UTeach STEM Educators Association (USEA) Strategic Plan

MISSION

Developing STEM literacy for all students through innovation and excellence in university-based teacher education.

GOAL I

Create a community of UTeach programs and stakeholders through networks, opportunities, and resources that support them to thrive in their universities, schools, and communities.

Objectives

1. Establish and maintain a directory of members
2. Establish national vehicles for community communication, including
   a. Newsletters—for example, sections for different members, comments, voices from the field, voices from members
   b. A peer-reviewed journal—practitioner and research
      i. Form a committee to start planning
      ii. Implementation
   c. Develop a proposal for a virtual community workspace
      i. Form a committee to plan
   d. Regional/national chapters—meetings regionally and at national/regional conferences
   e. Recognition of outstanding contributions to the USEA mission from member categories
      i. Form an Awards Committee

GOAL II

Continuous improvement of the UTeach curriculum and model through analysis of program and graduate data and the application of current research-based, cutting-edge best practices.

Objectives

1. Develop and institutionalize enhanced pathways in high-needs disciplines in association with other professional organizations
   a. Specific disciplines: physics, chemistry, earth sciences, computer science, and engineering
2. Promote the sharing of program data and best practices by members
3. Promote the sharing of research by members at the UTeach Annual Conference and in the USEA peer-reviewed journal
4. Continue to develop the UTeach model in response to state and national initiatives
GOAL III

Advocate for effective university-based STEM teacher preparation and the importance of STEM education.

Objectives

1. Provide research-based materials and information about best practices in STEM teacher preparation to policy makers and other STEM education stakeholders
2. Publicize the UTeach community successes in STEM teacher preparation at state and national levels, to include state and federal government and state and national organizations for school administrators, and STEM education professionals
3. Partner with organizations and associations that disseminate information at state and national levels
4. Provide access to experts and scholars in STEM teacher preparation for advocacy through speaking, testifying, etc., on STEM education issues

GOAL IV

Facilitate the establishment of a national research agenda for STEM instruction and assessment.

Objectives

1. Identify funding sources for coordinated STEM teacher preparation research and publicize them to USEA members
2. Bring together multi-disciplinary cross-university teams that will develop specific grant proposals that:
   a. Develop a measure of what UTeach students learn by graduation about science, math, and the teaching thereof
   b. Measure what UTeach students learn by graduation about science, math, and the teaching thereof
   c. Measure the above three years into teaching
   d. Measure the implications for the students of UTeach alumni
3. Provide assistance in evaluating requests for access to UTeach data
GOAL V

Partner with other organizations to provide ongoing research-based professional development to university faculty and staff as well as alumni and in-service STEM teachers to ensure the highest quality STEM teachers for our nation’s students.

Objectives

1. Disseminate high-quality STEM education professional development
   a. Annual Conferences (e.g., UTeach Annual Conference, UTeach Alumni Conference, events of individual USEA program members)
   b. Disseminate information about USEA program members’ professional development offerings at STEM education professional conferences (NSTA, NCTM, ACS, BCCE, NSELA, etc.)
   c. Disseminate information about USEA program members’ professional development offerings to schools/districts partnered with UTeach programs
   d. Track and publicize presentations by USEA members at relevant professional conferences to all our members so that those attending such conferences can attend any USEA presentations of interest to them

2. Identify funding sources to support STEM education professional development activities

3. Bring together multi-disciplinary cross-university teams that will develop STEM education professional development grant proposals

4. Create a social network site to share best practices of STEM education among USEA members—induction support, video clips, mentoring, etc.