What methods/platforms should be employed to solidify, grow, connect and enrich the GCSP community and its alumni?

- Means of evaluating the success of the program with associated awards.
- Develop methods to assess the portfolio of the GSCP and share it through platforms like LinkedIn, Facebook, Slack, WeChat etc.
- Creation of a platform/website by the NAE of GSCP projects that could be of use for employers and people seeking industry partners – potentially include projects, summer internships, research opportunities. A way to emphasize and document the achievement of the program.
  - Platform: focus on functionality, easy accessibility and should cover both current students and alumni
  - Students can be motivated by seeing the progress/achievement of alums
- Sharing resources among GCSP faculties
  - Leverage some shared content
- Incentivize faculty
  - Teaching relief for mentoring
  - Special recognition
Are there opportunities to grow the GCSP movement that are unique to your institution, your network, or your country?

- **Dallas (SMU)** –
  - Professional Mentor program (usually consisting of alumni). Students therefore have both an academic and an industry mentor.
  - Capitalizing on an existing relationship between an existing institution and a foreign partner – potential to expand the GSCP program via this link.

- Potential to extend the program to graduate programs (PhDs, postgraduate work etc.).

- **Korea** – >70 universities currently participating in government sponsorship program (Engineering Education Innovation Centre in Korea). Leverage an existing government relationship, or build another initiative through GCSP.

- **Taylor’s University** – Holding a session dedicated to GCs or the GCSP in existing biannual conferences.

- **Singapore** – Potential for speakers with GCSP experience to visit & speak with students/faculty about the program in an established university. Promote to faculty/students for buy-in – overseas recognition; a domestic degree becomes international. “I address Grand Challenges”.

- **USC** – stamp on their diploma + medal recognition at their graduation. Medals also used by Taylor’s and LSU.
Are there opportunities to grow the GCSP movement that are unique to your institution, your network, or your country?

- Bangladesh – Nation’s goals (access to clean water, renewable energies, minimizing extreme power outages) align with some of the Grand Challenges – want to achieve their goals by 2030. Motivation for students to solve these problems not only for their education, but also to help their country move forward.
  - Potential for connections to other universities.

- Indonesia – multinational industries exist that demand these global competencies – therefore a need for Indonesian graduates to develop the competencies

- China –
  - Linking to government initiatives on inter-disciplinary studies -> Government funding to help support the program.
  - Industry partnering with universities to work on projects (financial support) -> Creates both academic and industry supervisors.
  - Leverage existing undergrad team global projects as part of the GCSP program -> address multidisciplinary competencies by partnering with other schools (Business School etc.).

- Adelaide, Australia – Can leverage existing research project (honours program) to include/address some of the Grand Challenges and build on current project-based learning initiatives (e.g. EWB First-Year Challenge).
What are the best ways to connect engineering horizontally across disciplines, including beyond STEM?

- Faculty from other departments teach seminar courses
What are the most significant challenges for growing the GCSP movement at your institution or in your country?

- General - extending the GCSP to graduate programs – how can this be achieved?
- Asia – lack of awareness about GSCP, a need to create more exposure.
  - Challenge to gain industry support (financially and career-based)
  - How will employers/students know it is valuable?
  - Students tend not to be interested in doing more than is required for the degree
- Challenging for faculty to spare extra time mentoring students
- Barriers between departments
  - Needs to inspire faculty to participate across departmental boundaries
- Universities strong in existing programs that address similar competencies
  - Brand competition for student attention
- Russia (Former Soviet Union) – difficulties with changing the minds of faculty with traditional schools of thought and/or a resistance to change.
What about the GCSP is most exciting to students and what can be done to catalyze that excitement?

- Potential for taking a domestic degree to an international certification with NAE recognition on transcript
- Knowing that you can solve – or at least contribute to solving – these global issues is motivating
- Serves as a way for students to see the effects of their work/the type of things they can be involved in throughout their careers
  - Make a connection between their studies and the world
  - Competitive edge in job-seeking
- Hands-on experience with industry projects, overseas opportunities, potential for exposure to different cultures/societies. Existing education focuses on the how and the what, the GCSP brings in the why
- Grand challenges motivate students to endure the less exciting elements of their degree
- Framing education in terms of challenges may help to change faculty thinking as to what courses are best to teach
How can awareness of the GCSP be increased among global networks?

- Spread the networks and make use of chambers of industry and professional societies
  - E.g. submit an article to IEEE Spectrum (approx. 400,000 readers)

- Domestic/national meetings to communicate awareness

- Create student exchange partnerships within universities
  - e.g. joint labs, exchange students/faculty travelling to/studying at each university

- Creation of a national deans’ conference in home nations that don’t have one with GCSP as a main agenda item