UTeach Maker: Supporting Making in STEM Education

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Why UTeach Maker?

To support teachers in bringing creativity, passion, and innovative technologies to the STEM classroom

To ensure that students from all backgrounds have an opportunity to engage in Making as an empowering way of learning
UTeach Maker - Cohort 1

Paige Arneson
Biology
showcase

Aminadab Morales
Physics
showcase

Susan McLain
Post Bac

Miriam Reyes
Biology
showcase

Hannah Spock
Biochemistry
showcase

UTeach Maker Second Cohort will be
17 Students & 3 Induction Teachers
Essential Features

• Monthly Cohort Meetings
• Maker Mentors
• Community Events
• Maker Showcase
• National Reviewers
UTeach Maker: Micro-credentialing Process
Maker Showcase

https://maker.uteach.utexas.edu/maker-showcase
Maker Showcase Categories and Criteria

- Maker Philosophy
- Maker Education
- Maker Project
- Maker Community
1. **Maker Philosophy**: The purpose of this category is to have candidates explore and develop an understanding of the philosophical and pedagogical roots that are expressed via Making, like constructivism, constructionism, and other progressive educational models (Montessori, Reggio Emilia, etc.) plus the historic and cultural context that led to the current Maker movement.
2. **Maker Project**: The purpose of this category is to illustrate the candidate's personal experiences as a Maker. This section provides the opportunity for candidates to highlight their "maker mindset" as well as the dispositions involved in making. Participation in a personal project will support candidates in experiencing the playful, growth oriented, and collaborative nature of Making.
3. Maker Education: The purpose of this section is to showcase the connections between Making as a personal endeavor and the broader arena of Maker education, specifically as it applies to secondary classrooms. This section should include a discussion of educational issues such as issues of access and equity (including under-representation in STEM fields and other barriers), strategies for integrating Making with curriculum, the use of rubrics to support student Makers, and insights into classroom management strategies for Maker environments.
4. **Maker Community**: The purpose of this section is to illustrate that Making is an activity that occurs within complex communities. Making involves links to a wide array of people that bring diverse expertise and perspectives. These community networks support the connection to Making to a larger social context and provide productive pathways for learning.
Example of Maker Portfolio

https://sites.google.com/view/livelongandmake/
UTeach Maker Mentors

Patrick Benfield
The Magellan International School

Alex Morrison
Independent Museum Consultant

Oren Connell

Lauren Siegel
MathHappens

Ann Richards MS
Cohort Meetings & Mentors

- Monthly meetings on campus or local Makerspaces
- 4 Makers - 1 Mentor
- Food
- Maker PD/ team building
- Showcase check-ins
Community Events

• Optional community events
• Published on website and promoted at meetings
• Connect to local Makers
UTeach Maker Ecosystem

Community Makerspaces

K-12 Makerspaces

Cohort Meetings

Maker Mentor

Internships

University Makerspaces

Student Teaching

Local Maker Events
Maker Internship Opportunities

UTeach

MAKER

girlstart

REAGAN EARLY COLLEGE HIGH SCHOOL
AUSTIN Independent School District

thinkery

MAATHHAPPENS
Showcase Review

- Formative Showcase review (in house)
- UTeach Maker partners with national leaders in Maker education to review Maker Showcases
- The review process ensures that the work of UTeach Maker meets high standards and reflects up-to-date Maker tools and skills
- Showcases are also presented to the public for feedback
UTeach Maker Teaching Fellows!
The UTeach Maker Experience
More on UTeach Maker @

https://maker.uteach.utexas.edu/

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