

# Student Engagement in Distance Delivery Education

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# Presentation Outline

## Student Engagement in Distance Delivery

- ▶ Why the interest in student engagement?
- ▶ The first effort to get students engaged.
- ▶ Results of Assignment #1, Student Presentations.
- ▶ Student perspectives on Assignment #1.
- ▶ Promoting peer learning in distance delivery.
- ▶ Discussion

# Construction Management: What are we doing in the university?

- ▶ Well, we aren't teaching students how to pound nails!
- ▶ There are more than 160 colleges and universities in the United States with postsecondary degrees in construction, and more around the world.
- ▶ There are many degree titles: Construction Management; Construction Engineering; Construction Science; Construction Technology.
- ▶ These degree programs reside in a myriad of colleges such as: Engineering, Architecture, Business, Professional Studies, or Technology, for example.

# Construction Management: What do we study? What is the academic foundation?

- ▶ Construction Management (CM) is a professional program, similar to law or medicine.
- ▶ The difference is that CM is interdisciplinary, drawing on content from Architecture, Engineering, Business, and our own CM content.
- ▶ CM content includes estimating, scheduling, cost control, materials & methods, building systems, just to name a few.


# Construction Management: Why is student engagement & peer learning important?

- ▶ CM draws from all these disciplines because CM graduates will be working and collaborating with architects, engineers, bankers, bonding and insurance brokers, people in the trades and owners of the built environment to name a few.
- ▶ Therefore, people skills and the ability to work with individuals with diverse skills and backgrounds is of critical importance.

# Assignment #1: What was required?

- ▶ Each student's 5-minute presentation shall include a PowerPoint with the following content:
  - ▶ An introductory slide with the student's name, academic major and minor, and a head-shot photo (5 points).
  - ▶ A 2-3 slide summary of what work you did this summer (15 points). Students will improve their chances of get a high score by including photos and/or other graphics. Students will also improve their chances of earn a high score by including information about work activities or job duties relevant to anticipated course content.
  - ▶ Include 2-3 slides presenting your personal and professional goals (10 points). Students should tie those goals to anticipated course content. These slides should include information about whether or not they will be working part time for a construction company this semester.
  - ▶ Professionalism and level of effort are worth 10 points.
  - ▶ Presentation skills are worth 10 points

# Example of student deliverables:



**Chase Barbre:**  
**CSTM 462**  
**Assignment #1**

*Project: SPIRE*  
*Field of Study: Construction Management*



**Summer 2020**

- ▶ Second consecutive summer with PCL Construction
  - ▶ Assigned to "SPIRE" Seattle
  - ▶ \$211 Million GMP
  - ▶ 43 Story, over 350 luxury condos
- ▶ Assigned to Finishes Team
  - ▶ Comprised of 1 PM, 1 PE, 6 FE's, and myself.
  - ▶ Casework, door casing, bathroom vanities, appliances.
  - ▶ Time with MEP team



**Week on the Job**

- ▶ Perform QA/QC Checks on most recently installed floor of my scope
  - ▶ Would track via the 3-week look ahead schedule (prepared by interiors superintendent)
  - ▶ Typically would follow a one floor per week model
- ▶ Take progress photographs of all installed work in accordance to my scopes
- ▶ Attend daily/weekly team, scheduling, and foreman's meetings
- ▶ Plus other several activities assigned to me

**Personal & Professional Goals**

- ▶ **5-10 Year Goals (Post Graduation)**
  - ▶ Work through all entry level positions in attempt to act as Project Manager
  - ▶ Receive any accreditations possible to get me there
  - ▶ Open to relocating
- ▶ **10-20 Year Goals (Post Graduation)**
  - ▶ Move into upper level management roles
  - ▶ Senior Project Manager, Construction Manager, etc.
  - ▶ Settle in final place of work



# Second example of student deliverables

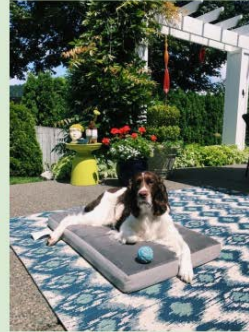
## Paige Tabert

Major : Construction Management

Minor : Business Administration



## Sellen



## Yale and Harrison

South Lake Union

220,000 SF Office Building, Rooftop Terrace

Design - Bid - Build Contract

Electrician, Mechanical/Plumbing, and Fire Protection (Design - Build)

Shell and Core



## Responsibilities

Paired with MEPF, doors, frames & hardware Senior PE

I got to see 10 pours ranging from 345-560 CY

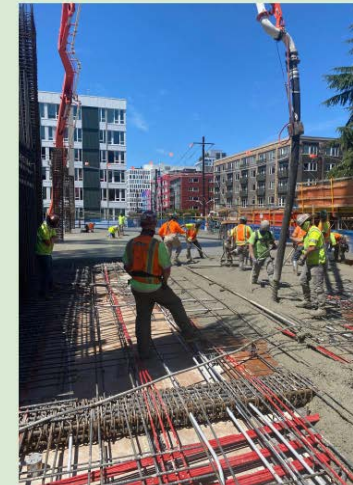
Packaged submittals

RFIs

Drafted a subcontract

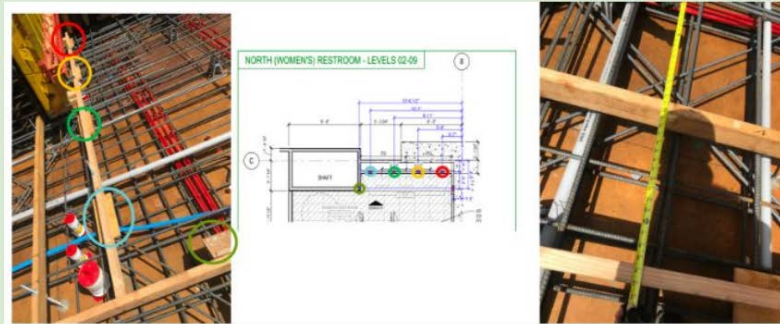
QA/QC

QTOs

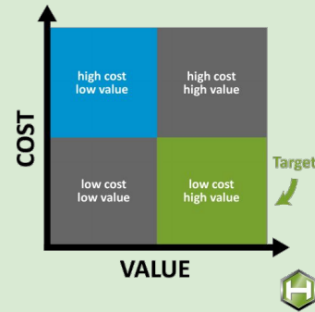




# Final example of student deliverables



## Relating to CSTM 451



## Value Engineering

Increasing value by lowering cost and maintaining functionality

## Personal Goals

- Stay on top of material in this class
- Ask questions when I need clarification
- Keep an open mind and be willing to learning things that I am not comfortable with
- Attend every live zoom meeting



## Professional Goals

- Join another CM club this semester
- Continue my career at Sellen next summer
- I will not be working this semester



My goals for Assignment #1 were to get students engaged right in the beginning of the semester, and for me to learn more about each student as an individual. Student feedback:

“In regards to Assignment #1, in relation to the goals outlined above, I think that this assignment did a fantastic job and satisfied both of those needs. I *enjoyed being able to discuss my summer and experiences* with you and I think it was a *good way for you to gauge the different levels of educational and professional development that each of your students* had this summer. I personally *enjoyed the assignment and hearing the cool things that my peers were able to do* and realized that everyone in my group did something different. I think that it was a *good ice breaker and efficient way to ease us into the semester.*” (Bold italics added to identify emergent themes.)

## Second student feedback about Assignment #1:

"I think that the assignment was definitely of good value. It forced me to *look back over the summer and see all the things that I had learned and put them all into perspective*. It also was a *good opportunity for us as students to transition from our summer work into the academic year* with that small recap and to be *able to discuss our experiences with you as an experienced member of both the academic side and the industry* as well. I think *all of us like to have the opportunity to show what we have learned* and then be challenged to *connect those experiences back into the course material* that we will be learning throughout the year. We were challenged to look deeper into our experiences and challenge ourselves to work on our weak points as well as put together some goals for long term growth. Overall I think the assignment did exactly what you had planned for and think that it would be beneficial for other faculty to consider."

## Third student feedback about Assignment #1:

“As for Assignment #1, I believe that it was successful in fulfilling your goals of getting students engaged and building more of a one on one relationship. I enjoyed completing the assignment as it *allowed me to self reflect on my experiences* so far as well as *share my future goals* with you. I also *enjoyed learning more about my fellow classmates*. This type of interaction is different from what we normally experience in lecture based classes and I believe that it was a *great way for this course to be introduced*.”

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## Fourth student feedback about Assignment #1:

"I enjoyed Assignment #1, I thought it was an *excellent way to jump-start engagement for the class*. Staying at home for the last decade (or at least that's what it feels like) has made each day feel like it has been fading in and out, from one to the next. Having *an assignment that allowed us to reflect on the last few months*, helped to break the cycle of each day feeling like the last. I also enjoyed that *Assignment #1 helped me continue to practice my presentation skills* and how I present myself when I'm speaking. Although the Assignment #1 presentation was only about five minutes, I found that practice helpful when it came time for contractor interviews. *Without Assignment #1, I do not think I would be as engaged or prepared in the beginning of the semester.*"

- ▶ It appears that a few themes are emerging:
  - ▶ Reflection on what was learned during internship
  - ▶ Transition from work back into school and course work
  - ▶ Enjoyed learning about what peers did in their internship

# Methods to stimulate engagement and peer learning:

- ▶ Breakout rooms for group projects:
- ▶ Group projects focused on creating a value engineering proposal package to submit to a fictitious owner: I met with each group of four students to observe a 30-minute brainstorming.
- ▶ My goal was to get students started with the assignment, and to ensure collaboration.



# More methods to stimulate engagement and peer learning:

- ▶ Breakout rooms for individual assignments:
- ▶ Students learning about planning and scheduling have a lab each week to work on assignments.
- ▶ I am available to help students one-on-one with challenges they may be having. They aren't as self-conscious asking a question when the rest of the class isn't listening.
- ▶ My goal is to get students comfortable with asking questions and to ensure students are grasping the learning objectives.

# Other methods to stimulate engagement and peer learning:

- ▶ I have discovered that students are more likely to meet me in Zoom Office Hours than they are likely to come to my office and meet face-to-face.
- ▶ I need to learn more about the educational psychology associated with students avoiding meeting with instructors face-to-face.

# A Huge Thank You to WSU's Academic Outreach and Innovation (AOI)

- ▶ If I have been successful at all in my transition from face-to-face teaching to distance delivery, it is because of the support I have received, and continue to receive, from AOI.
- ▶ Last Spring Break, AOI offered workshops to help faculty transition to distance delivery.
- ▶ Mastery of distance delivery, like mastery of teaching, is not a destination. It is a journey.

# Student Engagement & Peer Learning

## Questions & Discussion