## Supporting Our Future Leaders Through a Trying Transition

By Brian Petruzzi, P.E.

hile the effect of the Covid pandemic on today's workforce will be written about for years, one segment of this workforce that I have seen affected directly is recent college graduates.

The first hurdle for young engineers graduating during the pandemic is finding a job. According to Pew Research, college graduates entering the workforce in 2020 (compared to 2019) were less likely to be employed and represented a smaller percentage of the overall workforce. For those securing internships, surveys from the National Association of Colleges and

Employers show that nearly half of all internships during the pandemic were remote. This makes it challenging to replicate the social engagement that helps students bridge to the professional world.

Think back to when you started your first job. You were immediately shown your desk and introduced to the people in the office. Although I did not remember anyone's name from my first day, these people would soon form my inner circle – the start of my professional community. I spent more time with this community than my friends, resulting in a transfer of knowledge ranging from how to clear the printer when it jammed to how to review my first steel connection submittal.

Young professionals are torn about their professional experiences during the pandemic. When I talk to people on my team, they value the flexibility and quality of life provided by remote work. However, they do not have established networks or professional communities. This can often result in greater isolation from their teams, making them feel less informed than older colleagues.

Where should the next generation of structural engineers turn for their answers for the last two years and the foreseeable future? Who is providing them the context? How are we ensuring that their community for support and stability is as strong at home as in the office?

The answers include a variety of different resources – some virtual and some in-person – probably achieving varying levels of success. Unfortunately, I have witnessed first-hand how this vulnerable segment of the workforce is not receiving the same degree of support I did. In fact, on more than one occasion, I have addressed concerns that they may be missing out on career opportunities.

So, what can you do? First, reach out to a young engineer and connect with them. Then, create a forum where you can connect personally and sustain the forum over time (months to years). Remote work has stripped away the human aspects of the job, and if we hope to replicate any of the office cultures in a remote environment, we need to create ample space for genuine human engagement.

This leads to two NCSEA Initiatives focused on young engineers – the Young Member Group Support Committee (YMGSC) and the New Graduate Education Initiative.

The YMGSC was established in 2012 to assist the state SEAs in embracing young engineers as they transition from student to professional life. This committee has grown to drive engagement across NCSEA initiatives while building the future leaders of our profession. Results are most prevalent in the content developed specifically for young engineers at the NCSEA Summit.



NCSEA's New Graduate Education Initiative is producing an interactive resource to provide young engineers on-the-job answers at their fingertips.

Six years ago, I wrote an editorial for STRUCTURE about my first NCSEA Summit experience. I discussed the importance of building community outside the office and the Summit's role in empowering young engineers. As remote work challenges how young engineers build their professional community, we must double down on industry efforts to connect young engineers. Support your local YMGs. Find opportunities (when it's safe) to send young engineers to conferences. We must provide young engineers with a community of like-minded professionals with whom they can engage.

The New Graduate Education Initiative was launched in 2019 when NCSEA redeveloped its five-year Strategic Plan and included a goal to develop a new approach to educating recent graduates. We are not trying to replace comprehensive technical content already available like webinars or textbooks. Instead, how do you create an e-learning environment where new graduate engineers can learn enough to understand what resources they need to leverage and what questions to ask? And how can you do this so content is easily accessible and ranges from a few minutes to a few hours, depending on what is needed at that moment?

When we started the initiative, we did not know that the pandemic would inhibit a new graduate engineer from walking over to their colleague's desk to ask about control joints in masonry structures. However, the application and need remain the same. The struggle to support young engineers has been a growing problem in the professional world long before the pandemic. While NCSEA's webbased e-learning modules will not replace human mentoring, this New Graduate Education Tool is meant to deliver young engineers answers when they need them. The first module on masonry is close to completion, and future modules for materials such as wood are being ramped up.

As structural engineers, we must ensure that every structure has a stable foundation. The future foundation of our profession is the young engineers currently transitioning to the workforce. The time is now to ensure that the foundation has the support, resources, and community it needs to succeed.

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