



# Panel 2D: Industrial Sponsors and Sponsor-Student Relations

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**Panelists:** Hamid Rad (Washington State - Vancouver), Wade O. Troxel (Colorado State), Rachael Brown (Seattle University)

**Description:** Many capstone programs include projects with industrial sponsors. This panel will discuss topics and strategies associated with industry sponsor interactions and student-sponsor relationships.

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Opening Advice:

- **“We are in the relationship business”**
  - Your own stories and relationships could be a door-opener
  - Partnerships as ecosystem, whole-pipeline partnerships
- **Be engaged. Be aware. Be outwardly focused. Be patient.**
  - It might not be this time, but could be the next time. It’s a long-term, not short-term game.

Panelist Intro: Rachael Brown

- Fee \$20k and sliding scale (based on negotiations), \$1500 student budget, the rest goes to “overhead”
- If sponsor asks for itemized info, response is that this is a “fee for service” for a learning opportunity (and leave it at that)
- 1,000 hrs. worth of work (used to say this, no longer do)
- Value propositions - 9 mo of jr.-level work (no guaranteed outcome), free marketing, leadership training for sponsor employee
- Sponsor’s commitment: 1 hr/week, bare minimum (now says 3-5 hours)
- Students are consulting pod and sponsor (tech mentor) is the conduit
- Seattle U offers 3-4 students, faculty advisor (assigned to team as if it’s a full class, personnel and human dynamics issues), project/design coordinator (teaches the class and guides students on info they need to be successful)
- Noted that capstone is seen as a revenue source.
- Pro Tip - Take a negotiations tip from your University’s Business School
- Asked for funding for 5 black-owned businesses specifically. Just got this endowed for perpetuity
- Sponsors paying or not paying does not necessarily equate to commitment from sponsor
- Works separately from advancement folks, is often asked for information that they need to meet their metrics
- Engages with campus partners (development, engagement office, and business school) and offers a menu of options for ways sponsors can interact with university  
→ Partnership is key



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- Competes with UW, considered an “unknown” with some of the bigger companies and so have opted to be scrappy and reach out to alternative companies and employers that students might not think about and give them the platform that they want with students (e.g., Kenworth)
- Alums (at executive levels) are helpful to get foot-in-the-door
- Just completed 37th year as capstone program
  - Not pursuing grant funding is a hard line
    - Has done 3 years of service with forest service
    - Pacific Northwest CESU member = DOD, DOA, National Park Service partnerships, but relationship is pending due to politics
  - Same with faculty projects
- Getting engineering mentor support from consulting firms to then go and source humanitarian projects
- Post-COVID challenge: high contact turn-over, influx of new sponsors

## Panelist Intro: Wade O Troxel

- Runs fall and spring cohorts
- Students get \$4500 for the project
- Fee is \$20K (a gift) goes directly to the program, no overhead
- 6 Different types of projects:
  - Industry
    - Can accommodate NDA and non-disclosure
    - Students own IP, agreement between students and industry (the University helps facilitate)
  - Faculty
  - Entrepreneurship
  - Community
  - Competition
- Noted concept of a sales funnel (want 3 projects may need talk to 20 companies)
- “evergreen process” that has to be maintained.
- relationship building
- There is a specific value proposition relative to giving.
- \$20K grant is not in best interest of advancement folks, becomes a better investment if it is a “good first date” (first step for engagement)
- Had been asked to input data into advancement folks’ system, but was a timesuck for him.
- Similar experience where alum is helping get a foot-in-the-door
- capstone is a way to have a relationship with someone at the university, doesn’t just have to be alum-led

Starting your value proposition with the amount of hours the student teams will be working is a mistake. The hours are not always the most productive due to the students’ learning needs/skills



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## Funding models:

- Donor funding
- Unfunded
  - “Skin in the game” may not be enough to keep sponsors engaged.
- EDA funded
- University support (e.g., University of Central Florida - \$20K fee. research foundation that sets-up grant account. Unrestricted educational grant. Not a fee for service, for educational research. 5% overhead burden on those funds. They are writing it off and the program gets to keep a majority of funds)
- Money earned from the program tends to be a draw for others at the university. To stop it: tell the sponsor that “when you are donating x money it is being used for senior design. Using it for anything else is committing fraud.”
- Family foundations are very intentional about their giving, speak to their values
- Endowment of a category of senior design
- Federally sponsored
- NSF programs - there’s a grant related to senior design (Dear Colleagues design supplement)

## Ways to engage with sponsors:

- Alum
- non-traditional/alternative companies (e.g., art installations, origami in the garden)
- Use Industry Advisory Boards
- Your own network/stories
- Tier-levels in terms of exposure/engagement, added as part of the value proposition
- Federal agencies
  - Can be paper-work heavy
- Utilize 3rd parties engineering consulting firms to help bridge the gaps between student needs/interest and sponsor projects
- Multi-year agreements or single-year
- Multiple teams on a single project or multiple students on a single team

## Student Interests:

- Humanitarian/impact projects

## Challenges:

- Expectation adjusting. Scope varies from company, to faculty, to students - how to help students be okay with some adjustments to the scope
  - Solution: Defer to/support the faculty and their research; students: learning and educational growth opportunity; university: broaden perspectives with communication and keep overall outcome/objectives in mind
- To maintain quality control and avoid fires, stay “in the business” (7 points of contact during sales cycle) and talk to all stakeholders through surveys, coffee/lunch, informal chats, office hours/open door policy



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- To the sponsor
- To the faculty
- To the students
  - “Therapy dog” to draw them in
- Don’t forget about others, such as those working in machine shops

## Balancing relationship with legal needs:

- Colorado State - starts with a pitch deck (3 ppts - who are you, what’s the problem, any additional information) but project isn’t a “go” until student team is formed; usually accepts more projects than there are students because it gives the university some latitude
- Seattle U - scope is meant to be high-level description, and then students refine scope in first weeks of project; understood that it can be modified but sponsor doesn’t have to go through agreement again
- University of Colorado doesn’t have a formal proposal, sponsorship agreement is on U of Colorado’s terms (on their website)
- BYU - After the proposal is submitted, students complete a PSA that better defines what the project will look like, everyone signs and agrees to it, and the document is looked at again the second semester; expectations are set with the sponsor about this
- Deliverables are final report and presentation (no promised prototypes/design)
- Attend the “Birds of a Feather” contracting session!

## If you come-up short on projects:

- Tap into University networks
- Consider humanitarian projects
- (at Seattle): For projects that don’t have an engineer on them, asks engineers at consulting firms to serve as faculty mentors to students
- Re-run old projects but as an unfunded project (no cost) and with scope changed from previous project
  - Utilizes university liaison
  - Could potentially tapped into unused funds for this