Professional Ethics LIVE! – A Community Partnership in Continuing Education

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Abstract

This paper describes the community-engagement project, Professional Ethics *LIVE!* – an annual, student-run continuing education initiative serving the professional development needs of licensed engineers and architects who live and practice in the South Plains region of Texas. The key community partner is the South Plains Chapter of the Texas Society of Professional Engineers (South Plains TSPE) and the key university partner is the Texas Tech University Student Chapter of the Texas Society of Professional Engineers (Tech TSPE). Now in its 15th year, the event features presentation of ethics cases combined with discussion and deliberation among presenters, expert panelists and a live audience. Tech TSPE members invest sweat equity to host the event. Production costs are shared between Tech TSPE and South Plains TSPE, with South Plains TSPE accepting the financial risk, providing guidance on program requirements, and offering experience and support in hosting successful community events of this scale. Attendance has ranged from 130 to 231 persons annually since 2005, for an average of 175 design professionals per event – including engineers, architects, landscape architects, interior designers, and more. Diversity is actively promoted, one example being that sage members of the professions serve as ethics panelists who share their experience and insights. Other metrics of success include national and statewide recognition, strong community support, and attendee satisfaction. Professional Ethics *LIVE!* promotes learning not only among those design professionals who attend, but also the multiple generations of Tech TSPE students who host the event. Another important impact is that Professional Ethics *LIVE!* tangibly expresses how Texas Tech University values the local design professional community, and vice versa. As a university-community partnership, Professional Ethics *LIVE!* exists at the intersection of learning, application and collaboration and is an excellent expression of the community engagement model.

Introduction

The community engagement initiative, Professional Ethics *LIVE!,* exists to help satisfy a need for continuing education by licensed engineers and architects relative to their ethical obligation to promote the public health, safety and welfare in the practice of their professions. For engineers in Texas, the statutory requirement for continuing education dates to 2003 when in response to a national movement, several state legislatures including Texas enacted rules requiring mandatory continuing education as part of an annual requirement for professional engineer license renewal [1]. These rules require engineers to obtain 15 professional development hours (PDHs) of continuing education annually, one hour of which must be in "professional ethics" or related topics. For architects, the American Institute of Architects (AIA) measures continuing education in learning units (LUs), and AIA members are required to complete 18 LUs annually, of which 12 LUs must be in the topic areas of health, safety and welfare (HSW) such as practice management, project management, programming and analysis and others [2].

In recognition of the need for ethics continuing education, the South Plains Chapter of the Texas Society of Professional Engineers (South Plains TSPE) and AIA Lubbock were seeking ways to provide this instruction as a service to their own members and the local design professional community. Serendipitously, the National Institute for Engineering Ethics (NIEE) at Texas Tech University was offering professional ethics education courses nationwide. About this time, students in the Texas Tech University Student Chapter of the Texas Society of Professional Engineers (Tech TSPE) were seeking a service project consistent with the mission of their chapter. The confluence of these activities led to the creation of Professional Ethics *LIVE!* in 2005.

Currently in its 15th year, Professional Ethics *LIVE!* is an annual, Texas Tech University student-run continuing education initiative serving the professional development needs of licensed engineers, architects, landscape architects, and interior designers who live and practice in Lubbock, the South Plains region of Texas, and TSPE Region 1/ Texas Panhandle (Figure 1).

Figure 1. Geographic extent of Professional Ethics *LIVE!* audience including Lubbock, TX, the South Plains, and Region 1 of the Texas Society of Professional Engineers (*source*: Mapsof.net)

The key community partner in the initiative is South Plains TSPE, and the key university partner is Tech TSPE, both of which share affiliation through their parent organization, the National Society of Professional Engineers (NSPE). Additional community collaboration exists through AIA Lubbock, NIEE (formerly headquartered at Texas Tech University), and presently the Murdough Center for Engineering Professionalism (Murdough Center) at Texas Tech University.

This university-community partnership exists at the intersection of the scholarship of service and the scholarship of teaching. Design professionals require continuing education in the topics of ethics and professionalism to fulfill their State's licensure laws and their respective professional society's annual requirements to maintain a current license. Likewise, in a manner consistent with its organizational mission, Tech TSPE student leaders seek opportunities to serve and to give back to their community even while they learn about their chosen occupation. Professional Ethics *LIVE!* exists to help meet all these needs.

History/ Origins

The roots of Professional Ethics *LIVE!* trace to the Applied Ethics in Professional Practice "Case of the Month" program founded in 1997 by Ronald E. Bucknam, P.E., Ph.D. [*3*], and before that the educational activities of "Institute of Professional Practice" founded in 1971 by the Association of Soil and Foundation Engineers, now the Geoprofessional Business Association [*4*]. The Case of the Month program was an online ethics educational initiative created through the Professional Engineering Practice Liaison Program at the University of Washington [*5*]. Here Dr. Bucknam (and later, others) authored ethics cases about incidents and experiences drawn from actual professional practice, and they presented these case studies in narrative format on an interactive website, with the names of the participants and the locations altered to preserve anonymity.

Although it was called "Case of the Month," actual production was typically two to four cases per year. Case details focused on professional *practice*, and issues were customarily embedded within the disciplines of geotechnical, environmental, structural, and general civil engineering design and construction projects. Content emphasized ethical and professional practice issues such as contract management, the job interview process, expert impartiality, disclosure, gift-giving, marketing and business development practices, intellectual property, time reporting and billing, political contributions, privacy, human resources concerns, design-build conflicts, project communications, and more.

Each case study was linked to a series of possible solutions, not all of which were necessarily ethical but which represented reactions commonly found in professional practice. Case of the Month website visitors were given the opportunity to vote on their preferred course of action, as well as offer commentary. At the end of a prescribed voting period, results for the ethics case were tabulated and statistical responses reported, along with commentary and sometimes the actual solution to the matter.

In 1998, the American Society of Civil Engineers (ASCE) *Journal of Professional Issues in Engineering Education and Practice (JPI),* now the *Journal of Civil Engineering Education*

(JCEE) began to publish the "Case of the Month" ethics cases as forum articles [*6*]. In 1999, then-*JPI* editor Brian Brenner, P.E., inspired by the popular late-night television sketch comedy show *Saturday Night Live,* began creatively adapting the published "Case of the Month" ethics cases into an alternative script format to facilitate presentation as "skits" at national engineering conferences. In skit form, the quasi-real life ethics scenarios were acted out "live" by college student volunteer teams – further amplifying the "live" aspect – and these ethics skits have been widely performed in numerous national, regional, state and local engineering meetings/venues. Subsequently the University of Washington transferred the "Case of the Month" program to NIEE at Texas Tech University, where development of web-based ethics cases continued from 2002 through 2007, for a total of 42 case studies authored [*1*].

Method/ The Professional Ethics *LIVE!* Event

Professional Ethics *LIVE!* is a continuing education event, typically occurring during the work week as a luncheon meeting, and providing one to two hours of professional development instruction (PDHs or HSW|LUs) in "ethics". The overall length of the program depends on the number of ethics cases presented (typically two to four), with each full case study requiring 20 to 25 minutes to deliver. Two approaches have been used: (1) ethics skits and (2) ethics cases.

For its first twelve years, Professional Ethics *LIVE!* featured live performances of ethics cases (skits) from the Case of the Month program (Figure 2). TSPE student members from Texas Tech University acted out the skits, and there was also active audience participation, as well as commentary from a distinguished panel of "experts." Prior to the event, panelists were provided the full ethics case, alternative courses of action, and the website outcomes, so they had already thought about the case and could be ready with observations and insights.

Figure 2. Professional Ethics *LIVE!* skit presentations (2012)

The ethics skits, as derivative works of the published cases, warrant specific mention. The instructional approach was to dramatize ethics situations taken from actual professional practice, and initially these skits were done on an "improvised" basis, reflecting the initiative, creative talent, and interest of the *JPI* editor. However, as Professional Ethics *LIVE!* grew, the need arose for new case skits, and a more professional treatment. Here, the authors engaged graduate students from the Texas Tech University School of Theatre and Dance as playwrights. These playwrights authored scripts for several skit performances including "Between a Buck and a Hired Place", "Plains, Prairies and Porsches", "The Fetid Favor Fiasco", "I'd Rather Be Fishing", and more.

The typical delivery format of a case study is as follows:

- The Moderator briefly identifies the case study and introduces the skit actors.

- The ethics case is presented as a simplified skit. The skit participants (Tech TSPE student chapter volunteers) usually consist of two to four performers. Students bring their own props (cell phone, lab coat, hard hat, etc.), and each skit takes about five to eight minutes to deliver.

- After the skit, the Moderator offers a list of potential outcomes for the ethics case, and invites the audience to discuss the case study and outcomes in small groups, at their lunch tables. The alternative outcomes are also provided in print form (event program) to each attendee (Figure 3).

- After table discussion, the Moderator facilitates open guided discussion of the case study and associated issues, obtaining input from a wide cross-section of attendees, including the guest panel.

- Following a period of discussion, the Moderator asks the audience members to publicly vote their preferred course of action, by show of hands.

- Votes are tallied on the outcomes, and the Moderator presents the tally, and compares the audience "live" vote to the corresponding tally from the Case of the Month website.

During the past three years, the Professional Ethics *LIVE!* program content transitioned away from skits to an alternative presentation format consisting of more traditional ethics case presentations. Here the case studies are still "practical" but are selected thematically from the body of over 600 case studies published as *Opinions of the NSPE Board of Ethical Review* [7], rather than from the Case of the Month program.

Under this newer format, ethics themes have included "professional competence," the obligation to "speak up," and "conflicts of interest." The educational presentation follows the same basic approach identified above; however, rather than view skit presentations, the audience reads the case study details from their program as a narrative fact situation, and courses of action are not pre-identified. Tech TSPE students remain actively involved in hosting, organizing and presenting the Professional Ethics *LIVE!* event, they just do not serve as student actors.

Figure 3. Professional Ethics *LIVE!* case study discussion (2011)

Either way, the intention of the Professional Ethics *LIVE!* program is to achieve an engaging, active and effective discussion and debate of the ethical issues embedded in the case studies. The Moderator's role is to sequence the program, keep things moving, identify and highlight ethical issues and outcomes for the cases, and direct discussion and interaction among audience members and with the guest panelists.

Results/ Partner Impacts

All who attend Professional Ethics *LIVE!* engage in active learning about professionalism and ethics, and this makes for fun and lively discussion – one of the reasons for the program's name. Total attendance each year has ranged from 130 to 231 persons, average 175 persons per event. Of these, 88 percent (average) are design professionals, with the remainder being students (Figure 4). Attendee diversity has also developed, growing from primarily an engineering audience to now a more diverse group consisting of engineers, architects, landscape architects, interior designers, and more, as well as clients.

Diversity is actively promoted, one example being that sage members of the professions serve as ethics panelists who share their experience and insights. Two to three (typically three) seasoned design professionals are chosen to reflect diversity in profession, service sector, discipline and gender, and include members of both the South Plains TSPE and AIA Lubbock chapters. We intentionally seek a diverse set of perspectives on the ethics cases.
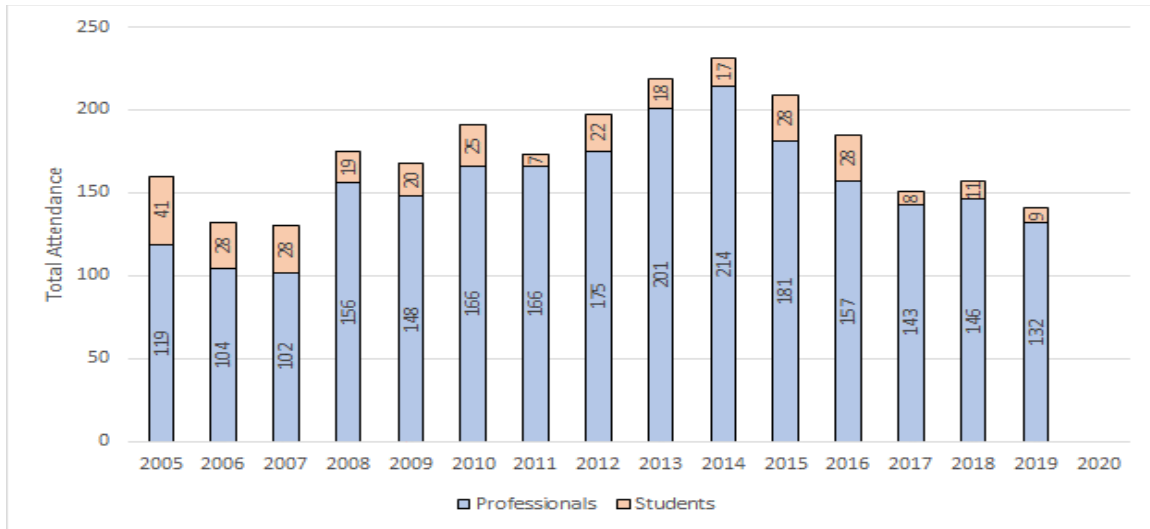
Figure 4. Professional Ethics *LIVE!* total annual attendance including professional and students

Financially, Professional Ethics *LIVE!* is a fundraiser for the Tech TSPE student chapter. The event has closed "in the black" every year of its existence, with revenues ranging from $3,975 to $7,790, average $6,221 and expenses ranging from $3,322 to $6,023, average $4,840. This has yielded annual profits ranging from $41 to $2,594, average $1,380. Half of this profit goes directly to the Tech TSPE student chapter, and the other half goes toward a TSPE engineering scholarship fund to which the students may apply.
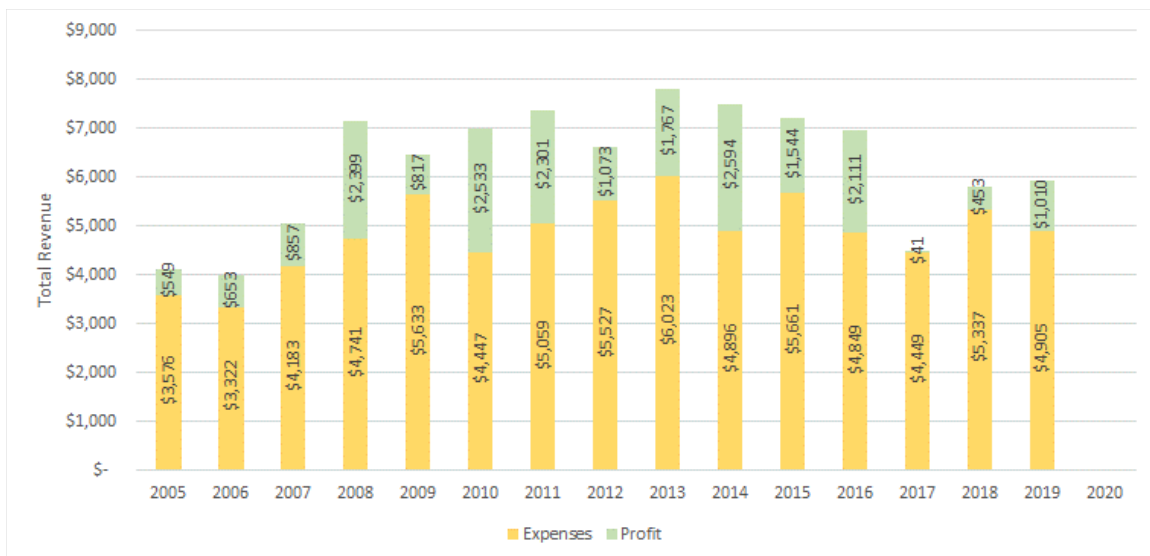

Figure 5. Professional Ethics *LIVE!* financial revenue summary including expenses and profit

One of the partnership aspects of Professional Ethics *LIVE!* is that local firms not only send their employees, but some also help by sponsoring the event financially at amounts ranging from $300 to $1,650, average $1,073 per year, with typical donations ranging from $100 to $250. This is done by advertising in the event program. In this way, Professional Ethics *LIVE!* affords

these local and regional firms a way to publicly showcase their commitment to professionalism and ethics, both for their employees and their professional peers and colleagues.

From the outset, Professional Ethics *LIVE!* was framed as a relationship between Texas Tech University engineering students, faculty and the local design professional community to promote and satisfy the needs of all partners. Tech TSPE student members invest sweat equity necessary to host the event. In exchange for publicity, NIEE has provided technical content (its educational materials) and expertise (its Deputy Director). Production costs are shared between Tech TSPE and South Plains TSPE, with South Plains TSPE accepting the financial risk, providing direct access to its members as potential attendees, providing guidance on program requirements, and offering experience and support in hosting successful engineering community events of this scale.

Metrics of Success

Professional Ethics *LIVE!* is mostly about the scholarship of teaching and the scholarship of service. Regarding teaching, Professional Ethics *LIVE!* promotes learning not only among those design professionals who attend, but also the multiple generations of Tech TSPE students who host and help with the event. Of course these students learn about service to their profession. But as an educator, it is also gratifying to hear student attendees thoughtfully deliberate among themselves about the ethics of the case studies they present.

Likert-type data [anchors 1-"strongly disagree" / 5-"strongly agree"] from a post-event survey of attendees at 2019 Professional Ethics *LIVE!* event (45% response) reveal that attendees believe Professional Ethics *LIVE!* helps them identify (4.1/5.0), understand (4.1/5.0) and apply (4.1/5.0) ethical standards for professional practice (Figure 6a). Attendees find the ethics cases/ scenarios interesting (4.3/5.0), realistic (4.5/5.0) and usually relevant (3.8/5.0) to their work (Figure 6b). Attendees further claim that Professional Ethics *LIVE!* helps them improve their ethical problem-solving skills (4.0/5.0), and overall they view the event as a "valuable" (3.9/5.0) learning experience (Figure 6c). Interaction is a strength of the instructional design, with most respondents identifying the table discussions, conversations, and combined viewpoints as the aspect of the event they "liked best."
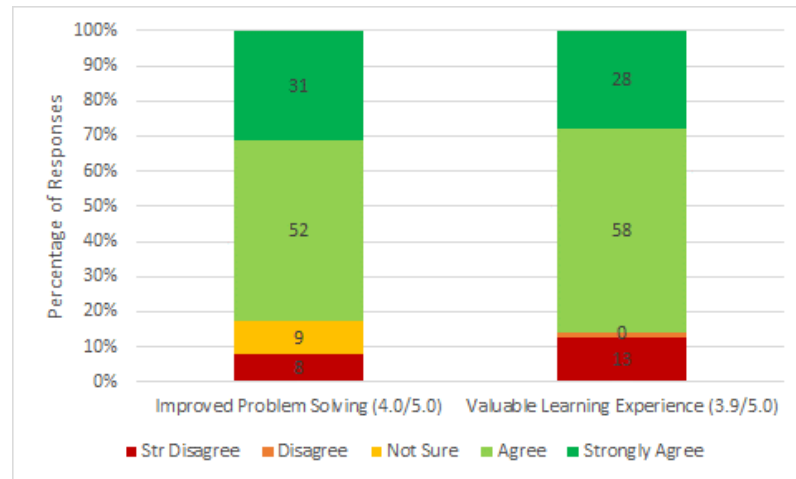
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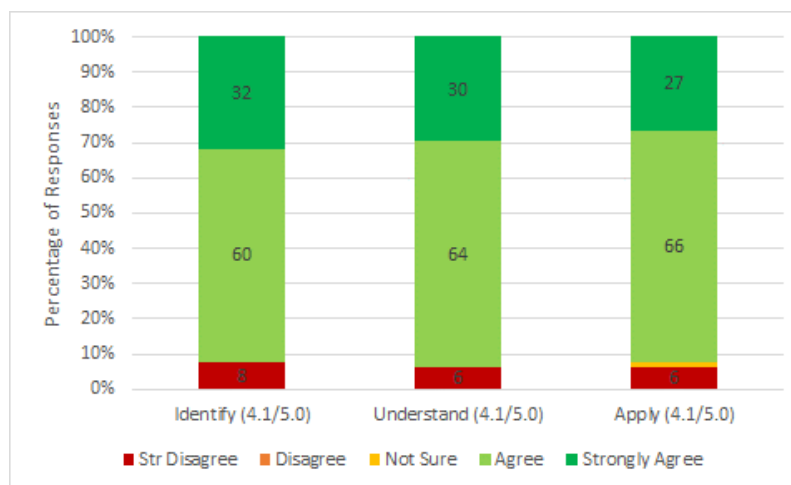
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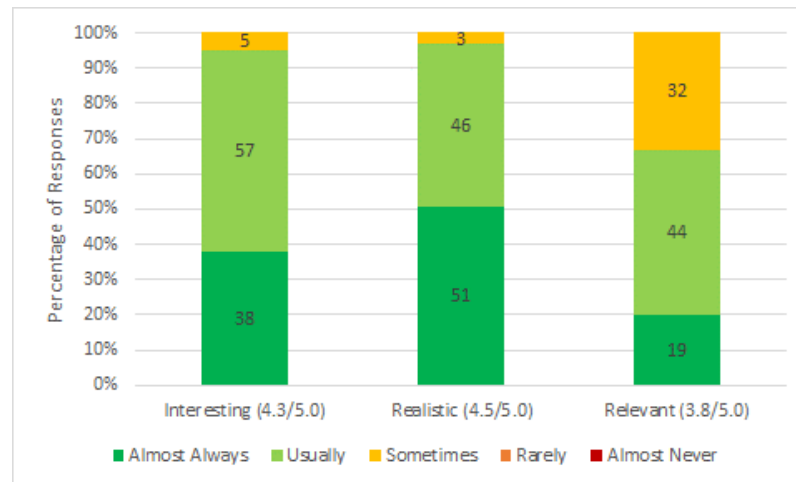
(c)

Figure 6. 2019 Professional Ethics *LIVE!* attendee survey: percentage of responses for (a) quality of ethics instruction, (b) case study engagement, and (c) overall learning assessment

It has already been noted that over its 15 years of existence, Professional Ethics *LIVE!* has seen consistently strong attendance and active community participation and involvement. In this way, Professional Ethics *LIVE!* tangibly expresses how Texas Tech University values the local design professional community, and vice versa. Each fall Professional Ethics *LIVE!* is widely publicized throughout West Texas, convened on Texas Tech's main campus, and hosted by Tech TSPE students and faculty. The alternative in the community would be… silence.

Professional Ethics *LIVE!* has been recognized as a service event at both the state and national levels. The December 2011 issue of the flagship publication of the National Society of Professional Engineers, *Professional Engineer Magazine,* featured an article entitled "Student Chapter Brings Ethics to Life" [*8*]. This article (Figure 7) showcases the 2011 event and describes the nature and impact of Professional Ethics *LIVE!*

Although the scholarship of research has not been a specific focus of Professional Ethics *LIVE!,* the event has seen some publication and scholarship effort. As has been noted, many of the Case of the Month ethics cases are published as forum articles in the *JPI*, including thirteen cases by the lead author of this paper. Some of these cases have also been published in other national periodicals, such as ASCE's *Civil Engineering Magazine* [*9*].
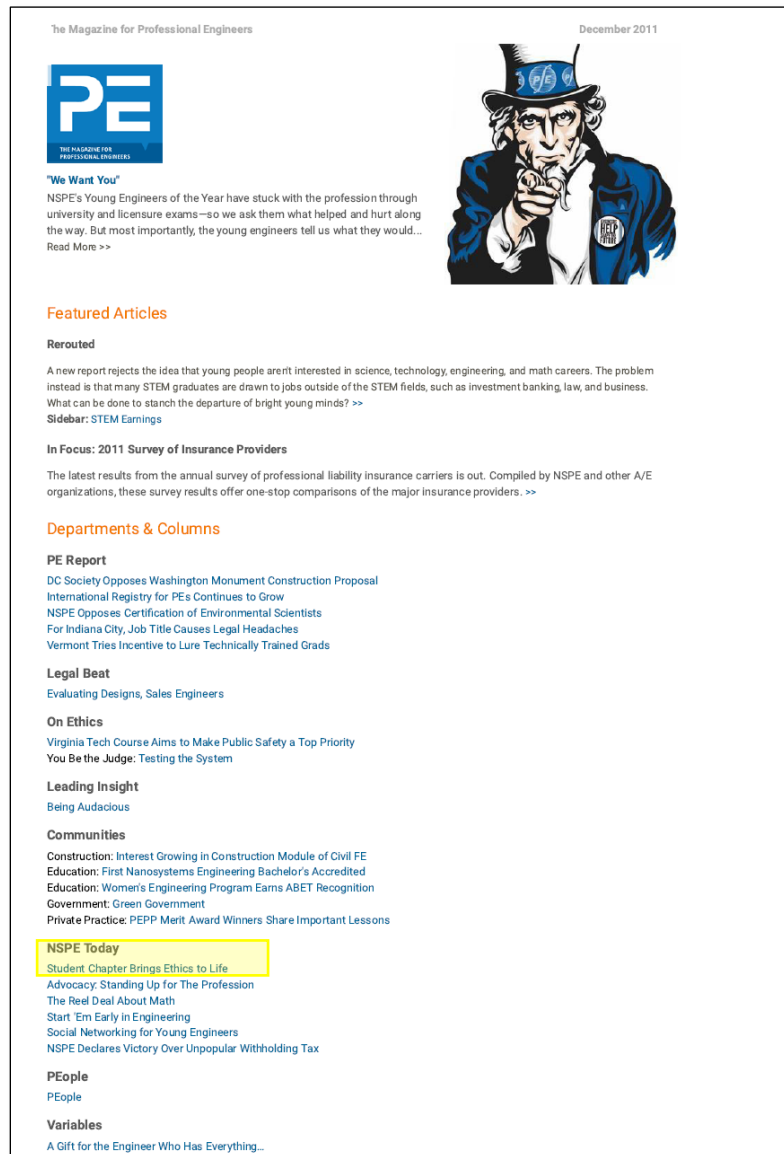

Figure 7. 2011 NSPE *PE Magazine* article about Professional Ethics *LIVE!*, "Student Chapter Brings Ethics to Life"

Discussion/ Lessons Learned

While Professional Ethics *LIVE!* has been highly successful as both a shared community project and a fundraiser for Tech TSPE, there have been challenges. Some issues arise from the brief time students are available to serve. Tech TSPE leaders often are senior-level students who

because of graduation, change each year. Thus few students with event experience are available, so most Tech TSPE officers must be taught "from scratch" the many aspects of hosting the event. Such a major responsibility and highly-visible forum make for an excellent learning opportunity, but instructional mentoring effort can be high.

Another challenge has been achieving both consistent quality yet fresh presentation. An early decision to increase the number of cases per event rapidly depleted the corpus of ethics skits available for presentation. To address this, in consultation with South Plains TSPE we started recycling some earlier cases and as noted, we hired graduate students from the Tech School of Theater and Dance to write new skits. However, working with the playwrights created unforeseen issues and questions about "creative control," and recycling skits resulted in voiced criticism from attendees about overfamiliarity with the "re-runs." These matters were addressed by seeking the opinion of event attendees (by survey) and working with South Plains TSPE leaders to update the program.

We have noticed that attendee perceptions of the relevance of cases (3.8/5) and the value of the learning experience (3.9/5) are not as highly positive as desired. While the organization of the event intentionally seeks diversity both in the audience and in the content, this means that some attendees may strongly identify with a case that others do not find as engaging. Simultaneously, it is important to celebrate the networking and community-building aspect of Professional Ethics *LIVE!* Hopefully all these factors can be balanced to continue to achieve a successful program.

To this point, data collection for the event has been limited and more anecdotal than systematic, with only two event-wide assessments. Also, evaluation has focused mostly on the design professionals and has not directly compared student views. But going forward, annual assessment will be used to identify the perspectives of all partners including both the students and the local design professional community, and this will help inform decision making. This more consistent, detailed feedback will be used to refine and strengthen the event.

It is no surprise that the key to addressing these and other issues is active communication among the partners. New students, unfamiliar with South Plains TSPE, must be introduced to the relationship and taught its value. Attendee needs must be heard and responded to. Relationships with new community partners such as AIA Lubbock must be actively and continuously cultivated. And at Texas Tech University, the scholarship of engagement must be articulated alongside other expressions of academic excellence so as to promote mature, healthy and sustainable community life.

The Future of Professional Ethics *LIVE!*

Notwithstanding the many changes that have taken place at Texas Tech University over the past 15 years, the social responsibility to give back and to contribute to our communities seems stronger than ever. As regards Professional Ethics *LIVE!,* the primary community partners and university partners still exist, and the policy impetus of promoting the public health, safety and welfare through continuing professional development remains. Thus, it makes sense to continue the Professional Ethics *LIVE!* program. Some of the challenges going forward include:

- The intentional valuing and cultivation of relationships with existing and new community partners
- The ongoing need to maintain relevance and excellence in professional ethics education
- Continued active development of student engineer leaders
- Identifying and establishing the next generation of program leadership

An encouraging sign is that Texas Tech University has started to formally support, recognize and promote community engagement through its "Office of University Outreach and Engagement" established in 2015 [*10*]. Within this program, Professional Ethics *LIVE!* is an expression of Texas Tech's strategic priority, "transform lives and communities through strategic outreach and engaged scholarship."

Conclusion

This paper describes a community engagement initiative, Professional Ethics *LIVE!,* that exists to help satisfy a need for continuing education by licensed engineers and architects relative to their ethical obligation to promote the public health, safety and welfare in the practice of their professions. The origins and history of Professional Ethics *LIVE!*, the nature of this university-community partnership, the instructional approach, and data on attendance, financial viability, and instructional effectiveness are presented. These reveal that Professional Ethics *LIVE!* is a mutually beneficial, reciprocal partnership that leverages university knowledge and resources with the understanding and experiences of the local design professional community.

It has been said that the scholarship of engagement exists at the intersection of learning, application and collaboration [*11*], and while Professional Ethics *LIVE!* was not originally created in the name of community engagement, it seems an excellent expression of the model. Many responsibilities compete for the time and energy of engineering faculty, but few offer such a rich return on effort as applying one's work in such a way as to simultaneously contribute to the professional community, develop future student leaders, and serve the needs of our citizens. Over the past 15 years, Professional Ethics *LIVE!* has done exactly this.

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