning Communities that support formation of relationships

- Explore whether Freshmen should be based in their own Small Learning Community
- Explore Advisor/Advisee Programs, scheduled on a frequent basis
- Foster student collaboration to build communication skills and the ability to work with others
- Support teacher collaboration through scheduling, positioning, and facilities design

SCHEDULE

- Create common planning time for teachers
- Institute strategic scheduling to empower the concepts outlined here. The school schedule must provide for flexibility, collaboration, and interdisciplinary learning

Facility Implications

- Design facilities to be flexible, able to support multiple learning modalities, teaching styles, and program change over time
- Develop Small Learning Communities with students and teachers contiguously arranged in clusters
- Plan the Small Learning Communities to allow one or more of them to operate thematically, if desired
- Plan the Small Learning Communities to allow one of them to be a Freshman House, if desired
- Select furniture that supports collaboration, different learning modalities, and is substantiated by brain research
- Create Teacher Planning Centers to foster collaboration, interdisciplinary teaching, and greater knowing of students by teachers
- Create a Media Center for the 21st century. Call it a Learning Commons. Locate it close to students, in each Small Learning Community and in a central location
- Create a building plan that offers security and safety despite constant visitors, many of whom will be using CTC services or will be active participants in student learning

KEY WORDS FOR EDUCATION

Workshop participants each identified one-word or two-word phrases that best represented their individual thoughts about their desired future Educational Deliveries. These words could be the basis of the “elevator speech” describing the future DHS and CTC.

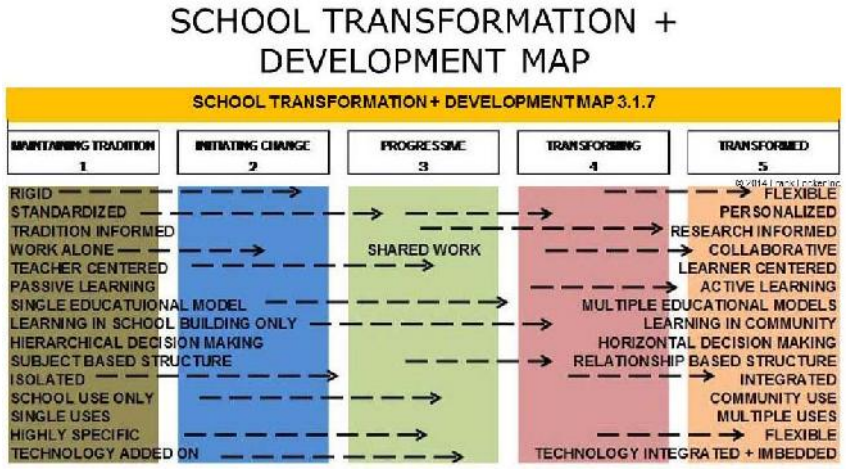
Their key words for education were:

- Collaborative
- Individualized

- Active
- Active/productive
- All inclusive
- Authentic/passionate
- Catered to the student’s future
- Custom
- Efficient
- Exciting engaging
- Experimental
- For everyone
- Hands-on
- Individualized-based education
- Inspiring
- Integrated (Interdisciplinary)
- Interactive learning (engaging)
- Motivational
- Practical
- Project-based learning
- Real-world application
- Revision driven
- Revolutionary
- Sincere
- Student-centered

SCHOOL TRANSFORMATION + DEVELOPMENT MAP

Workshop participants, working in three person Micro Teams, used the School Transformation + Development Map to evaluate DHS and CTC's current educational delivery and facilities, and to project the desired future for both.



The ST+DM expresses the evolutionary shift in education in great detail, chronicling educational practices and facility design. Schools today are in different points of evolution, and many schools expect to be in different points of evolution in the long-term future. The ST+DM characterizes schools and facilities on a 1 through 5 basis, with 1 as the most traditional category, and 5 as the most transformed.

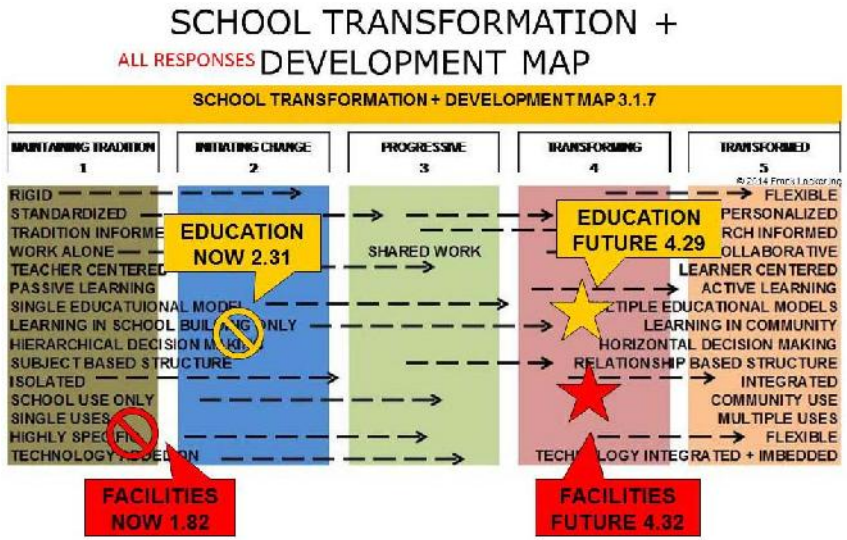
Workshop participants worked in Micro Teams to review the multiple educational practices and facilities concepts in the School Transformation + Development Map. They scored the schools in the following categories:

- Educational Delivery Today
- Facilities Today
- Future Educational Delivery
- Future Facilities

This average score gives a general understanding of current and desired future practices and facilities. Appendix Ch 5.5 contains the results articulated by the Micro Teams.

The average scores are:

	Now	Future
Education	**2.31**	**4.29**
Facilities	**1.82**	**4.32**



The overall scoring of all Micro Teams was relatively close on all four issues, indicating a high degree of consensus among workshop participants

The most important lessons from the ST+DM for the immediate future come from the difference between today's situation and the desired future. The Visioning Team desires significant change in both, more than two columns out of five. For education this means that a program of staff professional development needs to be implemented, starting soon. For facilities, it means that facilities will not look like traditional school. In both cases dialogue with the community needs to be engaged in order to share and receive comments and guidance on the exciting concepts proposed for the future DHS and CTC.

MOST IMPORTANT CONCEPTS FOR THE FUTURE

Visioning Team members, working in eight Table Teams, were asked to identify the three most important issues for learning in the 21st century at DHS and CTC.

The results are outlined here, in order of importance based on frequency of citing:

- Project-Based Learning
- 21st Century Skills
- 21st Century Learning Spaces
- Flexibility for Change
- Teacher Teaming/Collaboration

LEARNING MODALITIES

The Visioning Team members considered twenty learning modalities, ranging from traditional lecturing and direct teaching to independent study, and ranked them in order of appropriateness.

The most commonly cited most effective modalities are:

- Small Group Work/Student Collaboration
- Project-Based Learning
- Student Presentations
- Making Things/Design Thinking
- Internships
- Teacher Teaming/Synchronous Teaching

The most commonly cited as the least effective modalities were:

- Lecture
- Distance Learning

The full record of Learning Modalities preferences is in Appendix Ch 5.2.

SCHOOL ORGANIZATIONAL STRUCTURE

Visioning Team members were asked to reflect on model school organizational structures.

Overall Organization

They were presented with six possibilities, and asked to create new ones if necessary. Their charge was to rank the possibilities for appropriateness, and then develop “pros” and “cons” for one or more of the possibilities.
The choices were:

A. Departmental, 9-12, separate Career-Tech
B. Departmental, 10-12, with separate Freshman House, and separate Career-Tech
C. Vertical (interdisciplinary) 9-12 Small Learning Communities (SLCs), with Career-Tech as one of them
D. Vertical (Interdisciplinary)10-12 SLCs, with Career-Tech as one of them and a separate Freshman SLC
E. Choice, Thematic 9-12 SLCs such as a STEM/STEAM focus, or Arts, or Human Services or other with Career-Tech integrated in them as appropriate
F. Choice, Thematic 10-12 SLCs such as a STEM/STEAM focus, or Arts, or Human Services or other with Career-Tech integrated in them as appropriate, and Freshmen as its own SLC
G. Other: identify and share with others ASAP

Working in Table Teams, they ranked these possible school structures as follows. The one most commonly cited as most appropriate one is first.

Choice F, Thematic 10-12 SLCs such as a STEM/STEAM focus, or Arts, or Human Services or ??? with Career-Tech integrated in them as appropriate, and Freshmen as its own SLC
Choice D, Vertical (Interdisciplinary)10-12 SLCs, with Career-Tech as one of them and a separate Freshman SLC
Choice C, Vertical (interdisciplinary) 9-12 Small Learning Communities (SLCs), with Career-Tech as one of them
Choice E, Thematic 9-12 SLCs such as a STEM/STEAM focus, or Arts, or Human Services or other with Career-Tech integrated in them as appropriate

Choice G was favored by its proponents, in four variations:

- Thematic Freshman sampler, advisories
- Themes as events during each school year
- Combined thematic and vertical Small Learning Communities
- Interdisciplinary Small Learning Communities

The least favored defined structure was:

Choice A, Departmental, 9-12, separate Career-Tech

These results are significant. The traditional American school model, and the one generally employed in DHS and CTC, the departmental model, was deemed the least appropriate. The combination of the most favored organizational structures defines a school that does not look like traditional school, with teachers working collaboratively, swapping interests and passions, in a physical setting conducive to collaboration, sharing, and knowing students well, and most importantly, complete integration of CTC with DHS.

See Appendix Ch 5.4 for full details.

Teacher Collaboration

They were presented with six possibilities, and asked to create new ones if necessary. Their charge was to rank the possibilities for appropriateness, and then develop "pros" and "cons" for one or more of the possibilities.

The choices were:

A. Teachers work separately
B. Teachers "platooned" (swapping specialties/passions/interests)
C. Teachers "looping" with students
D. Teachers collaboratively/synchronously teaming
    a. In pairs
    b. In triads
    c. In quads, or more
E. Out of the Box

Working in Table Teams, they ranked the Teacher Collaboration possibilities as follows. The most appropriate one is first.

Choice Da, Collaboratively, synchronously teaming in pairs
Choice Dc, Collaboratively, synchronously teaming in quads, or more
Choice Db, Collaboratively, synchronously teaming in triads

The least favored was:

Choice A, Teachers work separately

These results are also significant. As with School Organization, outlined above, the traditional American school model, and the one generally employed at DHS and CTC, teachers working separately, was deemed the least appropriate.

See Appendix Ch 5.3 for full details.

Facility Concepts

INTRODUCTION

The Visioning Team developed facility concepts for the future Dover High School (DHS) and Career Technical Center (CTC). The concepts are defined through:

- **Key Words for Facilities,** characterizing the desired future school building in tiny "sound bites"
- **Places for Learning,** detailed descriptions of the learning environments
- **Defined Spaces,** expressing desired characteristics of the most important non-classroom spaces
- **Overall School Organization Diagram,** capturing strategic relationships over the entire DHS and CTC school building

KEY WORDS FOR FACILITIES

As closure to the six days of workshops, participants were asked to identify one word that best represented their individual thoughts about the future DHS and CTS's facilities.

Their key words were:

- Flexible (cited 12 times)
- Open (cited 3 times)
- Diverse (cited 2 times)

- Better
- Community/cooperative space
- Cost effective
- Dynamic
- Efficient
- Expensive
- Innovative
- Inspirational
- Inspiring
- Inviting
- Light and air
- Magnificent
- Modern
- Net-zero
- Public access

- Supportive
- Versatile
- Welcoming

PLACES FOR LEARNING

The Visioning Team reviewed fourteen exemplar schools from the USA, the United Kingdom, and Australia. Working in Table Teams they ranked the schools for appropriateness for the future DHS and CTC.

Essential characteristics of future core learning spaces were identified as:

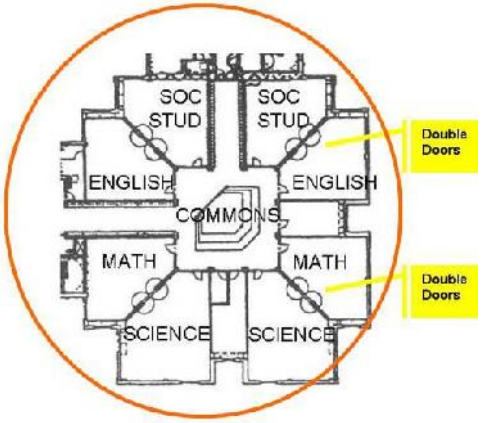
- Learning spaces arranged as Small Learning Communities
- Participants desire future facilities to be flexible for change, with multiple educational deliveries and learning modalities
- Classrooms are to be flexible, interconnected, and supported by auxiliary spaces including Collaboration/Breakout/Commons Spaces
- Possibility of students working in multiple places
- Common, collaborative spaces
- Circulation to be used for learning
- Interdisciplinary possibilities
- Teacher collaboration should be supported by the facilities, such as connections between the rooms
- Teacher Planning Centers to support collaboration and community
- Possible to locate satellite Learning Centers within

Most Appropriate Planning Concepts

ALL RESPONSES

Table Teams each identified three most appropriate planning concepts and one least appropriate. The composite scoring of all of the Table Teams responses, shown here, gives a good indication of the overall values and goals of the workshop participants. Shown here are representative photos, descriptions, and Table Team comments for the five most commonly cited exemplars, each cited by three to five of the eight Table Teams.

IPSWICH MIDDLE SCHOOL



Featuring:

- Arranged in “pods” or “clusters” with eight classrooms, a Teacher Planning Center, and a Special Education Resource Room in each
- Each pod is centered around a shared Commons/breakout space
- Classrooms are arranged In pairs
  - Math and science
  - English and social studies
- Paired Classrooms have communicating double doors between them
- Commons/breakout space designed as multi-media presentation space

Table Team comments included:

- Common seating forum
- Interdisciplinary classes
- Community spaces clustered at Entry
- Courtyard potential
- Common Area
- Flexible seating
- Small Learning Communities

- Ability to break into “Houses”
- Gym/Theatre separate to accommodate community use
- Flexibility of learning space + intentional teaming
- Common space, presentation space
  - Pod, SLC
- Connect between rooms
- Connecting classrooms
- Common spaces
- Flexibility

OLD TOWN ELEMENTARY SCHOOL
Featuring:

- Classrooms arranged as a cluster around a central Commons
- The number of classrooms in a cluster intentionally does not match the number of classrooms needed for each grade level
- 6 FT wide openings between adjacent classrooms
- Commons Area has presentation area, alcoves for breakout/ tutorials, mini-Library area
- Accessible through Commons are Teacher Planning Center, Student Toilets, Storage, Specialist Offices

Table Team comments included:

- More potential for natural light
- Flexible spaces like other models
  - More instruction, autonomy, model “C”

- Common space, SLC
- Offices → flexible work spaces within Pods
- Allows for interdisciplinary teaching options within layout
- Flexible common spaces
- Small school within a school
- Common spaces
- Connecting classrooms
- Open areas
- Everything comes off of Central Common Area

MILAN HIGH SCHOOL CENTER FOR INNOVATIVE STUDIES
Featuring:

- Learning spaces organized as Activity Centers, each with different furniture and equipment
- Learning spaces include a Maker Space, a Design Studio, flexible Classrooms, and Collaboration Booths
- Teachers teach by rotating among the spaces with their students
- Teachers share a Teacher Planning Center
- Circulation used for learning: student study and small group collaboration

Table Team comments included:

- Variety of spaces – collaboration
  - Project working spaces
- Common Area
- Multiple use of Corridors
- Technology-based
- Project-based learning
- Look appears comfortable, inviting, homey
- Fosters project-based learning
- Natural light/flexible learning spaces
- Unique size + shape of learning spaces

NEW TECH HIGH

Featuring:

- Double sized classrooms for teachers working in pairs
- Cyber Café at center of the school
- Well-developed outdoor learning spaces
- Each classroom has small group discussion area

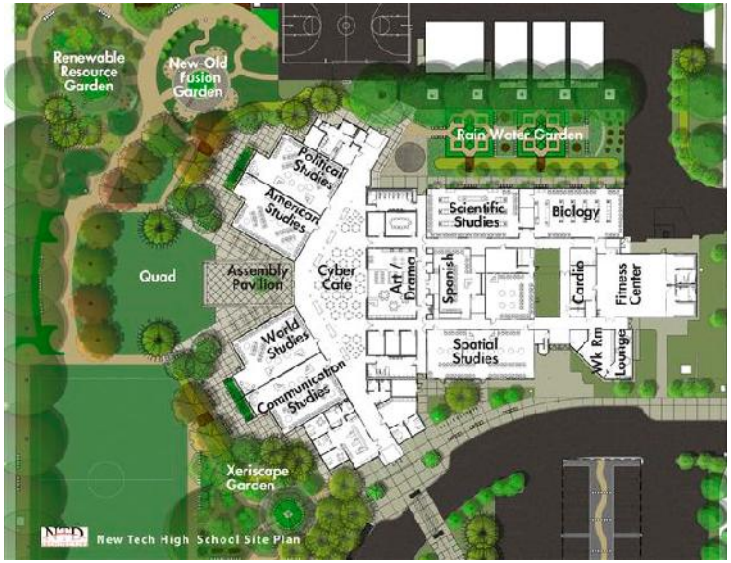


Table Team comments included:

- Indoor space
- Interdisciplinary studies
- Varied work spaces (learning, social, collaborative)
- Ability to break up into “Houses”
- Flexibility of design to incorporate CTE
- Outside learning spaces
- Outside walls
- Natural lighting
- Commons Area

Least Appropriate Planning Concept

SOUTHAMPTON HIGH SCHOOL

Cited five times

Featuring:

- Departmental planning
- Isolated classrooms
- No central focus
- Challenging separations between learning spaces

Table Team comments included:

- Already have it
- Teachers not collaborating
- No natural light
- Isolation and separations
- Lack of flexible/project working spaces
- Potential lack of natural light
- Lack of light
- Not flexible/differentiated size/shape
- Isolated
  - Department
  - Classroom
  - Teachers
  - Students
  - Etc
- Departmental
- Inflexible
- Current, traditional model
- Compartmentalized everything
- Overly traditional classes

Full details of all Table Team responses are in Appendix Ch 5.6.

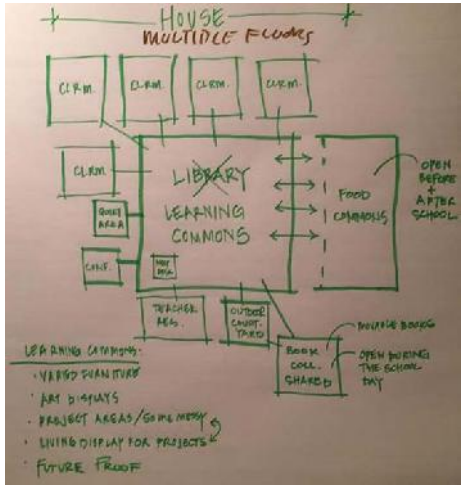
DEFINED SPACES

Essential non-classroom spaces were given consideration by the Table Teams. The outlines below represent their most salient concepts.

21st Century Library/ Media Center

Essential characteristics are:

- Each House has a Learning Common
  - House – multiple floors
- In each Learning Commons:
  - Varied furniture
  - Art displays
  - Project areas/some messy
  - Living display for projects



Auditorium

Essential characteristics are:

- Full-size Stage
- Backstage
- Green Room
- Storage/costumes/props
- Orchestra Pit (with extendable stage when needed)
- Stage lights
- Generous Lobby with area for Ticket Booth
- Close to
  - Art Department
  - Band/Chorus Room
  - Building trades
  - Sewing
  - AV
- Entrance – rear Main Lobby (for community)
  - Can be segregated from the rest of school
- Classroom space or sections incorporating (through flexible furniture) work space
- Working Fly System

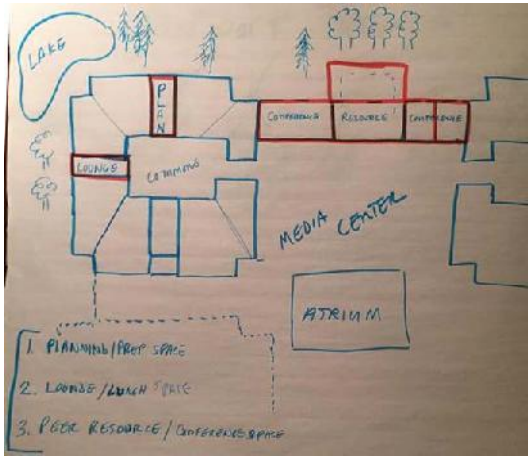
Making Things to Learn

Essential characteristics are:

- Storage
- Variety of spaces
- Safety/equipment + training
- Specialized areas blend to CTE:
  - Electronics
  - Woodworking
  - Textiles
  - Welding
  - 3D Modeling
  - Video/Audio Studio
  - Machining
  - Graphics
- MANY low-tech Maker Spaces by zone

Teacher Support
Essential characteristics are:

- Teacher Planning Centers for professional support located in each Small Learning Community
- Lounges for lunch at each Small Learning Community
- Shared central support at the Media Center:
  - Resource
  - Conference Rooms



Student Life
Essential characteristics are:

- Like an Airport Terminal
  - Food
    - ✓ Water stations
  - Electronic support
  - Variety of furniture
  - Project space
  - Outside vendors
    - ✓ Food
    - ✓ School supplies
  - Large groups could meet
    - ✓ Clubs
    - ✓ Students
    - ✓ Before/after school
  - Courtyard/Atrium
    - ✓ Lunch/Study
    - Advisory – get help
    - Two-hour block
  - Study Halls
    - ✓ Make these spaces available
    - ✓ Change supervision paradigm

Community in Building; School in Community
Essential characteristics are:

- Two entrances → student + community
  - Student → front
  - Community → rear/side → leads to CTC programs that offer services
    - ✓ → Make like a store front
- Marketing runs Dover High "Bookstore"
- Central to school, Library/Media Center directly above
  - → Opens up School Store to community and integrates school into the real world
- Both CTC and traditional classrooms are conducive to adult education/night classes
- Allow community to use school spaces
  - Meetings
  - Plays/shows (public)
- Good advertisements
  - On/in school
  - In business downtown
- School isn't a school → it's a community building. One of the things it does is educate.

Administration
Essential characteristics are:

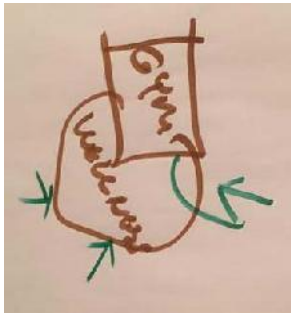
- Administration
  - Deans
  - Principal
  - CTC director
  - Guidance
  - Social worker
  - Psychologist
  - Nurse
- Ideas
  - Open
  - Inviting

- Private
- One-way windows
- New front of the school
- Secure/safe
- Passageways

Wellness

Essential characteristics are:

- Wellness Center/Gym
- Health Office/Nurse Practitioner
  - LNA
  - Athletic training
    - ✓ Classroom spaces
- Mental Health Office
- (Youth 2 Youth/DARE) Student Services
- Resource officer
- Fitness Center
- Group Fitness Rooms
- Boys + Girls Locker Room
- Wellness instructor space



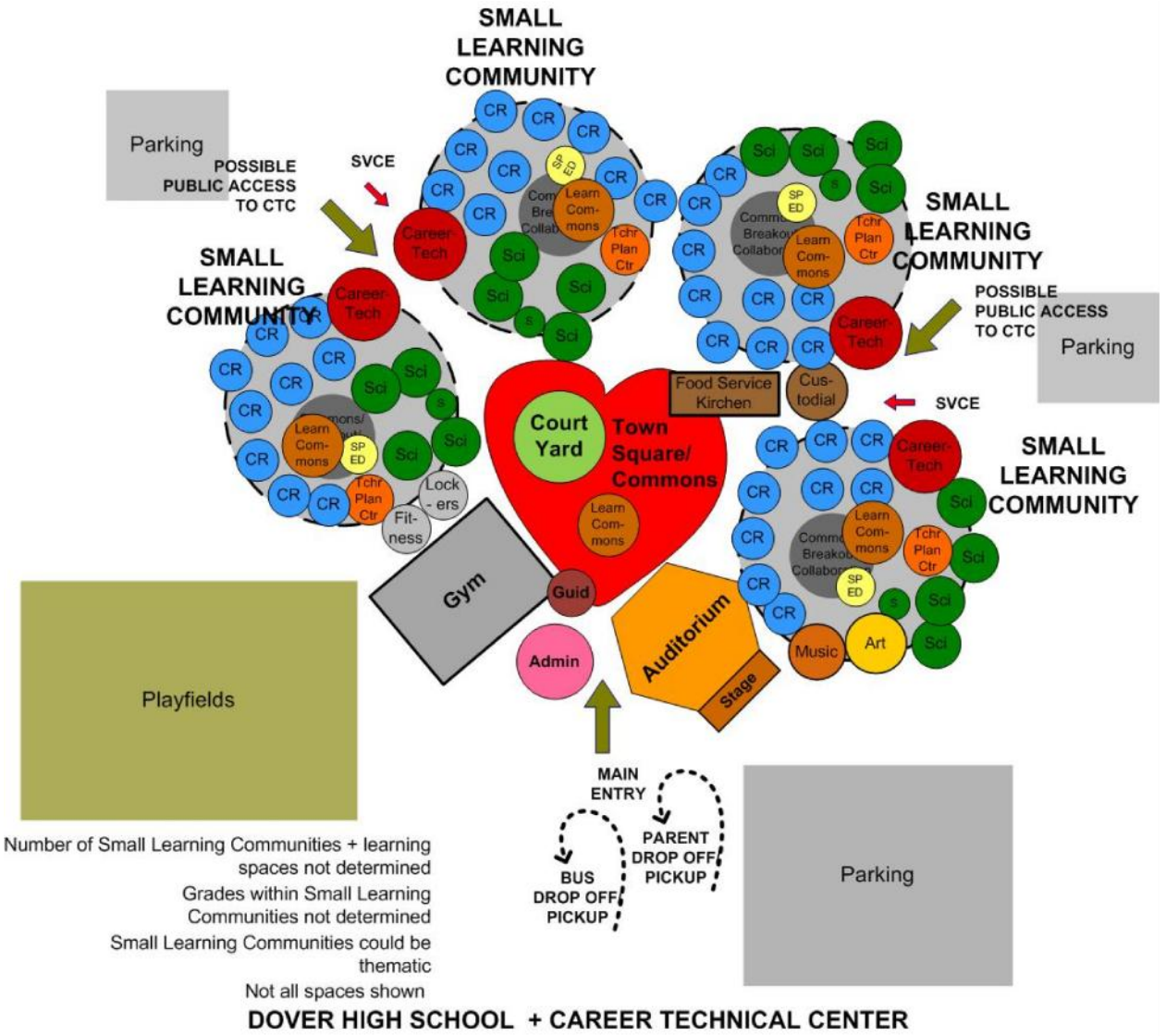
A full description of Table Team work is in Appendix Ch 5.6.

- A centralizing space which could be called Commons or Town Square
  - Public Access to this space will be encouraged
- It would have:
  - Tiered seats
  - Food
  - IT
  - Study Hall
  - Learning Commons
- Spaces most likely to have public access require special care in planning to maintain safety and security.
  - Integrate public facing CTE programs such as culinary, cosmetology and the school store into the centralizing space
  - Coordinate public access to these destinations with controlled access doors, as few as possible
- Some public access will be by vehicles, such as to Auto Tech and Animal Science
- School organized into Small Learning Communities (SLCs)
  - Academic and CTE spaces should be integrated within the SLCs
  - SLCs must be flexible and adaptable to operate either in a thematic mode or an interdisciplinary mode
- Encourage a high level of visual connection throughout

The overall planning diagram is shown on the next page:

OVERALL SCHOOL ORGANIZATION DIAGRAM

Workshop participants guided Frank Locker in the drawing an overall school planning diagram. Critical features of this were:


SMALL LEARNING COMMUNITY
Parking
POSSIBLE PUBLIC ACCESS TO CTC
SVCE
SMALL LEARNING COMMUNITY
SMALL LEARNING COMMUNITY
POSSIBLE PUBLIC ACCESS TO CTC
Parking
Food Service Kirchen
Cus-todial
SVCE
SMALL LEARNING COMMUNITY
Court Yard
Town Square/ Commons
Gym
Guid
Admin
Auditorium
Stage
Music
Art
Playfields
MAIN ENTRY
BUS DROP OFF PICKUP
PARENT DROP OFF PICKUP
Parking
Number of Small Learning Communities + learning spaces not determined
Grades within Small Learning Communities not determined
Small Learning Communities could be thematic
Not all spaces shown
DOVER HIGH SCHOOL + CAREER TECHNICAL CENTER

Workshop Notes Day 1

AGENDA

The first Visioning workshop was held on 17th December2014. Notes of all activities follow:

- Snapshot of Dover HS and CTC
- Discussion of Pre-Workshop Videos
- 21st Century Schools Presentation
- 21st Century Learning Most Important Issues
- What Works at Dover HS and CTC? What Could Be Better?

SNAPSHOT OF DOVER HS AND CTC

DHS School Principal Peter Driscoll gave a short overview of the current organization and learning outcomes of Dover HS and CTC, citing:

- There are 1400 students in the building
  - 1315 FTE students
  - 75 PTE at CTC
- Academics include:
  - Advanced Placement
  - Honors
  - College Prep
  - Foundational
- Core subjects include:
  - Science
  - Social Studies
  - Math
  - English Language Arts
  - World Language (extensive, includes Latin)
  - Biotech through CTC taught by DHS tech
  - Look for more integration
- Extensive arts, musical, visual
- Visual arts are visible throughout the city
- Music has lots of electives
- Winterguard– highly successful
  - Lots community support
- Theater arts:
  - Unified
    - ✓ Special needs kids are paired with others
- 29-41 Club offerings
  - Lots community service

  - Food Pantry
  - Blood Drive
- We are a Division 1 school
- Students encouraged to participate
  - Extra-curricular
  - Sports
- 2014 graduate destinations
  - 79% college
  - 22% work
  - 4% military
- SAT average scores:
  - 513 math
  - 492 writing
  - 65% took the SATs
- 99% graduation rate
  - Guidance and Dean are very important
- Schedule:
  - (4) 90 min blocks per day
  - We have A – B - alternating days
  - Therefore there are eight slots to fill in a two-day sequence
- CTC has a regional agreement:
  - Includes Rochester, Spaulding, Marshwood
- CTC has new technology and old technology
  - Must keep up with industry
- CTC has:
  - Engineering classes
  - Flight
  - Biotech
  - CNA program
    - ✓ Healthcare is 20% of GDP
  - EMT
  - Fire fighting
- Approximately 1/3 of DHS students are in the CTE program
- Non-traditional roles:
  - Girls class for engineering
  - STEM club for girls

DISCUSSION OF PRE-WORKSHOP VIDEOS

The Visioning Team was asked to review videos related to education. They identified the most important lessons from the videos in a whole group discussion. Here are their comments:

Videos watched were:

- Sir Ken Robinson on *Why Schools Kill Creativity*
- Sir Ken Robinson on *Changing Paradigms of Education*
- *21st Century Learning in New Brunswick, Canada*

Comments included:

- School as we know it was driven by Industrial Revolution
- Students need to construct knowledge themselves
- HS is where you learn how to learn
- People who end up at university where most educated in traditional system
- Think Pre-K – 12 overall
- Unless parents buy in, our work will not be accepted
- Paradigm Shift:
  - Standardized testing vs collaboration
  - Redefine our values
    - ✓ Academic is taught in separate subjects – world is not separate
- Memorizing for test
  - Why?
  - How to find information and use it is more important
  - Sorting information is more important than memorizing
- Why do we test?
- We need:
  - Problem solving
  - Persistence
- Students display what they know:
  - Projects
  - Test results
- Students will have 5 to15 careers
- Disruptive technologies – how to encourage kids to be disruptive in HS
- 24/7/52 learning. What would that look like?
- Have to know how to do everyone's jobs who works under you

21st CENTURY SCHOOLS PRESENTATION

Frank Locker presented on the changing values, goals, and deliveries that characterize the most progressive thinking about schools in the United States, and worldwide, today. Key points included:

- 20th vs 21st century schools:
  - The 20th century was a century of creating efficient schools; the 21st century has been a century of looking for effectiveness in schools
  - 20th century was the century of the teacher; 21st century is the century of the learner
  - The teacher used to hold all the information; now the teacher is the guide
- Research in learning informs us of many effective educational practices
  - Some are gaining popularity
  - Others are not yet in general practice
- Learning is more effective when students apply their learning immediately
- The Multiple Intelligence Theory explains why different students learn best in different ways
- 21st Century Skills Framework offers a clear concept of skills students need for success in our rapidly changing global economy. It establishes:
  - Core, subject-based learning is not sufficient any more
  - Learning relevant 21st century survival skills is just as important, perhaps more important. These include:
    - ✓ Learning and innovation skills
    - ✓ Life and career skills
    - ✓ Information**,** media, and technology skills
- Craig Jerald was cited as researching the most important traits that business and industry really want – professionalism/work ethic
- Learning should be interdisciplinary, bridging the gaps between subject areas
- Learning should be infused with 21st century themes. These include:
  - Global awareness
  - Financial, economic, business and entrepreneurial literacy
  - Civic literacy
  - Health literacy
- Learning is a social activity. Students learn better when they are in strong relationships with teachers and peers
- The Relevance and Rigor Framework of the International Center for Leadership in Education correlated Bloom's Taxonomy with application, offering a concise understanding of effective learning
- Google's Futurist has identified future new job titles
  - University Dismantler
  - Wireless Electrician
  - Urban Agriculturalist
- Teachers' work is supported through strong relationships with other professionals
- Schools are looking for more community connections to improve student learning
- Flexible furniture is needed to bring the student the support to learn in a variety of modalities

Individual Responses

Visioning Team members scored the relevancy of the different issues outlined while Frank was presenting. The next page has a compilation of their scores. Individual comments follow:

ISSUE	VERY IMPORTANT	IMPORTANT	DON'T KNOW	MAYBE NOT	NOT IMPORTANT	SCARY TO ME
1 Learning Pyramid	9	28	4	1	1	2
2 Gardner: Multiple Intelligences	18	20	3	1	1	
3 Integrate arts in core learning	15	14	10	3	1	2
4 Environmental Sciences/Sustainable Lvng/ STEM/STEAM	23	15	2	2		2
5 Relationships: Dunbar's Law, "Magic of 150", Breaking Ranks, Advisor/Advisee programs	18	15	6	3	1	1
6 Computers for Learning: Adaptive Lrning, Blended Learning, Computer Games Lrning	12	15	8	4	2	4
7 Revised Bloom's Taxonomy	11	17	14	1		
8 Daggett: Relevance + Rigor Framework	16	15	8	2	1	2
9 21st Century Skills	26	13	3		1	2
10 Jerald's Research on 21st Cent Education	18	14	7	2	1	3
11 Project Based Learning, Paris Cafe	30	7	3	2	1	6
12 Design Thinking; Making Things to Learn	14	18	8		1	2
13 Small Learning Communities	24	11	4		2	1

ISSUE	VERY IMPORTANT	IMPORTANT	DON'T KNOW	MAYBE NOT	NOT IMPORTANT	SCARY TO ME
14 Flexible, Varied, Brain Based Furniture	25	10	6	1		3
15 New Technology Close By	20	15	4			1
16 21st Century Learning Spaces	21	15	5			4
17 Teacher Planning Centers	13	16	11	2		
18 The End of the Library as we Know it Today	15	16	7	2		4
19 Flexibility for Change	17	15	1	1		3
20 Frequent Presentations, Group Discussions	7	12	3			1
21 Internships, Service Learning	12	10				
22 New Schedule Concepts	11	6	4	1		1
23 Integrated Applied Learning	7	10	3			1
24 Teacher Teaming/Collaboration	14	10	7	2	1	3
25 End of the Classroom as we know it Today	18	11	5	3		9

Individual Comments

Comments from individual Visioning Team members in response to the presentation issues are as follows:

ISSUE

1 Learning Pyramid

- Work on retaining knowledge not copying previous generations
- Realistic figure
- Depends on how it is applied
- Retention now does smarter balance
- Has worked in my life
- **"**Hands-on learning" is important
- Foundation concept
- Shows the ineffectiveness of some teaching
- Targets for success
- Understand how learners remember

- Career/hands-on
- I don't understand the pyramid
- Good to know
- Learn by doing and teaching others
- I learn similarly
- Is this still true? Research?
- Construct knowledge
- Interactive is important
- Our pyramid model is upside down
- It is not relevant to today's learning
- Yes we need to pay attention to this
- Guide on the side

2 Gardner: Multiple Intelligences

- Need to look at reaching all learners
- Teach many ways to target all people
- Many other intelligences
- Test this? We need to stop teaching kids that they are dumb!
- Some strengths aren't just in core subjects
- Not everyone learns the same way
- Grouping students in only two is dangerous and false
- Appreciation of diversity is key
- I have multiple forms of intelligence, as do nearly all my peers
- Seems hard to implement
- To understand how you learn and how to teach
- People learn in ways other than listening to a teacher speak
- Around long enough to know
- Needs of different students' strengths considered
- Need to be well rounded
- I am ???/athlete
- How does this happen - ? Helps students feel ???
- Special Ed…
- Recognize all ways to knowledge
- Important to recognize and vary lessons
- Because it doesn't help with what to do with those who don't learn the same way
- Teach to diverse students/learning styles
- People learn differently
- Seek toward success for everyone
- Differentiate instruction
- People learn differently

3 Integrate arts in core learning

- Brings in creativity, perseverance, communication
- Increase pass rate
- How can we as a high school do this and prep for college?
- May work in some subjects, not others
- Opens students to new ideas and allows them to break out of insecurity
- Arts make life worth living
- Modern system discourages interaction/assimilation
- Might help with #2
- Not all students feel they are "artsy"
- Goes along with multiple intelligences
- Brain research fascinating
- Only a few students
- Sometimes arts are a kid's only success – make it translate
- Engagement/authentic
- Allows for engaging students
- Not relevant to all
- Humans are artistic
- Concern we will not offer enough…we need strong arts! Levels the field
- Integration
- Kinesthetic learning/movement

4 Environmental Sciences/Sustainable Living/STEM/STEAM

- Integrate with other content areas!
- Apply different subjects
- Wider amount of education
- Future and real-world
- Love the integration idea
- Important in today's society
- We don't have enough (★) higher ed focus on STEM a lot more now
- Focus on specific jobs (for engineering kids)
- Connection to real-world – life after HS
- Will be predominant subject in future
- Looks very expensive. Seems very technical. English? Arts?
- Prepare students for workplace need
- Already doing this
- Gives choices to students
- Better prepares students for future

- Applied math and science hugely important
- Integrating separate topics
- Teachers definitely need more time to talk and plan together
- STEAM
- Not every kid is really good with math or tech
- Integration of curriculum
- Breaks down stereo-types
- People need a variety
- Students who enjoy social studies and English wouldn't have access to them
- Expression

5 Relationships: Dunbar's Law, "Magic of 150", Breaking Ranks, Advisor/Advisee programs

- Need to be connected to students and colleagues or cross disciplines
- The teachers I know best, I have the highest grade in their class
- Better chance of learning more
- What about content area support for teaching? Advisory? How would the split be defined?
- Relationships between teachers and students
- Make education personal = higher averages
- Need to know our kids
- Intrapersonal relationships are discouraged
- ✓ idea of teachers of same students meet
- Career content areas together
- It's easier for me to focus in the classroom where I have a good relationship with the teacher
- Fact finding and listening!
- Stray from curriculum elements
- Learn better when I know teacher well
- Well known – relationships
- I feel like I have good relationships with most of my teachers
- Teacher student ration 15:1
- Kids need a greater support system
- Connection/relationships
- Definite benefits with advisor programs
- Very accurate
- Enhances retention and success
- Should sort by department NOT age level, keep all to one school
- Power of small communities – sort by work! Montessori!!

6 Computers for Learning: Adaptive Learning, Blended Learning, Computer Games Learning

- Still need to face to face with students but varied options important – real life
- Cater towards how kids learn as individuals
- A good idea, but will it work?
- Must "teach" personal and social skills "off-line"
- What about collaboration and interpersonal relationships?
- (HS on-line) learning only on-line – missing very important human interaction
- Small schools aren't always better
- Blended learning!
- We shouldn't rely on technology work with teachers
- Important to have as an option – need to keep human connection
- More collegiate. Like it
- Problem = how does this translate into the workforce?
- Hard to do with career tech
- I feel that it'd be harder on-line
- Our technology is terrible
- Critical – but may well be some relational costs
- Need to learn in person. On-line good for supplemental review
- Creates better learning
- Sounds good for helping kids – but also robot like
- Blended – bring knowledge into class – demographics don't need a computer at home – just a phone
- Need to know more about it
- Students won't do on-line courses. They need someone telling them
- Social skills could take ???
- You can see this is the trend we are moving to
- Because it's a bad idea
- Adjusting learning to individuals
- At what point is the teacher too involved?
- Flipped classroom. Accessing a valid resource

7 Revised Bloom's Taxonomy

- Depth of knowledge (by Webb) more important
- The idea works

- Need more time…
- Revision shows change is coming
- Application is important
- Foundation concept
- Evolution of learning process
- Relevant
- Streamlines planning
- Doesn't seem to add much
- Not much change
- Create knowledge passive→action
- As it relates to learning pyramid
- The revised version!
- Application
- Active learning
- Create use for planning – language students can understand

8 Daggett: Relevance + Rigor Framework

- Students need to be able to make meaning. Work needs to have connection to life
- WE need to apply knowledge to jobs
- It seems outdated
- Is this a grading system to be used in a school?
- We're already working on this
- Keeping some of the "old-fashioned" techniques too. Real-world issues in school
- Model of how to move to 21st Century
- Another attempt to quantify educational values?
- Old dated evaluation
- Basic idea, re-application useful but seems too "two dimensional"
- Need a mix of A+D
- Real world
- But I love Bill Daggett – I just don't get this chart/colors
- Knowledge but don't know what to do with it
- Get to D
- Relevance to real world/careers in future
- In a good way, how to make it more student friendly

9 21st Century Skills

- Not sure how to reunite with state and federal requirements (HQT, testing etc), 4C's!
- Teach present-day skills, not skills from 100 years ago
- All the skills are needed
- What are 21st Century themes?
- Meet today's needs
- Life + career skills!
- The arts needs to be a part of academic importance
- Model of how to move to 21st Century
- Key to one's success is modern economy
- NEVER WAS SUFFICIENT
- Preparing students for life after school
- Can't live without them!
- Needing more
- Having things that every student can excel in
- Stop memorizing and start thinking
- Proven to be needed for future employees
- Slowly removing math, science, English, and social studies
- Global awareness
- GLOBAL AWARENESS! Exchange program? Opportunity to travel?

10 Jerald's Research on 21st Cent Education

- The idea and integration works
- How is this graded? How does on-line learning support spoken communication?
- Four + two years are where you craft your skills
- Communication, creativity, etc
- Model of how to move to 21st Century
- This is not news
- Feel we do this in CTE
- Real-world workplace
- Need to focus on speaking
- All the core subjects are important like the ones at the bottom
- It's scary if this is an issue, especially the written and oral communication. More kids can speak well than write well
- Accurate
- Work ethic! Please help us foster!
- Speaking vs writing
- Social media – does it take away from verbal communication?

11 Project Based Learning, Paris Cafe

- Critical mechanism to support students in developing/refining above topics and integrating content
- Applying knowledge
- Allows teamwork to happen
- "Right" person in the "right" seat
- Seems like quality performance assessments
- Projects allow for application
- No single answer that is right (does need to be monitored)
- Combines research with collaboration
- Great example of model of how to move to 21st century
- Seems effective as my education lacks real-world application
- PRACTICAL APPLICATION. LOVE IT
- Unexpected outcome can be scary to students/staff
- Very different from what we're used to
- Time management and people to people planning
- How to implement?
- Exciting, innovative, integrative, collaborative
- Demonstrating they learned the basic skills and concepts needs strong network
- Not all of work in school!
- This will work for motivated kids with strong family support systems
- Projects are a great way to test knowledge. Real-world experiences promote travel. Traditional school layout is easy to navigate
- Super = all problem solving
- Difficult to coordinate in our structure and scary for teachers
- Helpful – proves and expands knowledge
- No answer, big overhanging projects
- Hands-on, helpful
- Integrates and applies knowledge, makes it real and applicable
- No way to find definite answer
- Help us innovate!
- Application – cross curriculum

12 Design Thinking; Making Things to Learn

- Need to know more, sounds interesting!
- Allows creativity to work
- Where do the materials come from?
- Physical learning helps the lesson to "stick"
- Expand what we already do
- Seems effective as my education lacks real-world application
- More practical application!
- Great idea/realistic on large scale?
- This is huge. I could go on for hours
- Creation ??? spaces and some school libraries too
- Many public libraries have
- Maker spaces
- Hands-on works
- Resources, community buy-in
- Very important – provides community involvement
- Hands-on helpful
- WOW!
- Creativity

13 Small Learning Communities

- More collaboration
- Much better learning experience
- Timing/implementation
- Space is specific to the student. Benefits vary
- Support collaboration
- I had an open concept high school. Disaster; the open area wasn't used and the classrooms on the outside were traditional classrooms. There was a lack of commitment to the structure from the administration. Winchester High School
- May not be possible for all area's
- Variety
- Safety to be honest ↓ is not respected by others in room. Risky at times
- Use of space
- Relationships!!! Having voice heard
- More focus on students
- Collaboration

14 Flexible, Varied, Brain-Based Furniture

- Comfort, promoting learning/active
- Fewer distractions/more focus
- Is it cost efficient?
- Cost and maintenance
- Drooling right now!!
- Sitting in those traditional desks is awful

- Light and easy to move on wheels
- Being comfortable and brain movement help learning
- Healthy and promotes focus!
- IMPORTANT – school can be and has been a disaster to physical health
- Love it
- Traditional doesn't work
- Easier to stay focused
- I work with student services – works!
- Maintain flow of class. Don't won't to see a circus
- Movement
- But expensive for Dover
- Hard to sit in uncomfortable chairs for long period of time. Hard to be on your feet all day. Collaborative zones (corridors) are a cool idea. Glass, what happens when someone tries to shoot people? It is important to have mixed classes so you're always interacting with new people
- Recognize different learning needs
- Never really thought about before
- Studies show better focus
- Helps kids focus
- Must be flexible for meeting changing need over time
- I'm sick of sitting now
- No more one arm bandits
- Brain-based learning – continued movement

15 New Technology Close By

- Need more information, but probably important
- More learning potential
- We also need to be versatile for incoming technology
- Easy and fast or distracting
- Technology is the future. If this harnesses it, I am all for it
- Technology = correct and working
- Need a robust IT infrastructure for this to happen
- Separate use
- PUBLIC SPACE!
- $ and access
- Authentic learning tools/active learning
- Why not take advantage?!
- A lot of money
- Media Center surrounded by classrooms
- Technology is part of leaning for the student 24/7

16 21st Century Learning Spaces

- Love it!
- Collaborate/retain/apply knowledge
- More teamwork
- Encourages group learning. Open spaces create safety issues
- Round tables, door in the middle, <u>all glass walls safety issue!</u>
- Space does matter
- Promotes student creativity and collaboration – <u>connection</u>
- Encourages an important life skill
- More like a business meeting. Makes perfect sense
- All open/glass = safety issues
- If you're focusing on collaboration, it's good, but it would be harder to focus
- Need to change groups
- Supervision of students
- Nice concept
- Develop life- long learning/career/social skills
- Student-centered/authentic engagement
- Student-centered
- Desks can move, tables can't open areas
- Critical for collaboration

17 Teacher Planning Centers

- Need to help them know how to use it effectively
- Understand what does/doesn't work
- They could just hang around
- We already collaborate a ton
- Gives teachers ability to share
- Depends on teacher personality
- 16 + 17 – promote positive school climate
- Much
- Collaboration is critical
- I'm not sure if teachers need it
- Similar lessons
- Adults need talk
- Collaboration/team teaching
- Teachers need to do their thing also
- Team teaching is important. Is this another version of Teachers' Room → not functional

- Good collaboration about students
- Collaboration

18 The End of the Library as we Know it Today

- We really need to help Library/Media Center be more relevant – love this!
- Collaboration
- An excellent idea
- "A place for books"…?
- A safe, helpful place needed
- I still love books
- Hmmmm. Not sure about this one
- Working together, massive Library
- But our Library and many Libraries are already like your future design, need to be even more high tech and futuristic
- Like Library as Corridor between classrooms
- Not good with tech, the layout is cool
- Increased access!
- Learning integration/resource
- Library
- Constant access to resources/media

19 Flexibility for Change

- Change is needed
- That's the real world
- Need to keep it financially realistic
- Change is progressive
- Flexible. I like the idea. Need to see more
- Won't work for all
- What we've wanted for years
- Integrity/authenticity
- Hard to do with Career Tech Classes - ex, animal science/barns- dog grooming
- Change is difficult
- Need to be open minded
- Times + education change, the school should be flexible
- You never know if change will work
- Absolutely – to make change over time
- Love that the building can "go back." That is very "Dover-ish"

20 Frequent Presentations, Group Discussions

- Not good at public speaking
- More internships
- Oral communication skills
- NEED THESE (very helpful)
- Outside of comfort zone

21 Internships, Service Learning

- Learn how to do jobs
- More realistic business jobs
- Real experience
- Connects students to the community and vice versa
- Application of skills/knowledge
- NEED THESE (very helpful)
- Opportunity

22 New Schedule Concepts

- More students are happy
- Anything other than AB
- Fits needs of students
- Love 3hr blocks

23 Integrated Applied Learning

- Need to apply knowledge to careers
- More learning can happen
- Overlap is good
- Overlap CTC/academics
- Is this different from #21?
- Animal science/barking dogs next to math? Seems scary to me

24 Teacher Teaming/Collaboration

- Requires training, but promotes above ideas
- Role model
- Everything works together
- We do it already
- Example of New Tech High not comparable to DHS situation
- Not sure a large group would work for DHS
- Love the co-teaching

- I understand the higher concept, but two teachers working together doesn't necessarily prove the point. Two teachers with more students. I am not sold on the concept. I like the layout and the furniture choice. What is it like when the two teachers don't mesh? Possibly disaster, no?
- A big shift in Ed model
- Comfy chairs, good along with #16
- Provocative indeed! ??? challenges
- Teachers collaborate – students see how to collaborate, curriculum alignment
- Super!!!
- Across disciplines, too
- Realistic to life
- Integrated career/teachers
- Work load/teacher. How paired up? How to prepare?

25 End of the Classroom as we know it Today

- Concept of spaces that promote deep work critical
- More spaces = more work done
- Timing is everything
- How do you keep track of attendance?
- Seems unrealistic and impractical for proper security
- Would the space be used to its full potential?
- Design for students = better understanding
- More business-like. Intriguing
- How to coordinate teachers and students in this space?
- You would have to get used to distractions and work a lot harder to stay focused
- Adaptable for change
- Only science and math
- Huge variety of classroom possibilities
- Combination of traditional and Maker Spaces
- Grading?
- Flexibility and longevity are more important for sustainability. Adaptability
- I think the concept is great although some major changes to the current practices and thoughts would have to be changed
- Innovation
- Developing a new system will be hard

26 Other

- These concepts are all important as presented. However I am sitting here wondering how feasible these actually are. The concepts discussed require a rate of change which may exceed the capacity of the current system and, as a parent, I am unsure what this means within the current system and how it works with the mandate of the visioning group. (pg 1 1-7)
- Research supporting presentation would have been helpful. Spaces look great, but what is the research for a mixed environment such as DHS? (pg 1 15-18)
- What about safety?
- Co-teaching is scary
- * 4C's
- Forbes.com article why the open concept office trends need to ???
- "Teacher to Project Manager intro, people challenges"
- I like the idea of project-based learning.
- Master/???/relationship – intergeneration schools
- Access to tech, communication, collaboration, critical thinkers
- A Whole New Mind – Hot, Flat, and Crowded. The World is Flat. Frames of Mind. Emotional Intelligence

21ST CENTURY LEARNING MOST IMPORTANT ISSUES

Workshop participants, working as Table Teams, were asked to reach consensus on the three most important (effective) ideas for future Dover HS and CTC, and identify why they believed as they did.

Their thoughts are:

TABLE TEAM 1
Three Most Important

- 1 21st Century skills (#9)
- 2 Flexibility for change (#19) 2/6
- 3 21st Century learning spaces

TABLE TEAM 2

Three Most Important

- 1 Project-based learning (11)
- 2 Flexibility for change (19)
- 3 21St Century skills (9)

TABLE TEAM 3
Three Most Important

- 1 Project-based (#11)
  - Learning
- 2 Student/teacher collaboration (#24)
- 3 New technology close by (#15)

TABLE TEAM 4
Three Most Important

- 1 21st Century Skills (#9)
- 2 Project-based learning (#11)
- 3 21st Century learning spaces (#16)

TABLE TEAM 5
Three Most Important

- 1 Project-based learning (11)
- 2 Computers for learning (6)
- 3 21st Century skills (9) 4/6

TABLE TEAM 6
Three Most Important

- 1 Relationships (5)
- 2 Project-based (11) 5/6
- 2.5 Learning spaces (16) 3/6
- 3 Teacher (24)
  - Collaborating

SUMMARY
Most Important
Shown here in order of number of citations.

TABLE TEAM MOST IMPORTANT 21st CENTURY ISSUES		
Number	**Score**	**Issue**
11	5	**Project-Based Learning**
9	4	**21st Century Skills**
16	3	**21st Century Learning Spaces**
19	2	**Flexibility for Change**
24	2	**Teacher Teaming/Collaboration**
5	1	Relationships: Dunbar's Law, "Magic of 150", Breaking Ranks, Advisor/Advisee programs
6	1	Computers for Learning: Adaptive Learning, Blended Learning, Computer Games Learning
15	1	New Technology Close By
1		Learning Pyramid
2		Gardner: Multiple Intelligences
3		Integrate arts in core learning
4		Environmental Sciences/Sustainable Living/STEM/STEAM
7		Revised Bloom's Taxonomy
8		Daggett: Relevance + Rigor Framework
10		Jerald's Research on 21st Cent Education
12		Design Thinking/ Making Things to Learn
13		Small Learning Communities
14		Flexible, Varied, Brain Based Furniture
17		Teacher Planning Centers
18		The End of the Library as we know it Today
20		Frequent Presentations, Group Discusions
21		Internships, Service Learning
22		New Schedule Concepts
23		Integrated Applied Learning
25		End of the Classroom as we know it Today

WHAT WORKS AT DOVER HS AND CTC? WHAT COULD BE BETTER?

Frank Locker led a whole group discussion brainstorming what currently works at Dover HS and CTC, and what could be better. Students were asked to respond first. Here are the Visioning Team's thoughts:

Works

STUDENT RESPONSES

- School spirit
- Block schedule
- Art department
- Lots course selections
- School easy to navigate
- 30 minute lunch

OTHERS RESPONSES

- Interdisciplinary
  - American study
  - Caring faculty
  - CTC + ROTC – lots offering
- Clustering of public spaces
- Resourceful with limited $
  - Physical location in city good
  - Easy access for Barrington
  - Easy access for Nottingham
- Feels safe
  - But too many doors
- Administration communication good
- Administration + teachers responsive to parent concerns
- Level of community engagement
  - Students + staff community
- Teacher/student relations sometimes really good
- Block scheduling
  - Business community
- Athletics accommodated well
- Administration that organized this Visioning Session

Could be Better

STUDENT RESPONSES

- Technology
- Not enough social life student spaces
- More time to pass between classes
- Location of the entrance/not central
- Lunch is too short
- Student parking
- Not good food/nutrition/noisy crowded Cafeteria
- Poor indoor air temp/quality
- No free time/study time
- Outdated PE program
- Can't hear intercom from all areas
- Needs updating
- Teacher/student relationships
- Small Locker Rooms, Weight Rooms, not enough Gyms
- Bathrooms

OTHERS RESPONSES

- "Student-centered" learning
- Faculty collaboration
- Narrow Corridors/stairs
- No outside space for students
- Classrooms with no windows
- No customer access for CTE programs
- Outside – public/community view of CTE
- Too many doors/safety issue
- Handicapped accessibility/ADA
- Level charges
- Band Room on 2.5 level
- Office is not visible from Entrance/community spaces
- Block scheduling difficult for community scheduling internships
- Building layout no longer works with changing programs and additions over years
- Auditorium lights, seating, acoustics