

# Designing Active and Collaborative Learning Opportunities in Online Biology Courses

Interface 2021: Better Together

Presenters:

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## The Content

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- Case Study 1: Integrated Principles of Biology 1 and 2 employed scenario-based group discussions wherein students first individually applied course concepts to specific examples. Students were then asked to analyze the work of their peers and synthesize individual contributions into a final product.
- Case Study 2: Integrated Principles of Biology Lab 1 and 2 engaged students through the use of collaborative lab activities. Students individually performed experiments and then came together to share results and posit conclusions.
- Case Study 3: Marine Biology made use of a captivating non-fiction book which was integrated into the tool Perusall, allowing students to connect with the text while also connecting with each other. Groups also worked to identify scientific journal articles related to assigned chapters and acted as discussion facilitators to engage their peers.

## Advantages

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- Gives students the opportunity to deeply engage with course content
- Exposes students to the work of their peers and encourages reflection upon their own contributions
- Creates an opportunity for online collaborative knowledge building

## Challenges

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- Recognizing student preconceptions of collaborative learning
- Providing students with clear instruction on how to utilize the tools to be successful
- Planning in advance with attention to detail to ensure consistency with the design of the assignments for the entire course

## Goals Moving Forward

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- Emphasize the importance of originality in individual contributions
- Recognize different considerations for delivering online learning activities when translating from a face-to-face approach to an online approach

## Bonuses

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- Makes content relevant by presenting it in the context of real-world examples
- Shifts the instructor role to that of a facilitator