

AAU Undergraduate STEM Education Initiative Effective STEM Education: The Role of the Academic Department and Department Chair

Small Group Activity

In small discipline-based groups reflect on the workshop sessions and discuss with your colleagues the strategies and approaches your department is considering and/or implementing to improve undergraduate STEM education. The group is asked to consider both the opportunities and challenges in providing effective introductory STEM courses as well as identify actions that department chairs can take to advance a culture of teaching at research universities. If necessary, use the following questions to help spur the group discussion. Create a just-in-time poster that summarizes the key points of the discussion.

- What are the benefits and limitations of the various staffing models for introductory STEM courses? Is there intentionality that goes into teaching assignments?
- How is your department accessing curricular innovations? How do you calculate the costs of improvements?
- What are meaningful metrics and indicators for evaluating and rewarding faculty members' contributions to improving the effectiveness of introductory STEM courses?
- What strategies and approaches does your department use to create inclusive and welcoming learning environments?

Group roles

Identify a discussion facilitator, a note taker, a time keeper, and a spokesperson for your group.

- The discussion facilitator will be responsible for keeping the group on task and oriented toward its goals. The discussion facilitator also will make sure that everyone has a chance to speak and all voices are heard in the group discussion.
- The note taker will be responsible for keeping a record of the group discussion and any emergent, cross-cutting trends within the conversation.
- The time keeper will be responsible for making sure adequate time has been allotted for: the contribution of individual perspectives, deciding on the key themes for the poster, and the creation of the poster.
- The spokesperson will be responsible for presenting a three-minute flash presentation of the poster to all once reconvened.

Just-In-Time Poster Instructions

Create a poster that illustrates the key points and cross-cutting trends of the group conversation. Please return to the Pelican Room and hang your poster on the wall by 4:30 pm. We will go around the room with the spokesperson from each group giving a three-minute flash presentation.