PUBLISHING YOUR RESEARCH ON EDUCATION

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MOTIVATION

As a faculty member (at any stage in your career), you might observe an educational technique from a colleague, listen to a podcast about teaching, participate in a workshop on teaching, read a paper in the literature about a new approach to use in the classroom about a topic you teach, attend a conference where an interesting idea is presented (technical or otherwise), or simply have an innovative idea that you think would improve learning and engagement. As a *scholarly teacher*, you reflect on what you know, incorporate what you have just learned, and implement the new idea you have (from any of the above sources) within your own course to increase student learning and collect evidence for the impact of those changes.[1,2] It is then natural to want to disseminate information pertaining to your experiences associated with this implementation and evidence for their use, with the venue often being a conference presentation (locally, regionally, or nationally).

Sometimes, such as for the Annual Conference & Exposition of the American Society for Engineering Education (ASEE), presentations require a paper to accompany the presentation, which is reviewed and, if accepted, placed within the proceedings for that conference (and this becomes part of the archival literature on that topic). Accordingly, the level of detail and depth of thought required for such a conference proceeding typically place a larger burden on the author than would a presentation on the subject. For example, reviewers will want you to contextualize your work in that area related to what is currently known, including existing literature and relation to education theory. Reviewers will ask questions about whether your approach had the impact intended, including your method for making such a determination. These, and other questions from reviewers, place your work beyond the realm of the scholarly teacher through your classroom implementation; now you have started to engage with the *scholarship of teaching and learning*.[1,3] Many of the papers within this journal, *Chemical Engineering Education (CEE)*, over the past decade could be classified in this way.

Consider the following scenario: at the end of your ASEE conference presentation, someone whom you do not know comes up to you and wants to discuss your presentation. This person asks you questions about why you think this approach worked in the way it did, the broader implications of the findings on how people learn, and whether the findings would be transferable to students outside your institution, outside your discipline, or even outside of engineering. As you begin to consider answers to these questions (how you might even set up a research study to explore the questions), you have started to engage with *education research*.[1,4]

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This article aims to support faculty within chemical engineering (and related disciplines) who seek to engage in education research. We provide an overview of how to formulate studies during the planning stage to align with expected levels for quality. Specifically, the purpose of this article is to provide a resource for any faculty member to cultivate their education research ideas and place those ideas within a framework suitable for publication in a peer-reviewed journal such as *Chemical Engineering Education*. This work is based on a 2022 ASEE/AIChE Summer School Workshop on the same topic by the authors.[5]

LITERATURE REVIEW

The need to transcend "good teaching" and engage meaningfully in the scholarship of teaching and learning has been recently recognized at the highest levels of engineering and university leadership. The significance of engineering education research is inextricably linked to both the innovation in and vitality of the discipline in the 21st century and to socially just practices in the classroom and the profession. The Center for the Advancement of Scholarship on Engineering Education (CASEE) was created in 2002 as the first operating center of the National Academy of Engineering (NAE). CASEE specifically emphasized the need for education researchers with a strong domain understanding in engineering. The NAE report, *The Engineer of 2020*, projected probable trajectories for the engineering profession and strongly recommended that engineering education undergo fundamental reform to actively anticipate changes in society rather than reactively responding to them.[6] Another NAE report, *Grand Challenges for Engineering*, stated, "Engineers must join with scientists, educators, and others to encourage and promote improved science, technology, engineering, and math (STEM) education in the schools and enhanced flow of technical information to the public at large – conveying not just the facts of science and engineering, but also an appreciation of the ways that scientists and engineers acquire the knowledge and tools required to meet society's needs." [7] Finally, a series of reports from the Association for American Colleges and Universities (AAC&U) call for attending to the structural barriers of learning for some students coining the term *inclusive excellence*.[8-10] Creating inclusive classrooms attends to how to incorporate content and instructional practices that are welcoming for the multiple social identities of the students (and the instructor) in a course.[11] Since learning is fundamentally a social process, an inclusive culture and deep learning of engineering content are mutually constitutive. In all these regards, the scholarship of education researchers within the discipline of engineering is critical.

This article provides a resource for the chemical engineering community that focuses on an overview of the structure of a research article in *education*. For more information, resources are available for physics,[12,13] chemistry,[14,15] biology,[16] and engineering [17-21] education research. The journal *CBE-Life Sciences Education* has a useful set of annotated biology education research papers.[22]

ELEMENTS OF AN EDUCATION RESEARCH ARTICLE

We structure a brief description of a typical education research publication framework (focused on chemical engineering) as containing the following elements:

1. Introduction and Motivation
2. Research Question(s)
3. Conceptual Framework
4. Methods and Procedures (including explicit diversity, equity and inclusion considerations)
5. Findings
6. Discussion and Conclusions (Importance to Chemical Engineering [ChE] Community)

These elements are supported by two metaphors: a funnel and a house. We use the funnel to illustrate how to construct an argument for an education publication. This metaphor for writing and argumentation is not new and is widely used across disciplines. The house analogy is used to illustrate the role of theory in supporting inquiry in education research and how to write up findings so that theory and methods align to answer the research questions.

We illustrate the elements through two research studies: a quantitative study published in *Chemical Engineering Education* [23] and a qualitative study published in the *Journal of Engineering Education*.[24] The first study assessed the value of a cornerstone design course on the ways that students learned problem-solving as a result of this experience. The second study explored the ways surface features influenced student responses to two challenging concept questions.

The six elements of an education research paper are represented by a funnel (Figure 1) that illustrates how the topic of interest converges into the specific argument in the paper (the narrow part of the funnel), and then diverges into more general implications (e.g., for the chemical engineering community).

Element 1: Introduction and Motivation

The Introduction and Motivation section of an education research paper shares a commonality with basic pedagogical principles: why should the reader care? This section affords the authors with much creative latitude in how to make a pitch that makes a reader *interested* to read more. Certainly, an author (or a team's) perspective can come through via this section, but there are still important elements that an Introduction and Motivation should include to be useful. The first part is the "problem/topic." Regardless of how long a preamble is to the problem/topic, eventually the author must make plain the general topic of what is to follow.

After the problem is stated (and, importantly, via the preamble, why it is interesting), the burden is on the author to both identify "what we know" and the missing "niche/gap" in what we know. For education research in chemical engineering, *Chemical Engineering Education* is a good place to begin a literature search, but other engineering education journals (e.g., *Journal of Engineering Education, Studies in Engineering* Education) and science education journals (e.g., *Journal of Chemical Education*, *CBE — Life Sciences Education*, *International Journal of STEM education*) can be good resources. The information on what research has been conducted to address the problem/topic should highlight the important aspects of the literature and set up a specific "niche/gap" for the research in the study. Not everything unknown about any topic may be deemed worthy of study (and publication), and thus the "niche/gap" that has been identified by the authors must also be worthy of exploration. This "niche/gap" should also be more focused in scope than the original "problem/topic" at the beginning of the Introduction and Motivation section. This approach narrows the scope of the argument and leads the reader to the specific actions in the study to address the outlined "niche/gap." Examples of each of these three sub-elements of an Introduction and Motivation section are provided in Table 1.

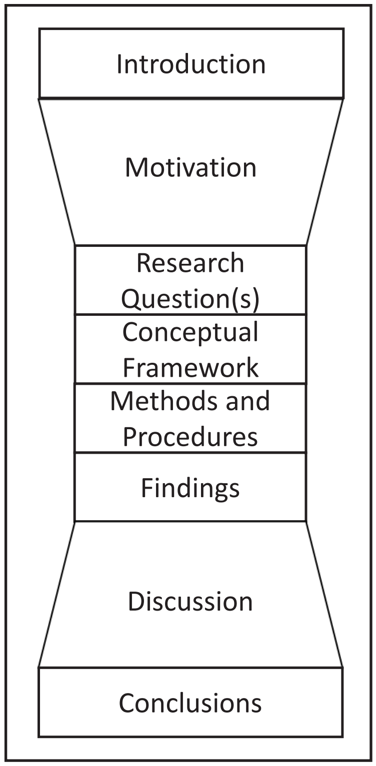

Figure 1. *The elements of an education research article - funnel analogy.*

Element 2: Research Questions

The research question (or questions, if more than one) provides essential framing for the focus of the study. These questions should be specific and concrete, measurable, informed by the literature review, and aligned with the conceptual framework and methods used (we discuss this alignment more in Elements 3 and 4, respectively).[25] The research questions provide the reader with information about the phenomenon under investigation and the knowledge that the study is designed to discover. Each research question should contain the following components: stem, context, and alignment with the conceptual framework and methods. Examples of two research questions' components are shown in Figure 2.

The stem is the starting part of a research question and often indicates the type of research study. Typically, stems that start with words such as "how" and "what" are open and emergent, and can be answered by rich *qualitative* data. "Why" implies a causal relationship and can be answered through either qualitative designs or careful quantitative experimental design. Note as the existence of a true randomized controlled experiment in education research is rare (most are quasi-experiments), causal inference is limited and advanced data analysis techniques are needed. "What," "to what extent," and "does," question stems are often aligned with *quantitative* approaches that can answer questions that are descriptive, correlational (relationships), or experimental (comparative).

The context of a research question should be specific to the phenomenon under investigation. This context could include a description of the key variables in a quantitative study or areas of focus in a qualitative study and should specify the participants and research site.

TABLE 1
Structure of an Introduction and Motivation Section

Sub-element	Example from ref. [23]
Problem/Topic	Engineers engage with complex, ill-structured problems, often taught in senior capstone design.
What We Know	More programs are integrating these concepts into first-year courses (called cornerstone design experiences). Such approaches increase students' self-efficacy, intellectual development, and improve retention of minoritized groups (i.e., women, Black, Latino/a/x, and Indigenous students).
Niche/Gap	However, few studies have investigated the cognitive impact of these experiences (i.e., problem-solving skills development).

Stem is bold, italic font

Methods and framework are underlined font

Context is bold and underlined font

Does students' problem-solving improve during a **cornerstone design course in chemical engineering?**

-Quantitative study

How do students' answer choices and written justifications compare for **two in-class multiple-choice concept questions** that have different surface features but ask students to apply the same concept in the same way?

-Qualitative study

Figure 2. *Example of the components of a research question. The questions are taken from refs. [23] (quantitative) and [24] (qualitative).*

Finally, the research question should be connected with the conceptual framework used to guide the study (the key constructs and connections of the phenomenon under study, refer to Element 3) and the methodology used (refer to Element 4).[26] For example, in the use of narrative inquiry, the research question may focus on stories as a key method of conveying data. For a quantitative study, the question might describe the relationship being explored between independent and dependent variables (e.g., correlate, predict, mediate, etc.). Mixed methods studies include both quantitative and qualitative data sources. Correspondingly, they need to include both quantitative and qualitative research questions to address the various data streams as well as a mixed methods research question that directly addresses the mixing of the data streams.[26] The ordering of these questions should be guided by the type of mixed methods research design used.[27]

During the workshop offered at the 2022 ASEE/AIChE Summer School Workshop, participants generated the following examples from research in which they were currently engaged:

- *Does incorporating technical communications projects into lecture-based core classes improve students' technical communications abilities before senior laboratory classes?*
- *How does teaching problem solving skills in certain deliberate ways improve students' problem solving ability?*

Element 3: Conceptual Framework

The framework for education research is communicated differently than traditional chemical engineering research designs. The difference centers on the role of theory in each case. In chemical engineering research, there is usually a consensus on the framework that can then be implicit when communicating studies. For example, in reporting nuclear magnetic resonance (NMR) experiments, the quantum mechanics of nuclear spin can be used to interpret NMR signals. Thus, the relation between the measurements (NMR signals) and the theory (quantum mechanics) typically is not elaborated or justified since there is implicit agreement among the community of researchers on this relationship. On the other hand, in chemical engineering education research, a phenomenon can be interpreted using different theoretical orientations, so the framework needs to be explicitly stated and justified. A researcher could consider behavioral, cognitive, or sociocultural framings associated with how latent (underlying) education phenomena are studied and measured. For example, consider a case where a class performance on exams is below historical measures. A behavioral orientation might lead to examining students' attendance or use of online materials in comparison to previous semesters; a cognitive response might be to investigate possible differences in the students' conceptual understanding; and a sociocultural orientation might be to inquire into the ways that broader social elements influenced students' engagement and motivation.

In this work, we use the term "conceptual framework," a term often used interchangeably with "theoretical framework" in the literature. We prefer "conceptual framework" as it is broader than using definitions of key factors or constructs from formal theory. The term also implies latitude to combine elements from different theories and elaborates on how these aspects interact with the other elements of the research process, including researcher interests and goals, identity and positionality, context and setting (macro and micro), and methods.[28]

Carrying through the previous example, ref. [23] uses a cognitive conceptual framework of how experts solve authentic problems in practice to investigate student problem solving. The authors linked this framework to their Research Question shown in Figure 2 and used this framework to develop and assess problems that were consistent with how experts make decision (i.e., methods, results).

LoBiondo-Wood and Haber [29] described the role of a conceptual framework in education in analogy to the way a frame on the foundation provides support for the construction of a house (Figure 3). The framework then is the structure that is used to answer the research questions by justifying the design, directing the researchers what to look for in the data, and interpreting the results in light of what existing studies have shown. Table 2 provides an example of a qualitative study [24] that shows how the conceptual framework links together the research questions to the methods and procedures, and ultimately to the findings and sense-making. Note that the conceptual framework example in Table 2 combines two theories: types of transfer and writing to learn.

Element 4: Methods and Procedures

Quantitative, Qualitative, and Mixed Methods. While there are many ways to classify education research methods, we focus on the characteristics of the data collected: quantitative, qualitative, or a mixture of both (mixed methods). The method should be chosen to most appropriately provide evidence to answer the research questions posed in ways that align with the conceptual framework. We do not have the space to fully explore the details of these different paradigms, but instead focus on issues of alignment across each. For more information on qualitative, quantitative, and mixed methods in engineering education research, refer to ref. [18]. For a description of qualitative research, refer to ref. [30]. Other classifications of education research methodologies are presented in refs. [31] and [32].

Quantitative studies are closest to the disciplinary training of many chemical engineering educators. In general, they rely on measuring phenomena numerically and conducting statistical analyses to answer deductive, confirmatory questions with generalizable findings. Data sources can include grades and other performance measures (e.g., concept inventories), close-ended surveys, and categorical demographic and institutional data. Data analysis is descriptive and inferential and relies on type of data, distribution, etc.

In general, qualitative research tends to be inductive or exploratory, collecting rich data in natural settings to understand phenomena. The methods chosen for analysis are

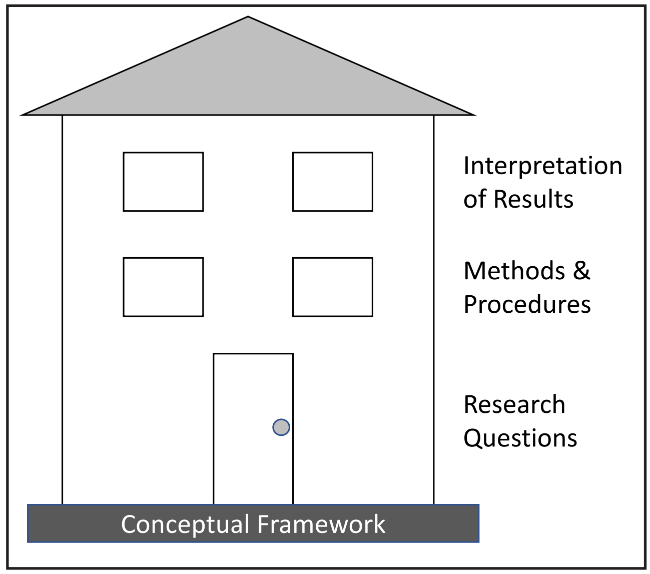

Figure 3. *The conceptual framework provides the structure to present a coherent chemical engineering education research study.*

TABLE 2
Example of the Elements in the House Analogy from Ref. [24]

Category	Approach
Research Questions	How do students' answer choices and written justifications compare for two in-class multiple-choice concept questions which have different surface features but ask them to apply the same concept in the same way?
Conceptual Framework	• *Transfer*: Classic; Actor-Oriented; Overzealous (product versus process). • *Writing-to-learn*: self-explanation.
Methods/ Procedures	• Two sequential, mixed methods case studies using critical case sampling. Study 1 examined differences in student responses with written justifications versus those without. Study 2 modified one of the multiple-choice concept questions to better align the question cues across conditions. • Qualitative analysis used hierarchal, open-coding.
Findings and Sense-making	Study 1 found differences in students' correct responses between the two in-class multiple-choice concept questions, and that students who tended to write higher-quality justifications on the more difficult question were less likely to choose the correct answer. In Study 2 the research team was able to decompose and interpret the differences observed in Study 1 based on actor-oriented transfer and overzealous transfer.

often more flexible in approaches but must be aligned with the conceptual framework and methodologies chosen to answer the research question(s). Data sources can include videos, interviews, and written or drawn responses. These data are then interpreted through methods such as qualitative coding, which systematically find common patterns or themes in data for transferable or exemplar findings. When coding, researchers often report the interrater reliability — the extent to which separate researchers can produce the same code identifications. In triangulation, more than one qualitative data source is used to confirm the findings are trustworthy.

Mixed methods research brings together the quantitative and qualitative research paradigms. While this approach might seem like the best of both worlds, mixed methods research can be particularly challenging. Mixed methods require expertise across different research paradigms and requires intentional integration of quantitative and qualitative data during analysis and interpretation.

Table 3 provides examples of research questions and corresponding measures for each study type in the context of a flipped classroom.

Positionality. In all research (quantitative, qualitative, or mixed methods), the researcher or research team plays a key role in designing the research study, collecting data, and analyzing and interpreting data. Throughout this process the researchers' interests, prior experiences, and judgement are involved — positioning the researcher as the instrument for the study. Most often, this role is discussed explicitly in qualitative research.[33] However, more recent discussions in engineering education and social science more broadly have made calls for the role of the researcher in all study types.[34-36] Including reflexivity (i.e., the process of evaluating how one's assumptions, beliefs, and judgement systems influence the research process) throughout the research process provides research that identifies and addresses potential research biases; provides transparent methods, analyses, and interpretations; and appropriately considers the role of the researcher in interactions with participants (i.e., promotes ethical validation [37]), which leads to higher quality research.

Positionality involves more than disclosing researchers' identities; it is a reflexive statement about the role of the researcher throughout the research process. It also provides more transparency in research and acknowledges that all research is conducted by humans (and in education research, with humans), which influences the results. Acknowledging positionality is essential to addressing the false dichotomy that quantitative research is "objective" or "more robust" than other paradigms and addresses the risk of methods, particularly quantitative methods, of being "divorced from the context of their construction and thus los[ing] the meanings they had for the people involved"[38, p. 101, as cited in Jamieson]

Chemical Engineering Education's DEI Requirement. In 2021 *CEE* implemented a new guideline that required authors to consider their work through a diversity, equity, and inclusion (DEI) lens. To help authors comply with the new guideline, a one-year transitional option was provided, allowing authors to address DEI in their cover letter instead of their paper, and published papers and editorials offered additional guidance.[39,40] This change was prompted by Lisa Benson's comments at the ASEE Educational Research and Methods Division Distinguished Lecture on how journals can play a role in DEI.

A recent focus group study amongst *CEE* readers and authors shows that the community is navigating how to address the new DEI requirement.[41] That study identifies a DEI developmental trajectory, starting from a place of valuing DEI within constrained situations and evolving to understanding DEI as omnirelevant and viewing DEI as an enduring attitude, a stance everyone is responsible to hold.

TABLE 3
Examples of Research Questions and Measures for Three Different Possible Studies in the Context of a Flipped Classroom

	Research Question	Measures
Quantitative	Do flipped classrooms result in higher conceptual understanding than traditional lecture?	Appropriate measures of learning (e.g., a concept inventory) and inferential statistical analyses (e.g., mean comparison across conditions with reported statistical significance and effect size).
Qualitative	How do students approach collaborative problem-solving in a flipped classroom? In what ways does their engagement support or impede the flipped classroom instructional design?	Video recordings of small group interactions triangulated by focus groups of students' perceptions and experiences.
Mixed Methods	What frequency do students engage in pre-class videos in a flipped classroom? How does student motivation inform students' decisions to engage in pre-class videos?	Student engagement with videos with descriptive statistical analyses combined with measures of student motivation through surveys and/or interviews/focus groups.

There are various ways that this requirement can be addressed, including positionality statements that acknowledge how a researcher might influence DEI in their study. Some examples are shown below:

- How am I interacting with this group?
- Could my analysis reproduce (even unintentionally) existing inequalities? [38]
- Methods for inclusive demographic measures
- Use of inclusive language for marginalized groups
- Description of the representation by race/ethnicity, gender identity, or other important factors in the sample and the influence of that representation on the generalizability of results for specific marginalized groups [42]
- Discussion of how a new learning activity might improve student outcomes to reduce existing equity gaps in academic performance
- An acknowledgement of limitations in the work for DEI

These examples are not exhaustive, but silence on the issue of DEI in research in and of itself perpetuates the status quo. Beginning to address DEI explicitly centers considerations in the research process, which is essential to making engineering education better for all.

Element 5: Findings

The Findings section contains the results from the analysis of the collected data. Below we briefly describe the contents of this section; for more detail please refer to refs. [12 – 22].

For quantitative studies appropriate statistical techniques should be applied and corresponding parameters reported, e.g., test statistics (including p-values), sample sizes, effect sizes, etc. For example, if the dependent variable is continuous, normality should be checked. One the other hand, if the dependent variable is ordinal, often non-parametric tests should be applied. Only findings that are statistically significant should be reported.[20]

For a qualitative study, findings should be reported in ways that provide an evidence chain that supports the claims made and advances the argument. For example, quotations might be used from a video study or an interview study while field notes might be referenced for a study that uses participant observation. In such cases, it is important to make the selection process of data presented transparent and not simply pick the most compelling quotes or other evidence. When presenting a quote as evidence for a claim, commonly the quote is preceded by a description of the context and what the reader should focus on, followed by an interpretation of how that piece of evidence fits within the argument. There is a trade-off between providing enough data for the reader to follow the evidence chain, but not so much that they are overwhelmed. Commonly, plausible alternative explanations and counterexamples to the overarching trends found are also addressed.

Carrying on the example from ref. [23], this quantitative study provided specific results with standard reporting practices, e.g., "We found statistically significant increases in Evaluation Criteria (15% pre, 25% post, $t(89) = 2.89$, $p = 0.002$, $d = 0.35$, medium effect size)." (p. 129). Importantly, in addition to the average value, t-statistic, sample size, and p-value, the effect size was also reported. The effect size is an essential piece of information to understand the pragmatic validity of the difference detected.

Element 6: Discussion and Conclusion

Typically, scholarship in education research contains a discussion section, and many claim it is the most important section of the manuscript. The discussion is where your argument comes together, expanding the funnel back out into generalizable or transferable knowledge (Figure 1). Since educational systems with human subjects are complex, it is important to identify the contribution of your work to the problem being investigated and connect the findings to your research questions and to the conceptual framework that you have used.

The first paragraph of the Discussion often summarizes findings in simple terms. The authors should then discuss how the findings relate to prior literature and answer questions of what was similar and what was novel in the results of the study. Additionally, the authors should make connections between the findings to possible explanations from theory/literature, particularly the conceptual framework used in the study. This section should then broaden to implications for educational practice, policy, or research. Limitations on the interpretations of the findings can also be presented here (or, alternatively, in the Methods and Procedures section). The Conclusion should summarize the important findings and clearly state what knowledge the study adds to the literature.

Continuing the example for ref. [23], the Discussion contained suggestions for how the findings related to possible implications for teaching and future research, as follows:

- Both deliberate practice and feedback from an expert teacher/coach are necessary for improving performance.
- "We are currently working with instructors of engineering science courses in years 2 and 3 of the curriculum to develop interventions that improve students' problem-solving during the middle years." (p. 130)

ETHICS OF HUMAN SUBJECTS RESEARCH

In research, ethical considerations refer to a set of principles that inform the design and implementation of studies. Education researchers are obligated to abide by a code of conduct when collecting data from human subjects. The Belmont Report [43] provides three common principles for conduct of ethical research: respect for persons, beneficence, and justice. Respect for persons emphasizes the rights of individuals' autonomy and that those with diminished autonomy be protected (e.g., children, prisoners, pregnant women, fetuses, mentally disabled persons, and economically and educationally disadvantaged persons; 45 CFR §46.107(a) [44]). Beneficence requires the researcher to not only do no harm but also to maximize the benefits and reduce potential risks to participants. Justice upholds that all individuals be allowed fair distribution of risks and benefits of research. Determining what to investigate and how to conduct the investigation entails fundamental ethical considerations that serve to safeguard the rights of research participants, augment the validity of research outcomes, and uphold scholarly integrity.

Before initiating any research involving the collection of data from individuals, it is mandatory to submit the research proposal to an institutional review board (IRB). The IRB is a committee responsible for evaluating the ethical acceptability of the research objectives and methodology, as per the institution's guidelines. This submission will require a clear description of the general study information, research questions, sites for research, research design, description of the benefits and risks, participant recruitment and selection, consent, study instruments, and efforts to maintain confidentiality, security, and privacy.

To be involved in such research that requires a submission to an IRB, your institution likely mandates researcher training ahead of any IRB submission. Most institutions will outsource such training to an organization that provides online courses and quizzes to certify that researchers are cognizant of crucial ethical issues associated with research involving individuals, though some institutions will have their own in-house training. As these certifications are often both time-consuming and require periodic renewal, researchers are encouraged to consider these certifications in advance of any IRB submission.

Once IRB approval is granted, you can commence data collection adhering to the approved research protocol. In case any modifications to the procedures or materials are necessary, you should seek approval by submitting a modification application to the IRB. In general, institutions' IRBs seek to support research activities while maintaining ethical compliance. If you have questions, you should contact and work with the IRB.

SIGNIFICANCE TO THE CHE COMMUNITY

This article and accompanying workshop are intended to provide background for chemical engineering educators to produce quality education research scholarship on areas that they touch on in their practice. We have described the key elements of a research study and provided examples of published studies to guide educators interested in transitioning from the scholarship of teaching and learning to engineering education research. With the description of the funnel and house analogies above, we believe that educators interested in exploring education research can be successful in study design and publishing. We do encourage individuals to read the additional citations and resources described in this paper and seek input from others engaged in education research.

In the process of writing, we provide the following tips to develop high quality manuscripts.

Do:

- Support claims with evidence from data
- Explain how the present study relates to previous studies
- Clearly explain your conceptual framework and use that framework to align all aspects of your study, particularly the interpretation of findings and discussion
- Offer implications for engineering education practice, policy, and/or future research

Don't:

- Make overly broad claims that exceed what your data would warrant
- Write conclusions that do not tell anything new

Chemical engineering education scholarship helps the community be better able to extend experiences in our own instructional practice to provide generalizable or transferable knowledge about how students learn chemical engineering and the ways that the class and organizational structures influence that learning in ways that are inclusive. We hope that this paper provides a jumping-off point, set of resources, and encouragement to further engage in this type of scholarship.

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