

Evaluation of Integrated Active Learning Sessions in a PharmD Program

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Background

Integrated Pharmacotherapy (IP) is a large, interdisciplinary, team-taught pharmacotherapy course with a variety of active learning session types varying from a single topic and discipline, to others being integrated with multiple disciplines around the same topic.

IP is a 9.5 credit hour course in the P2 year for a duration of about 14 weeks per semester

Topics discussed throughout the course include adrenal and sexual health, immunology, diabetes, hypertension, coronary artery disease, chronic kidney disease, and respiratory diseases

Each topic includes information from disciplines such as medicinal chemistry, pharmacology, and therapeutics that are reinforced during active learning sessions

Objectives

To describe the impact of integrated active learning sessions on second year doctor of pharmacy (P2) students' understanding of course content and learning experience in an Integrated Pharmacotherapy (IP) course.

Methodology

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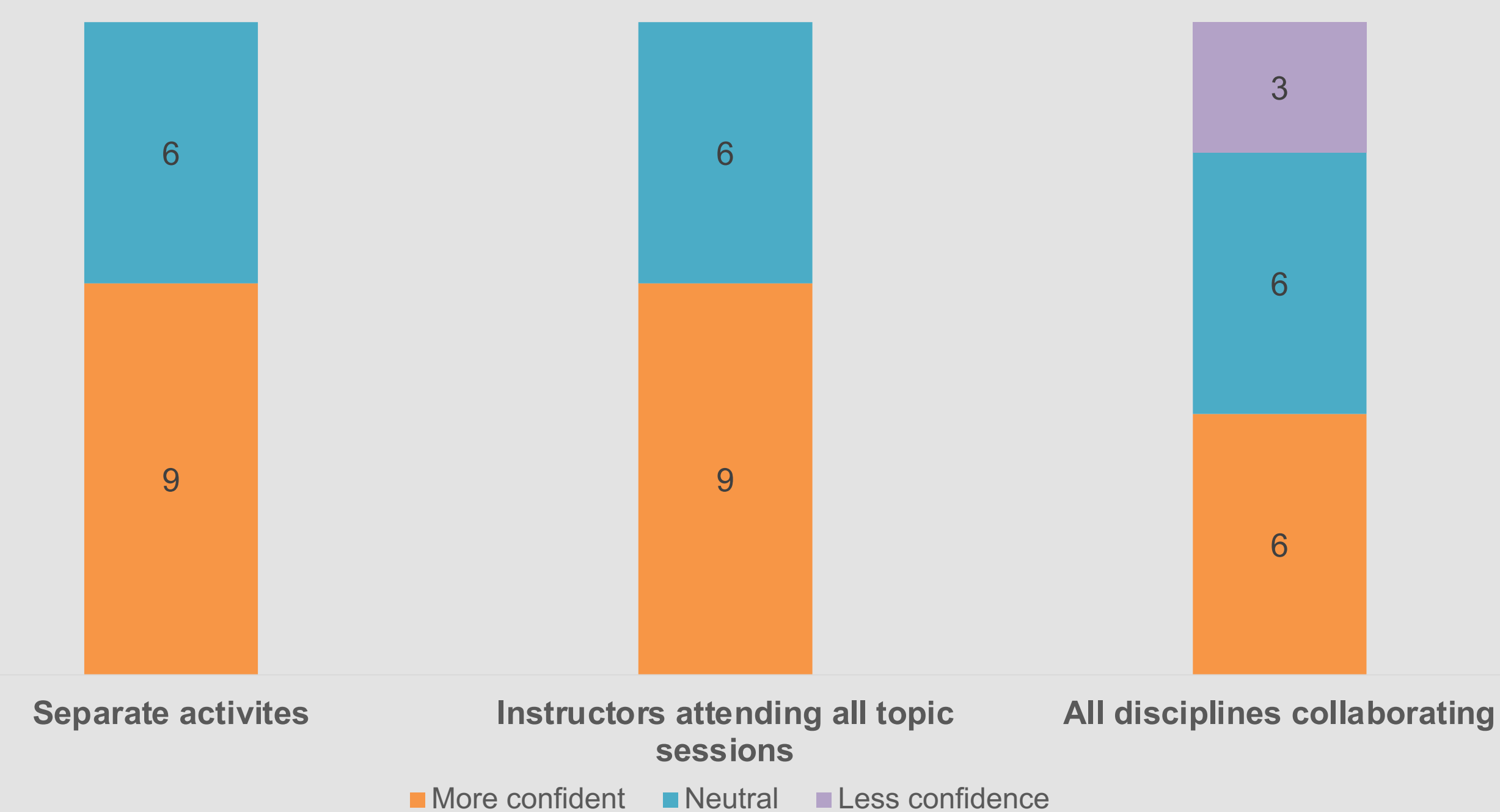
This is a prospective, observational, survey-based research study conducted at The Ohio State University in the IP2 course during the spring semester of 2024. This study was determined exempt by The Ohio State University IRB Review Board.

2

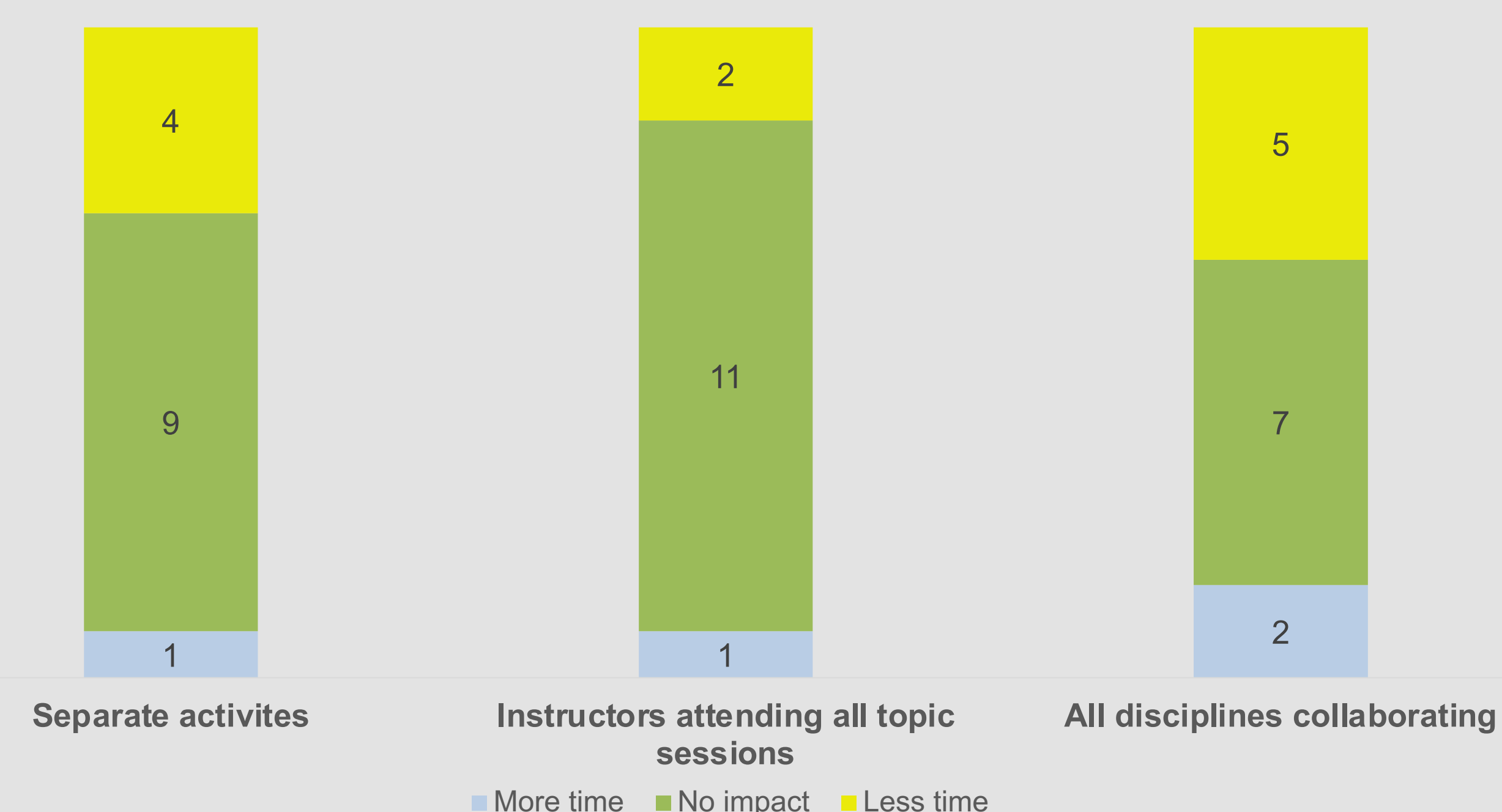
- P2 students received an invitation to participate in an anonymous supplemental evaluation administered via Qualtrics™
- The supplemental evaluation is an 11-item survey regarding student preferences and impact of active learning approach on study time

Results

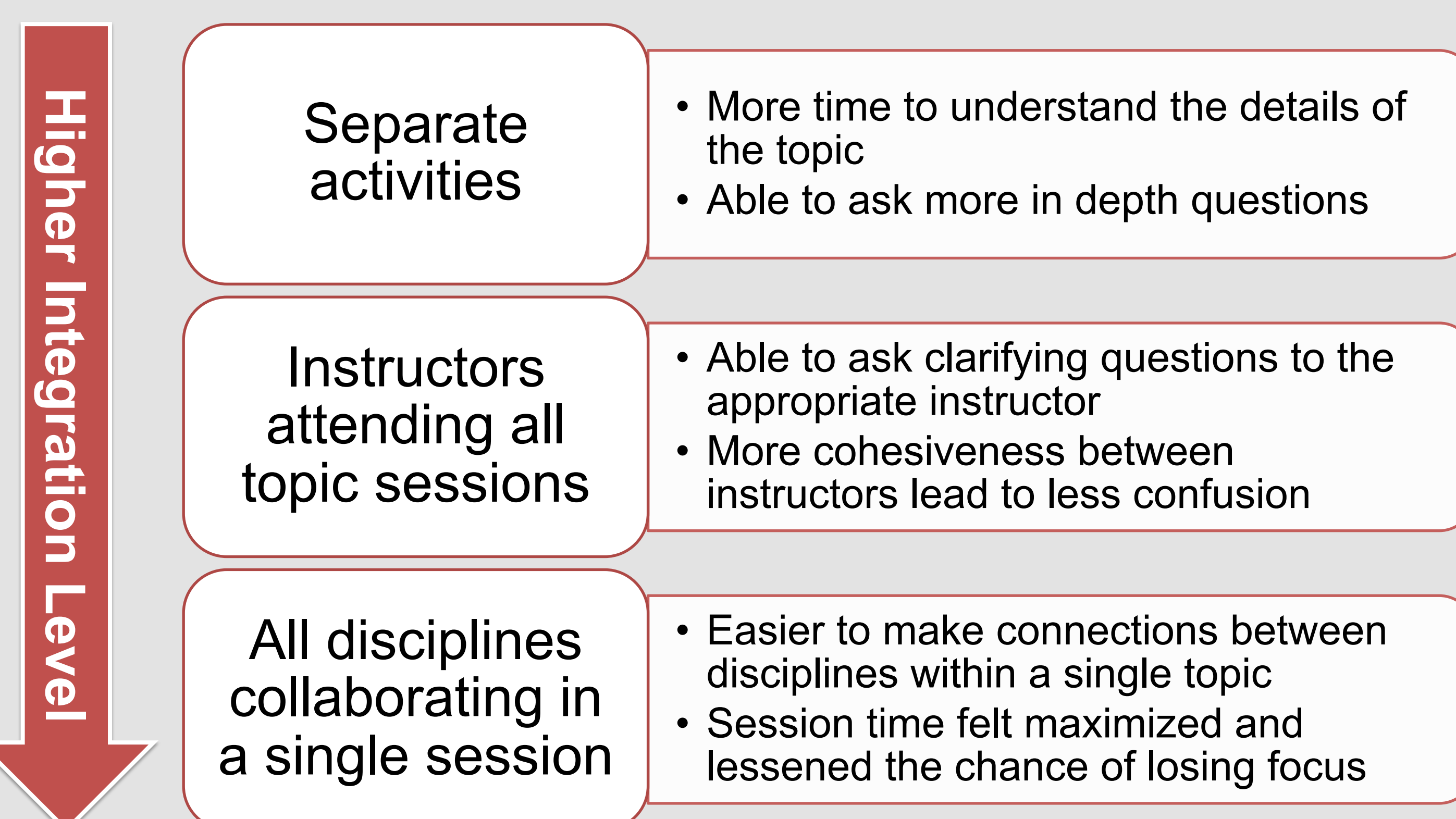
Perceived Confidence with Exam Performance



Perceived Impact on Study Time



Student Reported Benefits by Session Type



Discussion

There was not a consensus among P2 students about the impact on confidence in exam performance and study time between varying types of integration with multiple disciplines within the IP course. Three students (20%) found the highest level of integration (i.e. collaboration between all disciplines) lead to less confidence on exam performance compared to zero students for the lesser levels of integration (i.e. separation of instructors during sessions). While most students found integration types had no impact on their study time, two students (13%) found integration to increase study time compared to one student (7%) for each of the lesser levels of integration. While students found benefits in each of the different styles of active learning, many focused on what they were able to take away from the session given the various levels of integration between instructors rather than the integration itself. While different types of integration can play a role in students' perceptions of an active learning session, students also noted additional factors that influenced their preference on active learning sessions, including their topics of interest and previous experience with an instructor.

Conclusion

Instructors of various disciplines, including medicinal chemistry, pharmacology, and therapeutics, can integrate their topics in a variety of ways for student active learning

High integration between disciplines did not result in a better impact to students' exam performance and study time

Integration in Active Learning

Students' perceptions of the benefits of high integration resulted in more ease to make connections between disciplines compared to other levels of integration

Preference on the type of integration within an active learning session depends on factors such as the topic and instructors involved

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