



# ASEE Papers and Engineering Unleashed Cards

A Guide to Displaying and Documenting Your Work While Maximizing  
Your Reach and Impact

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## Overview

ASEE papers and EngineeringUnleashed.com cards are two distinct yet complementary tools educators can use to communicate data, assessment methodology, guidance, and resources involved with their topic. It is to the benefit of engineering instructors to use both these tools when displaying and documenting their work.

Compiled by instructors from around the nation, this guide explores how papers and cards work together. The guide also contains definitions, resources, and a detailed How To Get Started section.

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## Definitions

An **ASEE paper** is a formal, peer-reviewed, archival publication that communicates and documents developments in engineering education, such as a research study conducted on an intervention tried in class. Papers represent a significant scholarly effort to advance engineering education and promote teaching excellence.

An **Engineering Unleashed card** is a dynamic and adaptable publication that serves as a repository for sharing innovative teaching practices, classroom activities, and educational resources connected to entrepreneurial mindset. Cards allow people to document pedagogical developments in a manner that facilitates adoption by other educators. Cards are “living” documents, able to be updated at any time.

### **Entrepreneurial Mindset (EM)**

Cards are also connected to an overall mission to transform engineering education with an [entrepreneurial mindset](#), which is to equip students to see opportunities, make an impact, and understand their unique role as value creators.

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## How Papers and Cards Work Together

ASEE papers facilitate sharing outcomes from implementing a new activity or idea in the classroom or engineering education in general.

Papers generally focus on **why the activity or idea was conducted**, and **how its results contribute to engineering education** from a research-oriented perspective.

When a paper is combined with a card, the author is then able to share **how to implement the activity or idea**.

For example:

- Publish a paper on your research study. Then discuss it with other educators on your corresponding card.
- Publish a paper about developments in engineering education. Then pair it with a card about your teaching practices, including the assessment tools you used and student artifacts.

An important facet of the paper-card collaboration is that papers can refer to the unique card number and/or provide a link to the card. In turn, cards can link to the corresponding paper abstract (or any other archival publication). See [Citations](#) for more information.

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## Chart: Differences & Similarities

This chart further shows how papers and cards complement and supplement each other. By developing and using both formats, you will be able to provide others with the complete picture of your work - and facilitate their usage of it in their own contexts.

Features	ASEE Paper	Engineering Unleashed Card
Formal/Archival publication	✓	
Living/updateable publication		✓
Focus	Broad	Entrepreneurial Mindset
Peer-reviewed	Required	Optional (not blind)
Contains references	✓	✓
Citable	✓	✓
Add to CVs, P/T materials, reviews	✓	✓
Shares research	✓	✓
Advances engineering education	✓	✓
Documents developments	✓	✓
Facilitates adoption		✓
Shares outcomes	✓	✓
Contains activities		✓
Provides reporting on use/impact		✓
Contains downloadable resources		✓
Allows questions/commentary with author(s)		✓

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## How To Get Started

- Do you have a paper and want to make a card to go with it? [Explore Case 1](#).
- Do you have a card you'd like to turn into a paper? [Explore Case 2](#).

### **Case 1: I already have an ASEE paper accepted/drafted and I would like to make a companion card.**

Start by considering what resources you would like to share with someone that wants to use the idea or project from your ASEE paper.

Focusing questions:

- What would save them time?
- What would you send a colleague who asks for your materials?

Then as you draft the card, craft your main description around the things another faculty member would need to implement your idea.

Focusing questions:

- Why do *you* like the project?
- What makes it work well with students?

### **Case 2. I have a card I would like to turn into an ASEE paper.**

Start by considering how you might assess your project if you have not yet done so.

1. Take the [COMPASS assessment for EM self-paced training](#). This course was developed as a guide to help faculty explore tools and best practices for assessment of EM.
2. Make sure to consider whether or not you need approval from an Institutional Review Board (IRB) for conducting your studies.
3. Draft an abstract for the conference and submit it.
4. Start writing your paper with a literature search and information about your EM focus.

### **Beyond ASEE**

You can also look beyond ASEE; other conferences may work well for your project. For example, [Engineering Unleashed Ambassadors](#) are familiar with EM topics and have been publishing within professional societies. You can reach out to these people to learn more about work already happening.

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## More Ways Cards Can Supplement Presentations

Consider: How might your card be used to quickly link attendees to more resources? Are there multiple ways that a card can be used in a paper presentation? What about a poster?

Try these ideas:

1. **Include a QR code to your card** in your poster or presentation. This gives others a direct way to gather resources as well as an opportunity to talk with you further about your work.
2. **Get your card reviewed.** All reviewed cards can be viewed by the general public (i.e., they do not need an EngineeringUnleashed.com account). This makes the initial share with a public audience easier.
3. **Put the unique card number** on print items, presentations, or even on swag promoting your work. People can go to EngineeringUnleashed.com and easily find your card.

Here is an example of cards being integrated with posters, at the 2024 PNW ASEE Regional Conference hosted at Montana State University. (Note: KEEN is only included because MSU is a KEEN Partner - this does not have to be the norm.)



*Photo courtesy of Stephanie Wettstein*

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## Citations

### How to cite or refer to an ASEE paper on your card:

In the card's Folder section, **include a link** to that paper, abstract, or other archival publication, as seen in [Card #1519](#):

#### Folders

▼ Papers/Poster/Presentation						
Description						
Title	Type	Ext	Date	Size	Download All	Downloads
Link to ASEE Peer Paper	Journal / Article		7/15/2019	-	👁️ Link	
Link to ASEE Presentation Slides	Presentation		7/15/2019	-	👁️ Link	
ASEE Poster	Presentation	.pdf	7/15/2019	476.7 KB	📄 Download	0

### How to cite or refer to an Engineering Unleashed card in your paper:

#### Direct citation

At the top of the card, click the “Cite” button to generate the citation. Then copy and paste it into papers, CVs and other materials, and even other cards. See example from [Card #1493](#):

Cards ▸ CURIOSITY: What do we mean? 🗨️ Cite 📄 Save as PDF

An example method - the

DaVinci

Franklin

Melton, Doug, and A. L. Ranen McLanahan. 2024.  
"CURIOSITY: What do we mean?". Engineering Unleashed.  
Tuesday, March 12, 2024.  
<https://engineeringunleashed.com/card/1493>

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- Demonstrat
- Explore a co

#### Categories

Category

- Classroom &
- Engineering

Engineering Dis

- Comprehen

★ Exemplar Content 👁️ 5976 ❤️ 74 Favorites 📄 1 Times Used ➦ 1 Shares 📄 12086 Downloads

GENERAL CARD #1493

### CURIOSITY: What do we mean?

By [Doug Melton](#) & 1 other Updated: 3/12/2024 12:13 PM by [Doug Melton](#)

## Referencing

Each Engineering Unleashed card comes with a unique card number. This is present on the card itself and also in the card's URL (see example on Card #1493 above). In your paper, you can refer to that number and/or include the entire card link, depending on the format of your presentation.

## How to include your paper's co-authors and contributors on your card:

The inclusion and listing of your paper's co-authors should reflect their relative contribution. If your co-authors are (1) members of Engineering Unleashed and (2) work on the card with you, then you can add them as card authors or editors.

You can also list all of the paper's authors in the References & Acknowledgments section, as seen in [Card #940](#):

### References & Acknowledgements

S. Brunhaver, J. Bekki, A. Carberry, J. London, and A. McKenna, "Development of the Engineering Student Entrepreneurial Mindset Assessment (ESEMA)," *Advances in Engineering Education*, vol. 7, no. 1, 2018.

The authors of the card would like to acknowledge all of the paper authors: Laine E. Rumreich, Faith Logan, Zachary Dix, Nicholas Rees Sattelle, Dr. Krista M. Kecskemety, Dr. Ann D. Christy

The authors of the card would also like to acknowledge the OSU Department of Engineering Education KEEN team for their work in developing the learning objectives.

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## Resources & Further Learning

- See [Card #940: Comparing EM Course Learning Objectives](#) for an example of a card corresponding to an ASEE paper.
- Take this [on-demand course on engineering education research](#) and learn how cards contribute.
- Use [COMPASS](#) to determine the best type of assessment tool for your use of EM.
- [Engineering Unleashed Ambassadors](#) can help you find conferences to display your work.
- Explore [Scholarship of the Entrepreneurial Mindset](#) for valuable insights.

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