

## Promising Practice Capture Sheet

**School:** Cleveland High School

**District:** Cleveland City Schools

**Practice:** Capstone Experiences

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Rural  Suburban  Urban

Region: Southeast

### Connection to Strategic Plan:

<b>Goals:</b>	Top Half of States on NAEP – 4th and 8th Grade Math and ELA		State Average of 21 Composite ACT		55% of the class of 2020 obtains postsecondary credential
<b>How best practice addresses:</b>					Apply learning through practical experiences that develop knowledge and skills necessary for success in careers and postsecondary education.
<b>Priority Areas:</b>	Early Foundations	Empower Districts	Support Educators	High School Bridge to Postsecondary	All Means All
<b>How best practice applies:</b>			Both CTE and academic teachers integrated academic concepts with CTE relevant projects to see them come to life. This resulted in real-world project based learning.	Students build on classroom based instruction to develop employability skills that prepare them for success in postsecondary education and/or future careers.	



**Practices:**

- Culture
- Accountability
- Funding
- Instructional
- Programmatic
- Other:
- Training/PD
- Policy Change

**Project Specific Indicators:**

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**Results:**

- Increased student achievement results
- ACT  TNReady/EOC/TVAAS  NIC  EPS
- Decreased remediation and/or subgroup gaps
- Increased student readiness results (non-academic)
- Increased partnerships / alignment
- Increased participation / program growth

**The Challenge:**

Cleveland High School was in a position to start offering complete student capstone experiences. Other classes took fieldtrips and excursions, but this experience encompassed the following;

- Design Challenge
- Field testing and prototyping
- Logistics Planning
- Financial planning/Budgeting
- International Travel
- Guideline Planning
- Business Planning
- Language Barriers
- Product Installation
- On-site Training
- Blog updates

**The Vision:**

To create a “Complete Student Capstone Experience” that encompassed skills attained in all high school disciplines, both academic and CTE. The initiative was appropriately named “Project DOME” where Cleveland High School engineering students were given a design challenge from Ryan Cox from Hatponics out of Chattanooga, TN, a non-profit humanitarian organization who addresses world-wide hunger. High school students were given the challenge to design, create, construct a prototype, and install a self-sustaining aquaponics dome that would sustain 16 people on two meals per day consisting of both fish and vegetables. The dome was to be delivered and installed in Nicaragua by our own Cleveland High School engineering students. Being a capstone experience, students not only had the monumental tasks of the dome itself, in addition, students took ownership of fundraising, budgeting, logistics planning, international travel guidelines and/or variables.

**Action Steps Taken / Summary of To-Do's:**

- Encourage students to take ownership.
- Show students it's more than an academic or CTE course, it was the ability to articulate the skills and knowledge into a completed task.
- Approach local chamber of commerce for potential partners.
- Contact local business partners.
- Utilize experienced classroom speakers who have experience in such initiatives.
- Educate students on international travel.
- Keep minutes of meeting and stay abreast of timeline.
- Educate students how this expedition would enhance their skills in life as well as postsecondary.
- Getting students to think of variables they may experience on-site in Nicaragua.
- Research destination regarding culture, weather, cost, legalities.

**Lessons Learned:** *Include advice on start-up and sustainability*

- Involve more Postsecondary partners.
- Make the high school class be offered in the spring semester and take the trip immediately following in the summer.
- Realize that not all who originally say they want to participate will complete.
- When students take on a project involving a humanitarian approach, there seems to be a deeper level of buy-in and commitment resulting in embedded skills.
- It was crucial to promote this project up front to the community, school board, and student body. This contributed to the success of this project through motivation when things got challenging.

**Communications:**

- Clear, concise, and consistent communication and planning meetings with all stakeholders.
- Utilize stakeholder skills at all levels of the project.
- Communicate with all stakeholders how this experience increase students' life skills.

**Stakeholder Management:**

- Students
- Community Volunteers
- Business Partners
- Local Media
- School Board
- Student body

**Metrics & Measurements:**

Baseline Data	Progress to Date	Goals
<ul style="list-style-type: none"> <li>• First time we offered this level of a “Complete Student Capstone Experience.”</li> <li>• Make sure it could continue and be sustainable.</li> </ul>	<ul style="list-style-type: none"> <li>• Aquaponic Dome project was designed, delivered to Nicaragua, installed, local people trained within a week. Dome was able to sustain 16 people, two meals a day at 1400 calories per day, year around.</li> <li>• Due to the success of the “Project DOME”, we have seen a heightened level of interest from community partners and volunteers willing to participate in the upcoming capstone experience project. Building community and business relationships willing to participate and work alongside of our students will not only bring a higher level of learning for the students, but also edges our students closer to success in the real world as they pursue post-high school choices.</li> </ul>	<ul style="list-style-type: none"> <li>• Continue a “Complete Student Capstone Experience”</li> <li>• Humanitarian approach</li> <li>• Encourage academic and CTE integration through project bases learning</li> <li>• Involve more community and business partners</li> </ul>

**Resources:**

- <http://www.chsdesignlab.com/>