summit

A Guide to Capstone Education

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Introduction

With the generous support of an E. E. Ford Foundation Educational Leadership Grant, the Capstone Consortium was established in 2012 to provide support for capstone education. The group's inaugural Summer Summit was held in June 2013 at the Thacher School in Ojai, California. Through lively discussions, presentations, and workshops, participants produced the materials summarized here in hopes of encouraging, supporting, and nurturing capstone programs at all types of schools throughout the country. In addition to hosting Summits, the consortium remains an active community, supporting capstone education and teachers throughout the school year. The next Summer Summit will take place from June 16-20, 2014 at the Thacher School.

The participants in the inaugural Summit represented a diverse range of schools, public and independent, large and small, day and boarding, from throughout the country. The capstone programs they represented were similarly diverse, which yielded a rich pool of experiences and perspectives.

The conclusions from the inaugural summit are presented in three categories. The first is a statement of principles. These are core beliefs that apply broadly to capstone education, regardless of the school context. The second category is a series of questions that leaders of capstone programs should answer in the design and implementation processes. Last is a series of suggestions that do not rise to the level of principles and may not apply to every school context, but have proven valuable for many. The participants offer all of these as suggestions for anyone interested in capstone education to consider.

Guiding Principles for the Capstone Project

We believe that student interest and passion drives the project.

Therefore...

The students:
- synthesize skills and experiences gained during their high school career and expand beyond them.
- develop an essential question which guides their project.
- pursue in-depth independent inquiry.
- engage in self-reflection throughout the process.
- publicly demonstrate their mastery and achievement.

The program:
- has an articulated philosophy that reflects or serves the school's core values.
- establishes baseline standards for the projects in keeping with the academic standards of the institution.
- incorporates and supports adult mentors.
- provides frequent opportunity for individualized interaction with adults via checkpoints, constructive feedback, benchmarks, and evaluation.
- utilizes technology, when appropriate, to make the capstone process more efficient, more effective, or both.

The school:
- allocates time and resources to support the capstone program philosophically and programmatically.
- engages in a self-reflective process and considers revision and modification of the capstone program.
- honors the students' accomplishments through a culminating event.

Questions for Capstone Program Leaders

The following questions should be considered in the process of project design and evaluation.

The Roles of Adults

1. How will the program encourage buy-in and support from the faculty as a whole?

2. How will the program balance the virtues of student initiative versus adult oversight and guidance?

3. How will adults provide feedback to students throughout the process?

4. Will the program employ outside mentors or internships, or keep the adult role internal to the school?

Technology

1. How will technology enhance the structure and requirements of the program?

2. Is there a plan to insure that students have equal access to technology?

3. To what degree will the program use technology to make projects public?

4. What resources can you devote to exploring new technological opportunities?

5. What forms of technology should be required components of the program, and what should be presented as optional tools?

Time Constraints and Scheduling

1. Will students and faculty have specific time devoted to the project, or not? How much?

2. How will the program fit with the schedules of the AP program and the college application process?

3. If you are adding a new project, where will the time come from?

4. Do students need release time to pursue work outside of the class schedule?

5. How will the program schedule presentations/celebrations, considering the potential audience and the emphasis you want to place on this aspect of the work?

6. How do you want your program shaped over the calendar year? What is your scope and sequence, and how does it line up with the school's broader calendar?

Evaluation

1. To what degree will the program allow revision? To what degree are you comfortable with students ultimately failing the program?

2. What grading system best fits the values and principles of your program (including concerns of optional vs. full participation, and whether or not the program is a graduation requirement)?

3. How will you deal with academic dishonesty?

4. Within a pass-fail evaluation system, how do you prod students of differing levels of ability to do their best work?

5. Will students complete any formal self-evaluation?

6. What will you do when students don't meet benchmarks?

7. Does your school want to create an award or designation for particularly successful projects?

8. How will your program incorporate outside faculty, outside mentors, etc. in the evaluation process?

9. How will you standardize the evaluation process to make sure it is consistent with different individuals involved in evaluation?

10. How will the program evaluate itself? What tools will you use to measure your impact?

Institutional Support and Integration

1. To what degree will the faculty as a whole get involved, to encourage broader buy-in from the full adult community?

2. What sort of funding will you need to sustain the program and ensure equity?

3. Will the program be for students who opt in to it, or will the school require full participation?

4. How will the program complement and/or enhance your school's program? Does it need a separate mission statement?

5. Who will be the audience for the presentations? How will the institution encourage attendance?

Program Design and Structure

1. How will your program foster and facilitate independent learning?

2. What parameters and guidelines will you establish for approving topics?

3. Will you archive projects? What components will be saved, how, where, and in what format? Who will be in charge of archiving? Will past projects be available to future students?

4. Do you want to engage seniors in each other's work and research processes? If so, how will you facilitate this?

5. How will your program balance joy and toil? Do you have a structure that encourages well-earned celebration of hard work?

Tips and Techniques for Capstone Implementation and Review

The following suggestions do not rise to the level of core principles and may not apply to all programs, but have proved useful to many.

The Roles of Adults
1. The program will be stronger if the school has a structure with some core group of committed adults who believe in the process and want to devote time to it.

2. Program leaders should initiate frequent conversations with the whole faculty about what's happening and what they need to do.

3. Showing student work to faculty helps to foster communication and standardize principles.

4. The program should help adults (faculty and outside mentors) understand that the one-size-fits-all parameters of the program have to be tailored to the individual student and his/her individual project.

5. Journaling (esp. technological) allows adults more frequent and thorough engagement with the project.

6. Outside mentors/internships can be useful, but clear expectations, guidelines, and standards need to be established and agreed upon.

7. The school's library staff are an essential resource.

8. The adult facilitators should model the open-mindedness in the administration of the process that we expect from the students.

Technology
1. Journaling/blogging can help monitor student progress and to create a student portfolio.

2. Technology can take advantage of opportunities to collaborate when face-to-face interaction is not possible.

3. Program leaders should be mindful of the pitfalls of overdependence on technology and its potential to supplant real work.

4. Program leaders should prepare students for technology failures.

5. Effective technology use requires careful teaching/mentoring. Simply supplying the tool is insufficient.

6. Students need to be educated on the responsible use of technology.

Time Constraints and Scheduling
1. Program design must consider the particulars of when students and faculty will complete this work.

2. Using designated class time, either through an existing class or as an additional, stand-alone class, permits deeper engagement for students and faculty than simply adding capstone work to the existing school schedule.

3. The program should schedule time for cohorts of students to collaborate and/or share ideas and progress throughout the process.

4. College counseling/application time can be diverted to capstone work later in the year.

5. Programs that include a creative element should set time aside specifically for that purpose.

6. For a project of such a large scope, scaffolding student work with interim benchmarks is essential.

Evaluation

1. Programs should Incorporate peers or peer cohorts in the evaluation process.

2. Self-evaluation can be a very useful part of the general evaluation process.

3. Programs should cultivate positive peer pressure to motivate achievement.

4. Incorporating multiple and diverse voices into evaluation yields better outcomes.

5. Calibrating your evaluation process to the calendar can help students showcase strengths without getting bogged down.

6. Evaluation tools should reflect the program's beliefs about the relative importance of process and final product.

7. Evaluation tools should tailor feedback to each individual, while also maintaining a set of acceptable standards for the program.

Institutional Support and Integration

1. Programs should engage the broader faculty to promote general faculty buy-in.

2. Programs should engage the larger community (parents, alumni, mentors, etc).

3. Juniors can play an important role in the preparation and evaluation of capstone projects.

4. Capstone work should fulfill some portion of the mission and core values of the school.

5. Earlier in each student's career, schools should encourage project-based learning, student-centered learning, presentations, and in-depth research as a pathway to a capstone experience.

6. Capstone programs should be agile and malleable in response to regular processes of self evaluation.

Program Design and Structure

1. Endeavor to include some type of deliverable.

2. Develop a mission statement for the Senior Inquiry Project.

3. The program needs to be organic; its design should be unique to each institution and supportive of its particular programmatic goals/desires.

3. Program design should reflect what type of learning is sought. Examples include learning by: doing, building, creating, performing, serving, experiencing, and writing.

2013 Summer Summit Participants

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