

**COLLABORATIVE, ONLINE AND BLENDED  
LEARNING IN UNDERGRADUATE TEACHING AND  
LEARNING; SYMBIOSIS OR MARRIAGES OF  
CONVENIENCE?**

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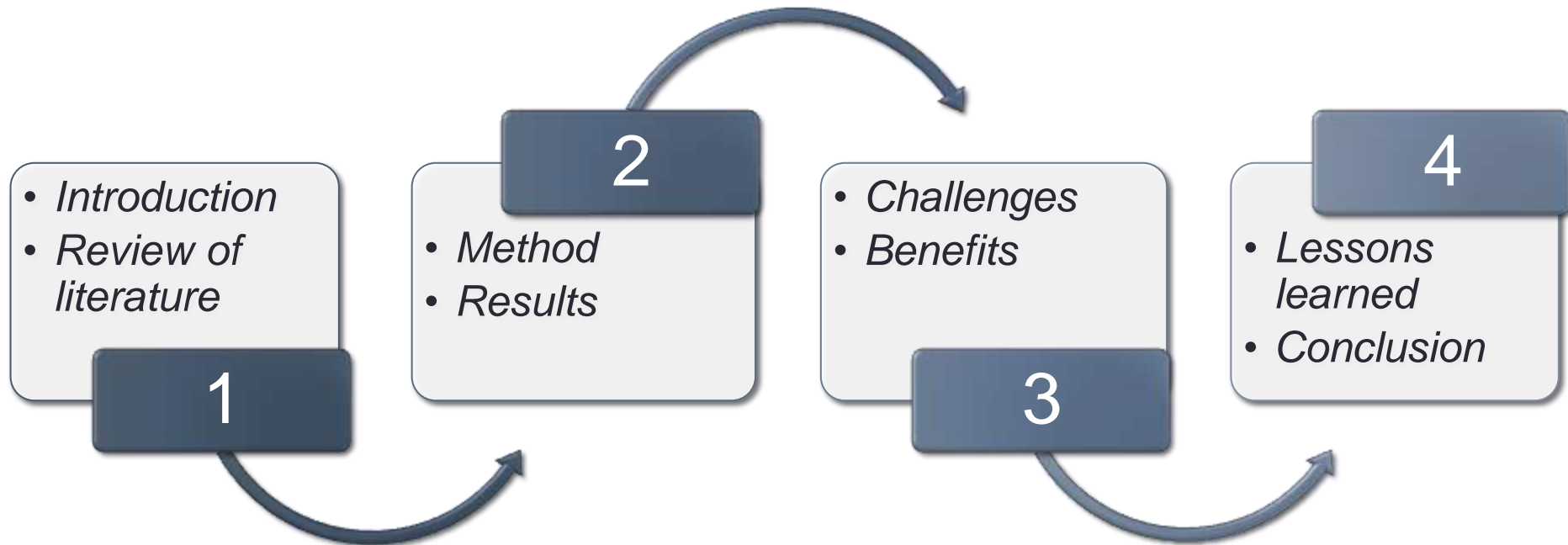
**Ms. Elisa Monteiro**

University of Saint Joseph, Macau

**Prof. Keith Morrison**

Macau University of Science and Technology, Macau

# Outline



# Overview

- A mixed methods empirical research project
- Examines relationships between collaborative learning, online learning and blended learning
- Findings from pan-university survey
  - examine the extent of student collaboration in online and blended learning, both inside and outside classrooms
- Benefits and challenges

# Introduction

- Growing potential of ICT
- Collaborative, online and blended learning
  - student autonomy, empowerment, motivation and communication
- Lessons learned to promote genuine collaborative learning through online and blended learning

# Group Learning

- A function of the learning of the members of the group and the evolving interactions among them that produce mutual understanding and lead to produce a group outcome (Sessa & London, 2008).
- Students use social skills to acquire new understanding and knowledge and share these gains with the group as a whole, and complete tasks.



# Collaborative Learning

- Collaborative learning involves learners in active group participation throughout the entire learning process
  - active participation
  - knowledge sharing
  - high-level elaborations
  - active social interaction
- Learner-centred
- Active agents
  - Discover and construct knowledge
  - Working at own pace within a problem solving environment



# Key Claims

## COLLABORATIVE LEARNING

- Active exchange of ideas
- Increase motivation
- Promote critical thinking
- Improve communication & group dynamics
- Improves attitudes toward learning
- Promote student autonomy

## BLENDED LEARNING

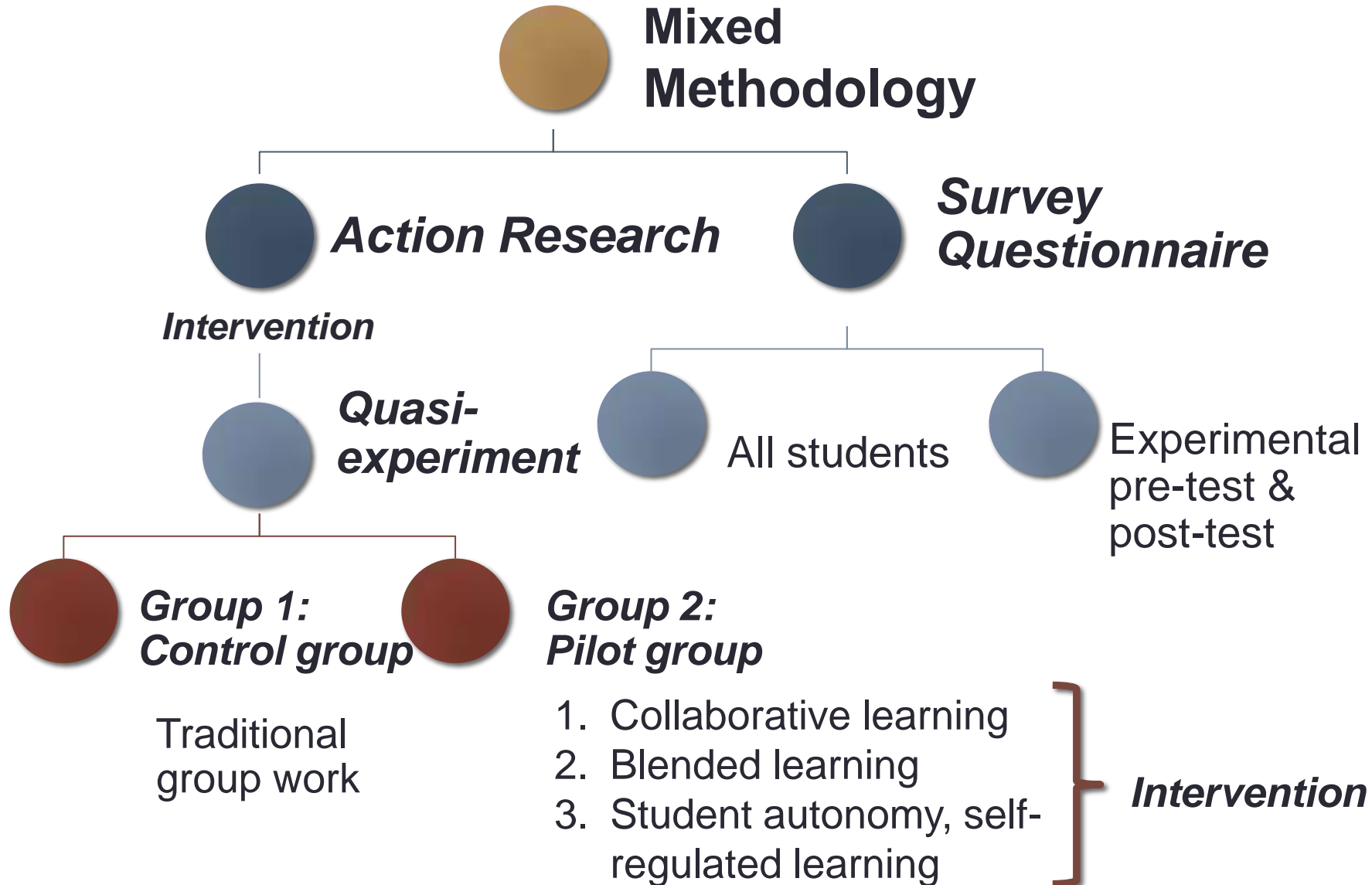
- Promotes deep learning
- Increase motivation
- Promote critical thinking & knowledge construction
- Enhances communication skills & interconnection with other students
- Greater ownership of learning
- Promote student autonomy

# Research Question

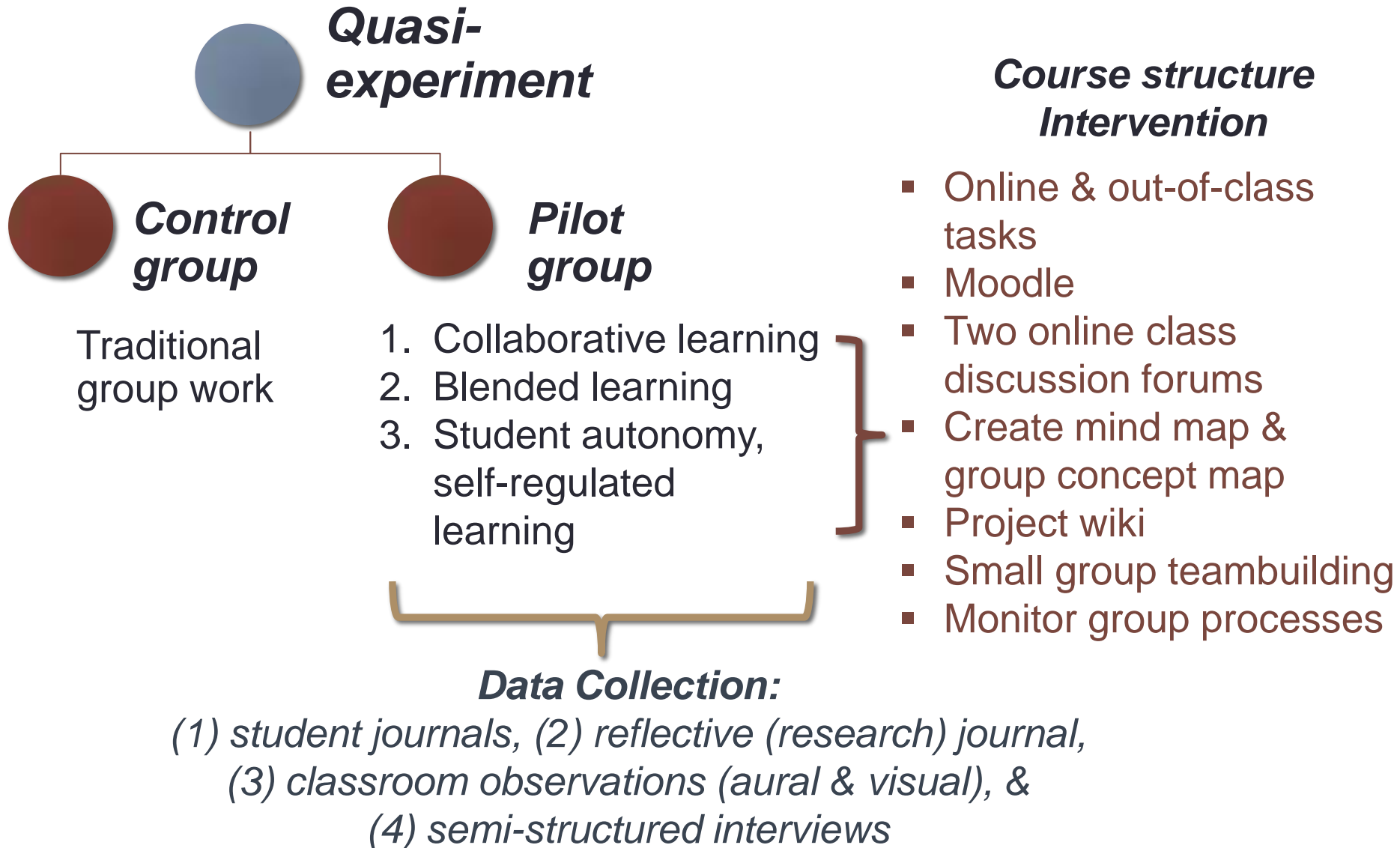
1. How can undergraduate students in Macau work effectively in groups and empower their members using collaborative learning and blended learning?
2. How can collaborative and blended learning improve group processes during face-to-face collaboration and online participation?
3. How can blended learning in small group activities promote student autonomy?
4. How can blended learning in small group activities promote effective learning?
5. How can blended learning foster collaborative learning activities?
6. To what extent can group work encourage active and interactive participation?



# Method



# Method



# Survey

- 827 responses (70% response rate)
- Contained questions related to eight issues:
  - group learning
  - collaborative learning
  - online collaborative learning
  - blended learning
  - group interaction
  - learner autonomy
  - motivation
  - communication in groups



# Survey Results

- Most students engaged in online collaborative tasks by organizing work, sharing knowledge, interacting about the task, explaining or elaborating, seeking input, seeking feedback and engaging with interactive communication.
- Highest form of engagement involved exchanging resources and information.
- Facebook, WhatsApp, mobile phone calls, and face-to-face were used much more than the other media.
- Most students found online collaborative learning for discussions and contributions of work.

# Survey Results

- Correlations between online collaborative interaction and discussion, student contributions, and effective learning.
- Online learning promoted more discussion than face-to-face interaction.
- Correlation between Facebook and 'giving access to new resources and online collaborative learning with blended learning is better at promoting learning with collaborative learning than without blended learning'.

# Challenges

## TEACHER

- Encourage students to regularly log into Moodle
- Stimulate active & interactive participation
- Promote student autonomy
- Implement collaborative learning group tasks that cognitively challenged students

## STUDENT

- Lack of interpersonal/social & group skills
- Language & culture barriers
- Excessive input from dominating group members
- Lack experience in self-regulated learning



# Benefits

- Enabled exchange of resources and information
- Promoted interactive communication
- Useful for explaining and elaborating
- Engaged students in critical discourse and reflection
- More time to reflect
- Flexibility in time



# Lessons Learned

- Lessons should inextricably integrate face-to-face and online educational experience
- Teachers should be more explicit and directive in their assignments
- Keep group size small (four members)
- Provide clear assessment criteria that are consistent with the learning outcomes of the course
- Organize teambuilding activities
- Include on-going monitoring of students



# Conclusion

- Blending learning provided a reciprocal structure for student learning.
- Face-to-face environment supported group development, and communication and knowledge attainment of course material.
- Online environment supported face-to-face environment by giving the students' time to think, process, and have online discussions outside scheduled class time.
- Symbiosis or marriages of convenience?

**QUESTIONS?**