

## **ISSOTL small group on UGR Table 3**

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Three key issues emerged from our discussion:

1. In our discussion of the diverse posters presented through the day, we noticed that undergraduate research programs seem to face a common set of design choices that institutions approach differently:

(a) How to balance the opportunity for undergraduate students to develop their own research skills/questions with the careful study of how disciplinary experts conduct research?

(b) How to balance immersive but time/resource-intensive research experiences with less deep but more widespread opportunities for student research?

(c) How to balance research skill building with considerations of identity development and affective concerns related to research, such as enhancing student confidence?

2. What challenges and opportunities do emerging technologies present for undergraduate research programs? One of our group members, for example, is at a university committed to online/distance learning programs. Do traditional approaches to undergraduate research require regular face-to-face contact? Might there be emerging technologies (or existing ones) that would allow undergraduate research projects and mentoring to occur in new ways? For example, asynchronous online mentoring communities might allow more and different undergraduates to participate in undergraduate research; these technologies also might allow experts outside of the academy (such as practicing architects, engineers, and artists) to serve as research mentors. The need for technological solutions might be particularly important since one-on-one, face-to-face mentoring of research is not possible, for resource reasons, in many institutional contexts.

3. How does undergraduate research work with “mature age” undergraduates, particularly those who have significant relevant work experience? Perhaps we need to rethink possible roles of students in undergraduate research. So, for example, could “mature age” undergraduates serve as tutors or peer mentors to other undergraduates – allowing faculty and students to use their time/expertise differently in undergraduate research?