Good Neighbors: Developing a Synergistic STEM + CTE Campus

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Today’s Speakers

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Thomas Edison High School of Technology
The Planning Process
Montgomery County P.S. Background

- 205 schools
- (25) high schools
- (38) middle schools
- (133) elementary schools
- (4) special education centers
- (1) CTE school
- (1) alternative education school

161,000 students

Diverse school system — racial/ethnic profile for school system
Wheaton High School

Part of a 5 high school consortium where students choose their focus:

Four Academies
+ Bioscience Academy (PLTW)
+ Academy of Information Technology
+ Academy of Engineering (PLTW)
+ Institute for Global and Cultural Studies
  • Global Studies Pathway
  • Digital Music and Arts Pathway

Two Application Magnets
+ Biosciences
+ Engineering
+ Current Enrollment: 1,959 students
The Planning Process
Edison: Montgomery County’s Career + Technology Hub

+ 3 class periods each day
+ AM and PM sessions
+ 17 Programs at Edison…. and growing
+ 640 students at existing school
+ 900 students design capacity at new school
The Wheaton-Edison Study

+ Embarked on 2-phase Planning + Feasibility Study
+ Challenges:
  • School identity and image: 2 vs 1
  • Low enrollment at both schools
  • Small sandbox: tight site, no swing space
  • Evolving CTE model: educational objectives + goals
  • Upcoming modernization for two schools
+ Charged to develop a wide range of program and facility approaches to define relationship between two schools
The Planning Process
Community Engagement

Stakeholders
- Educators
- Staff
- Students
- Neighbors
- Parents
- State Reps
- Local Biz.

Process
- Workshops
- Visioning Sessions
- Round Tables
- Web Outreach

Outcomes
- Workforce Demands
- Enrollment Trends
- Guiding Principles
- Design Concepts
- Building Vision
Several Approaches Developed

1. One Comprehensive High School and One CTE Center as two separate buildings
2. One Comprehensive High School and One CTE Center as one building on Current Site
3. Wheaton HS remains on current site and CTE program is relocated to another site
4. Create multiple locations for CTE
5. Consider Charter School with business partners for CE programs
The Planning Process
Issues –
Two Separate Facilities

Pros

• Provide Magnet at Wheaton HS to increase enrollment
• Enhance schools’ identity to attract more students
• Students can make decision on CTE at Grade 11
• Students maintain home school identity while focus on specific CTE at Edison
• Provide more flexibility in future

Cons

• Opinions differed on whether the this model would improve enrollment at Edison
• Continue with current model would lead to same outcomes and difficult to meet needs of all students
• Meet the needs of all students
• Impact on athletic facilities
The Planning Process
Issues –
Single Comprehensive High School

Pros

• Provides strong school identify
• Prepare students for college and career
• Encourage stronger partnerships with business and industry
• Career-oriented students would not be segregated
• Provide students with more flexibility in scheduling

Cons

• Difficult for students to make choice at start of high school
• Students may be less willing to give up home school to attend CTE program
• Wheaton HS may be perceived as a “vo-tech” high school and not improve image of high school
What would you do

One comprehensive building for both schools or two separate facilities...
• Superintendent recommended one comprehensive building for both schools

• Based on community input during public hearings Board of Education adopted plan for two separate facilities
Design Integration
Design Integration
Solve the Puzzle
Design Integration
Overview: Wheaton-Edison Campus
Design Integration
Overview: Wheaton-Edison Campus
Design Integration
Overview: Wheaton-Edison Campus
"The most fertile and engaging space in our culture is at the intersection between new technology and the humanities."
Steve Jobs
Design Integration
Wheaton HS: STEM spaces = project based learning
Design Integration
Wheaton HS: Places to see and be seen
### Design Integration
#### Edison: Guiding Principles + Project Goals

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<th>Professional grade for all programs</th>
<th>Places for students to gather</th>
<th>Abundant daylight throughout</th>
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<th>Access for community</th>
<th>Celebrate showcase our programs</th>
<th>Plan for the future</th>
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Design Integration
Community Interface
Edison: Goals Inform Design
Design Integration
Community Interface
Edison: Goals Inform Design
Design Integration
Engagement Influences Design: A Place to Gather

The “Showcase” is born...
Design Integration
Engagement Influences Design: Feed the People

Food options for ½ day
Design Integration
Adapting to change: Junior Achievement
Design Integration
Adapting to change: Junior Achievement

I will have a head start when I start into the real world!

I learned how to balance a budget.
What would you do?

+ Integrate JA program into the plan?
+ Separate JA program on top floor?
+ Run away as fast as you can?
• Junior Achievement suite developed on new 4th floor

• Provides safe separate of Edison and JA programs

• Middle school students experience Edison programs as they ascend thru the building

...what happened.
Design Integration
Adapting to change: Junior Achievement
What's Next?
Changes are Happening…

+ Enter new MCPS Superintendent:
  Career-Ready focus
+ New Principal hired during construction:
  New Vision + Energy
+ MCPS Focus on Career Readiness
  New report looks forward
What’s Next?
Edison: the Keystone Institute to College + Career Readiness

STUDENT OPPORTUNITIES
• Junior Achievement
• Montgomery College
• Ana Mendez Comm. College
• CREA – Career Readiness Education Academy
• SkillsUSA
• Foundations Office
• Business Partnerships
• Apprenticeships
What’s Next?
Every student, a different story…

“I’m headed straight into the workforce…”
- Amanda

“Teach me skills to prepare me for college…”
- Jackie

“I want to advance and innovate…”
- Anna
What’s Next?
Program evolution

PROGRAM DEMANDS:
• Need room for CREA
• Medical program #s are up, need a new lab
• Add Police + Fire Academy

ADAPT THE PLAN:
• Consolidate Print program
• Align Hospitality with Restaurant
• Move Career Center
What impact would a new Principal have on the design + construction process?
What impact would a new Superintendent have on the design + construction process?
Lessons Learned
Lessons Learned
What would we do differently…the same…

Modularity: keep it simple…

+ Small labs for light duty programs
+ Medium labs for mixed use programs
+ Large labs for heavy duty programs
Lessons Learned
What would we do differently…the same…

- **Flexible infrastructure**: building systems that allow for program evolution
- **Communication**: engage all stakeholders and departments, and when you think you’re done, re-engage
- **Agility**: Get ready, change is coming!
Thank you. Any Questions?