

Hybrid Learning in the PharmD Program (HIPP)

Kerry Wilbur, Katherine Seto, Leonie Harper, Ginette Vallée, Marion Pearson, Jon Grosshuesch, Robert Pammett, Leah Villalobos, Lia Hughes, George Pachev, Jon-Paul Marchand, Paulo Tchen, Jasmin Kaur Gill, Nakyung Kim, Arkin Au, Jocelyn Micallef

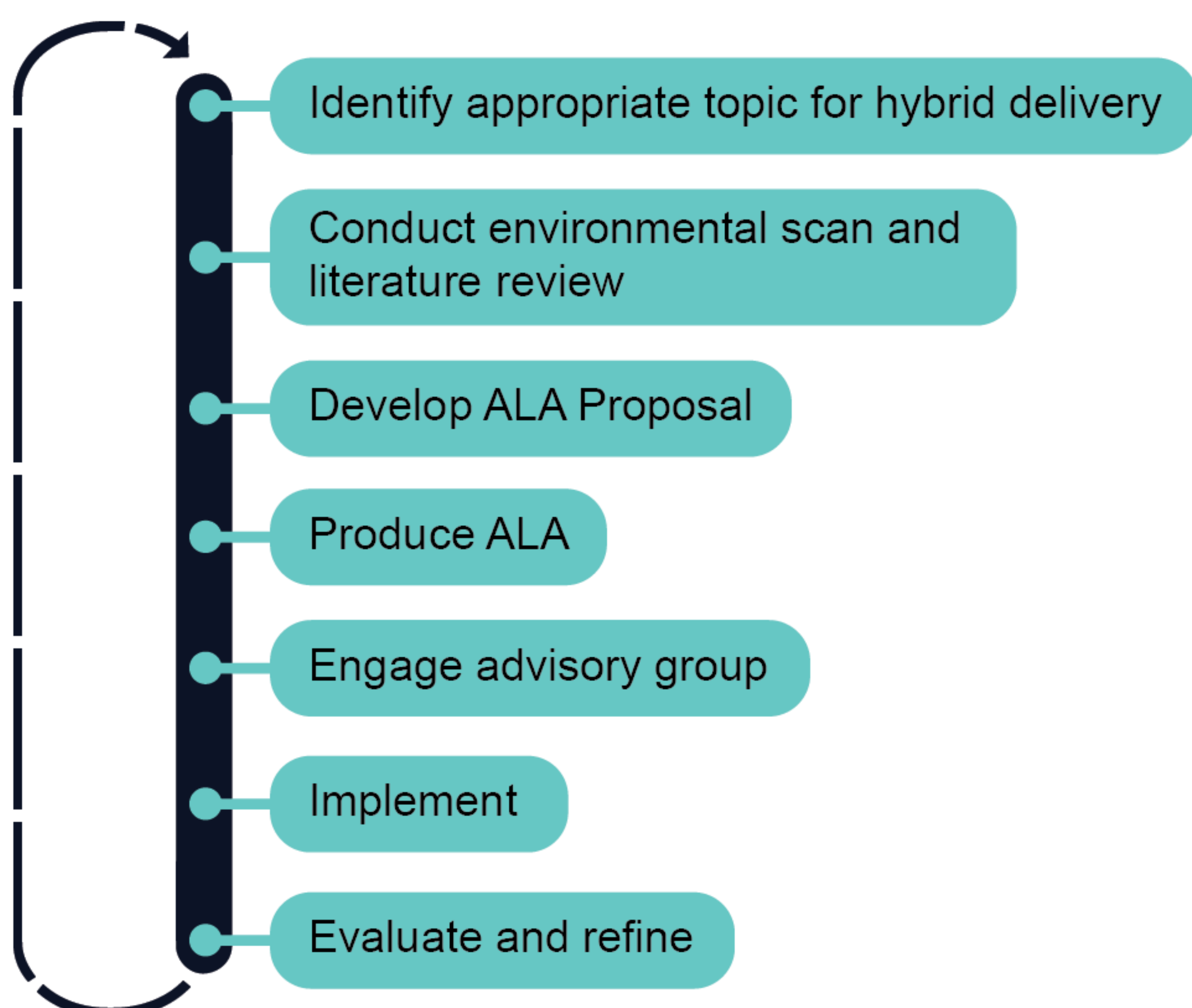
Introduction

An evaluation of online modalities used during the pandemic yielded important guiding principles related to hybrid delivery in the Entry-to-Practice PharmD curriculum. The goal of the HIPP project is to integrate intentionally and flexibly designed hybrid content to support learner autonomy and flexibility.

In year 1 of HIPP, the project team has:

- Refined a change management informed approach for this project that centers:
 - Universal Design for Learning (UDL) principles and equity, diversity and inclusion (EDI)
 - Student collaboration
 - Faculty and staff expertise
- Created templates and processes for planning, production and evaluation of hybrid content
- Developed, piloted and evaluated three hybrid sessions which includes asynchronous learning activities (ALAs) to complement synchronous session
- Initiated planning and development of HIPP-Y2 ALAs
- Identified sustainability-related priorities

ALA Development



Examples from ALA

The ALAs have been built within Articulate Rise principles and are available within the Canvas Learning Management system. Features of ALAs include:

Introductory materials: Welcome video from instructor, navigation instructions, learning objectives and downloadable pdf hand-out

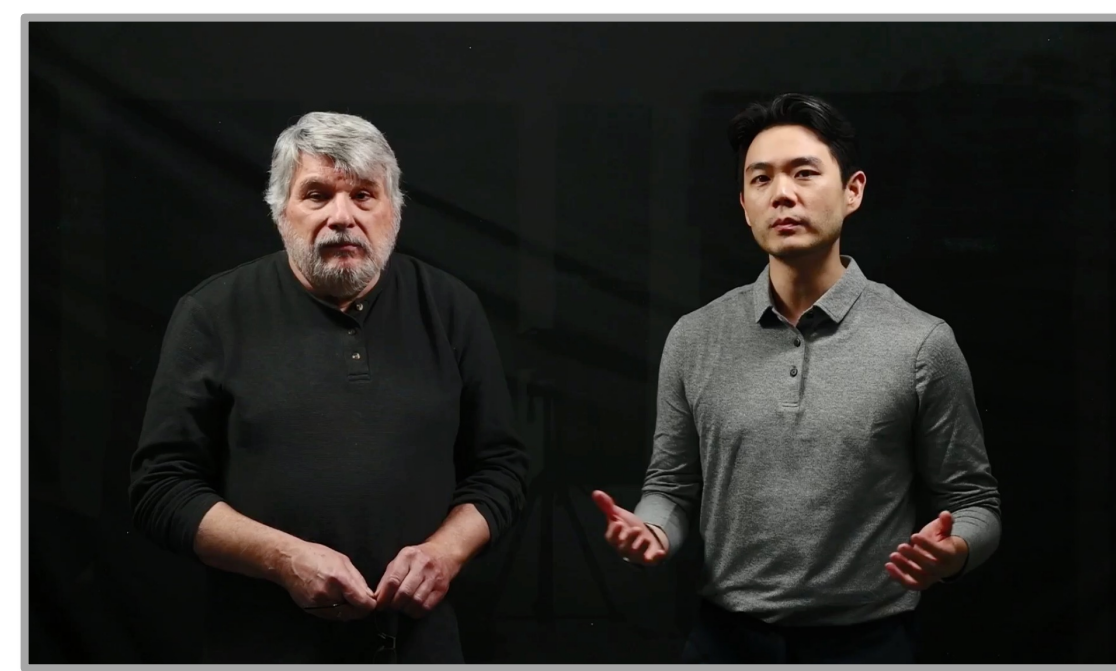


Fig. 1 Welcome video by instructors

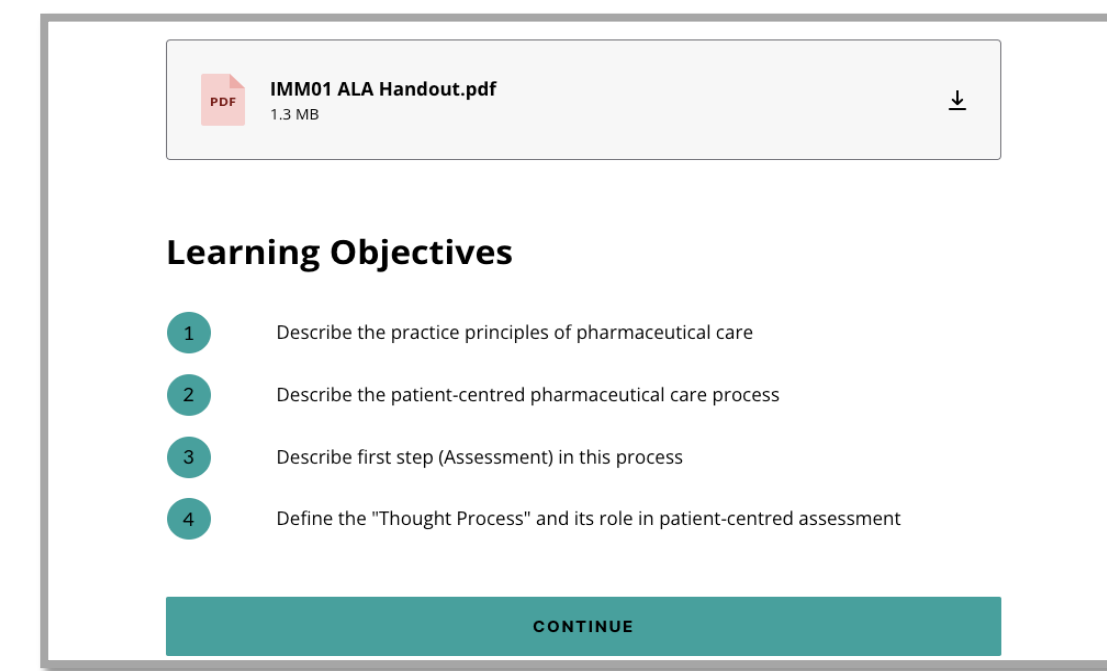


Fig. 2 Hand-out and Learning Objectives

Navigation: Content divided into topics that are aligned with learning objectives to support student engagement

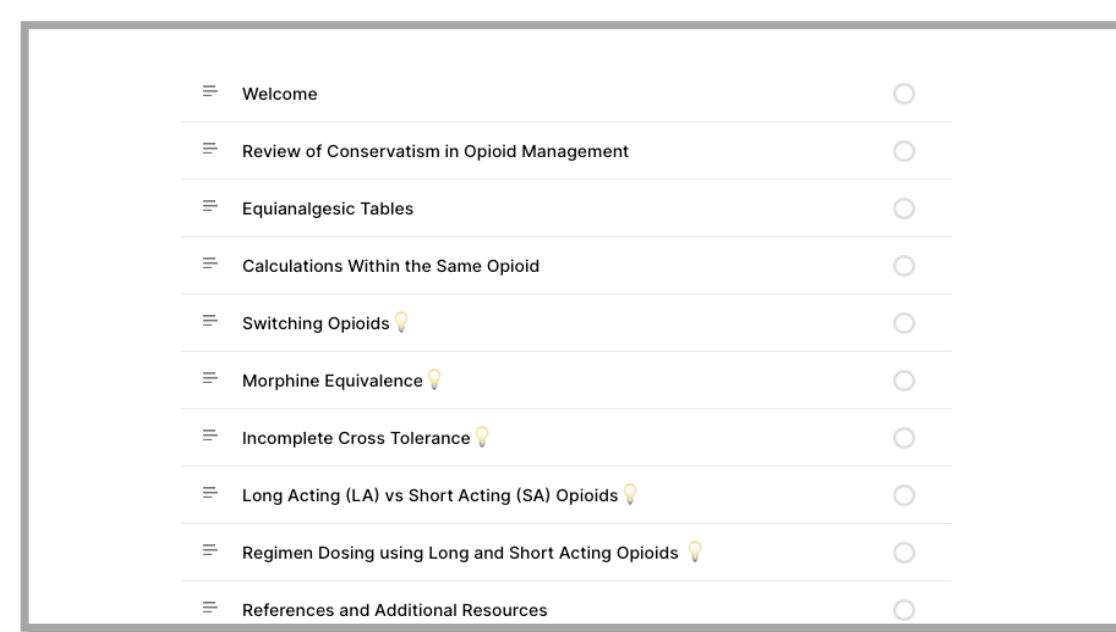


Fig. 3 ALA index page with progress tracker

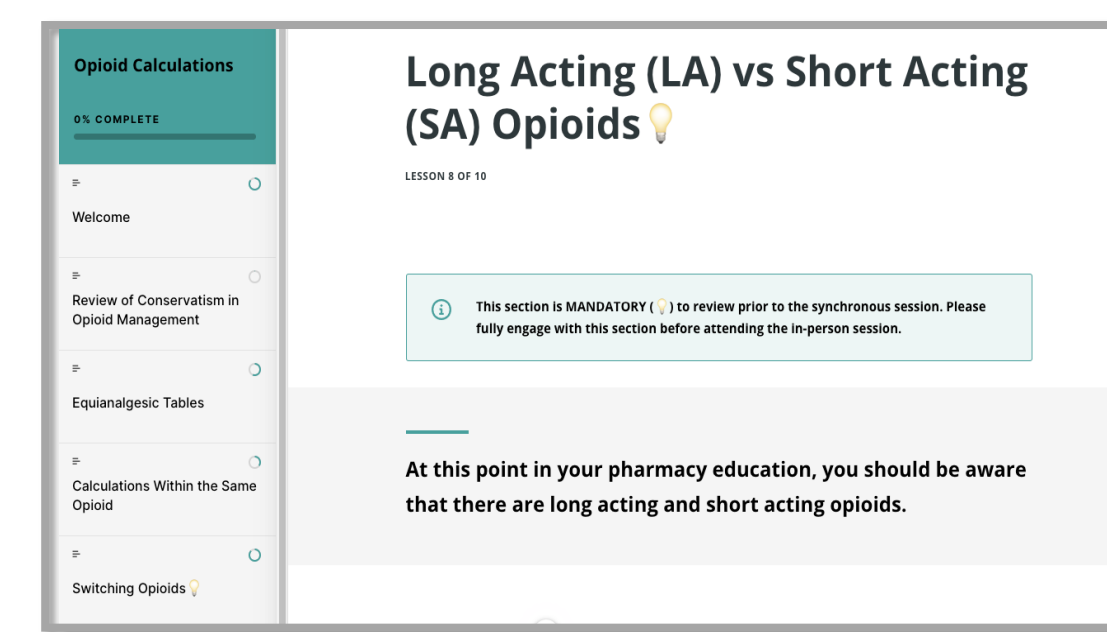


Fig. 4 Navigation bar allows quick access to previous sections

Interactive Learning: Interactive activities, video, audio and text for dynamic learning experience

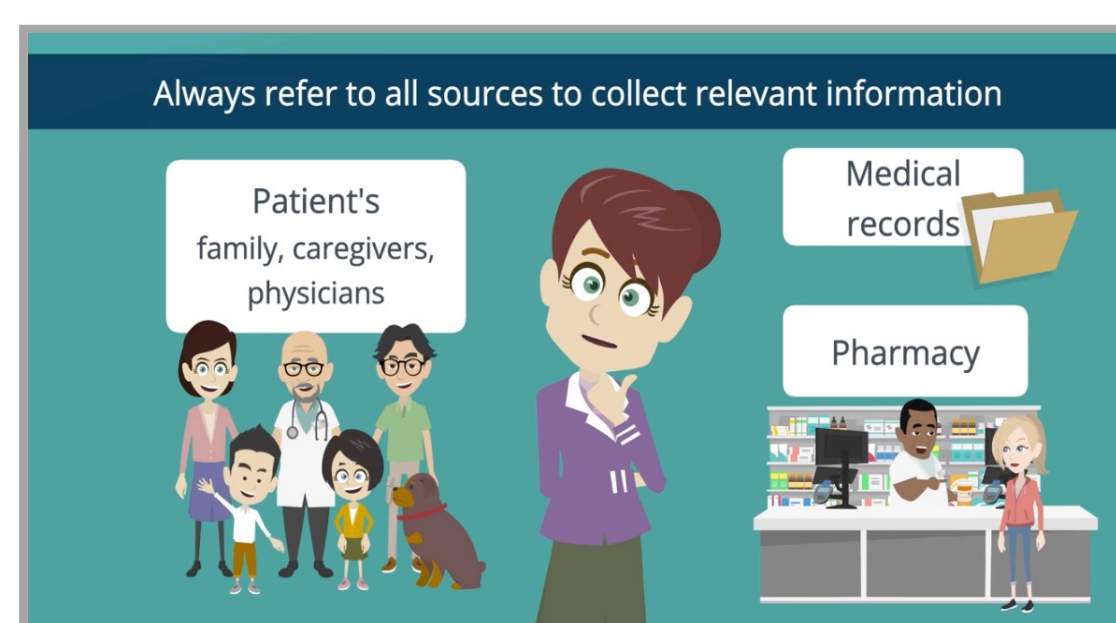


Fig. 5 Animated video created with Vyond

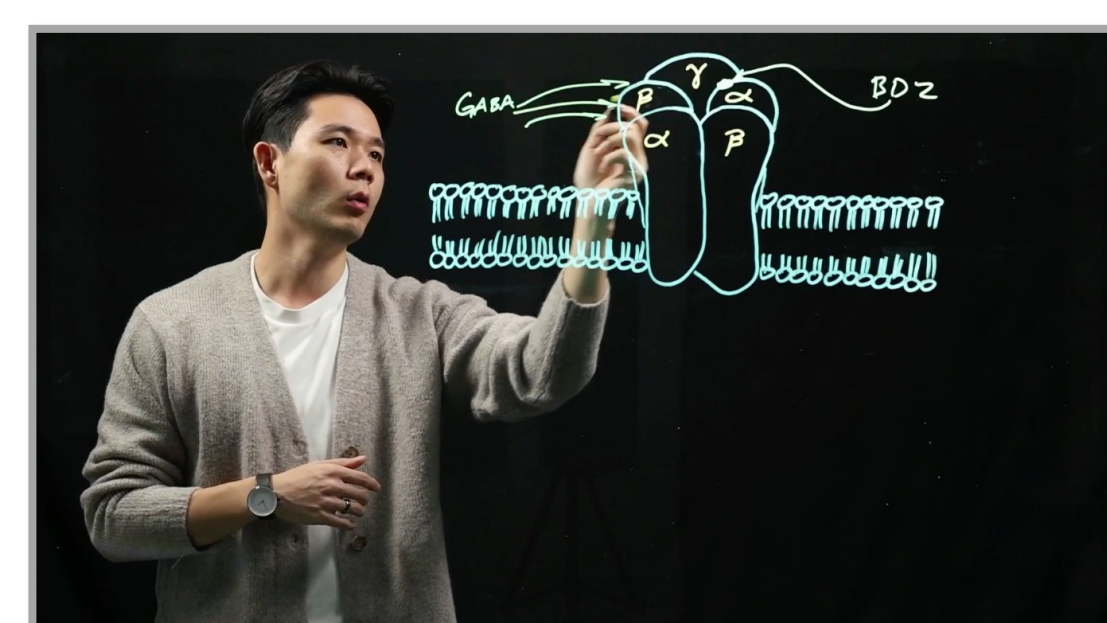


Fig. 6 Lightboard video created with Camtasia

Self-Assessment: Knowledge check questions and explanations to assess progress towards learning objectives

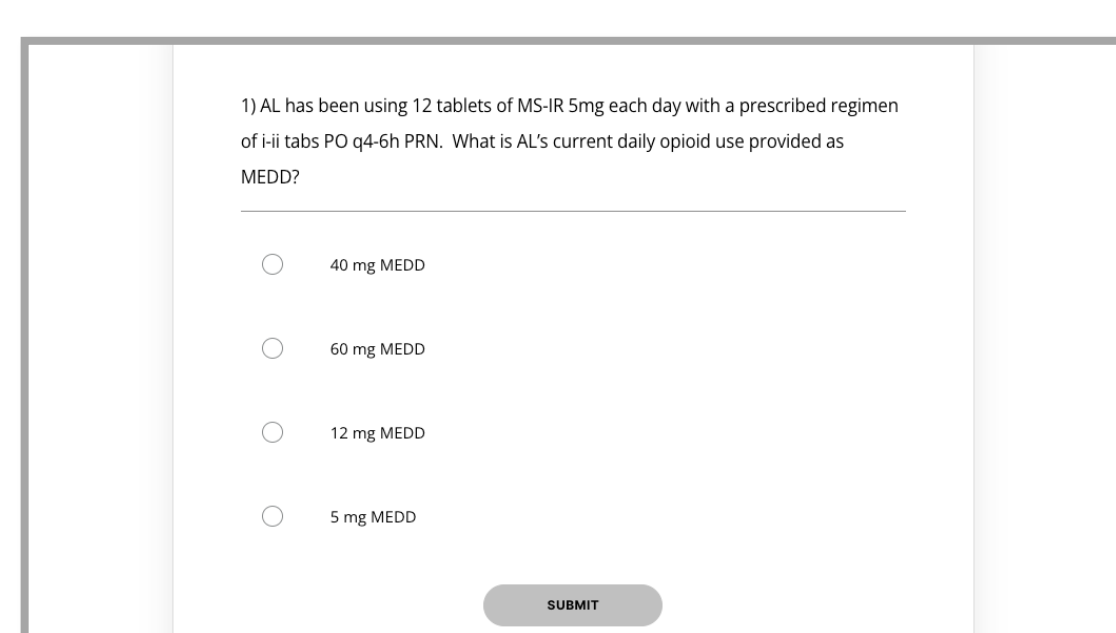


Fig. 7 Knowledge check questions

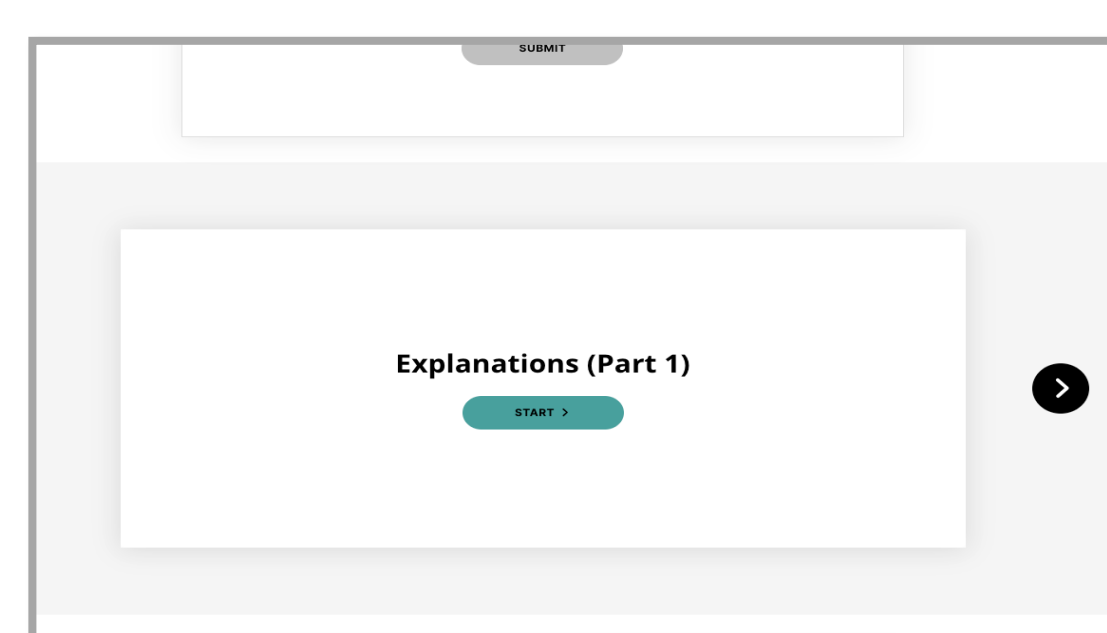
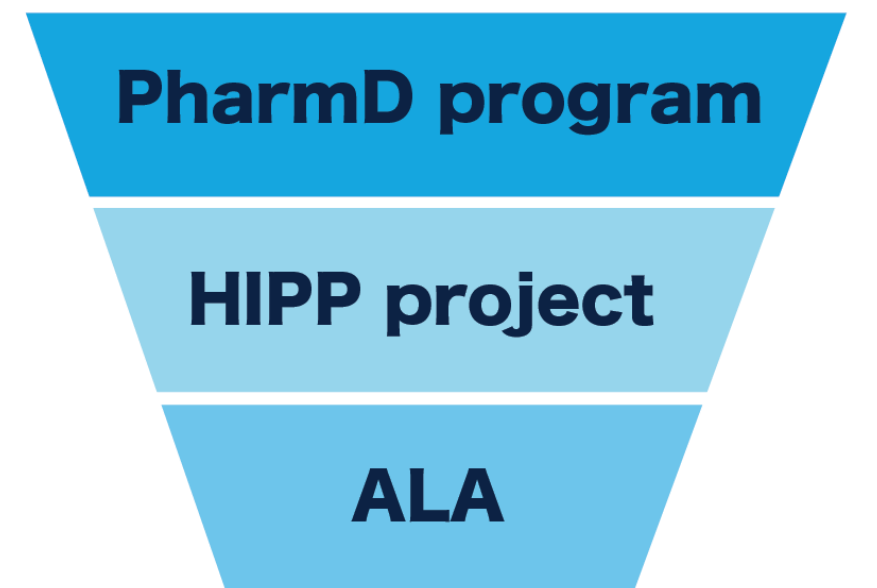


Fig. 8 Explanations provided after the questions

Evaluation

An evidence-based approach was used to develop the evaluation questions for each ALA. We conduct the following activities and consider the different levels of decision making:



- Develop and pilot data collection tools
- Collect data
 - Administrative data (e.g. usage, old vs new activity types)
 - Focus groups and interviews (faculty, staff and students)
 - Surveys (students)
- Analyze data
- Report and make recommendations for all involved

Early Findings

Overall, the Pharmaceutical Care ALA was well received by students (97% rated it good, very good, or excellent; 93% agreed that the ALA prepared them well for the synchronous session)

Student feedback highlighted the following positive themes:

- Autonomy/Independence:** enabled completion according to personal schedules
- Flexibility:** enabled progression at own pace
- Balance:** Complemented and enhanced synchronous experience

Student suggestions for improvement that we plan to work on:

- Knowledge check questions:** Add complex questions that progress to the difficulty level of synch sessions
- Redundancy:** Reduce repetition between asynchronous/synchronous sessions

Faculty members appreciated developing the ALAs:

- Time:** ALAs took longer to create than expected
- Team:** Communication and support from the educational technology and learning design team and the student staff were essential and much appreciated in developing ALAs