PERSONALISED LEARNING NETWORKS IN THE UNIVERSITY BLENDED LEARNING CONTEXT

Feifei Han
Robert Ellis

INTRODUCTION

Ecological perspective on learning
set of contexts found in physical or virtual spaces that provide opportunities for learning

Cognitive dimension
learners' internal states, which are interdependent on other learners and non-human elements in learning

Social dimension
with whom and how to collaborate

Material dimension
engagement with learning technologies both in and outside formal classes

METHODOLOGY

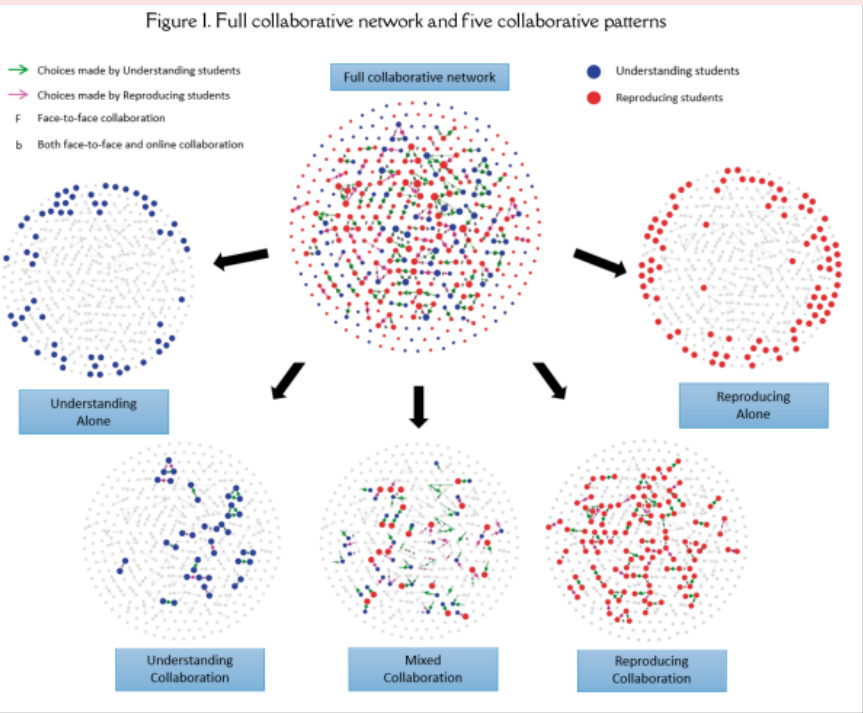What are the relations between dimensions (cognitive, social, material) and academic performance?

365 first-year undergraduates from a metropolitan Australian university
(251 females, 113 males; ages: 18 to 53, M=19.72, SD=3.55)
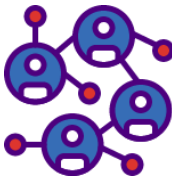
Likert-scale questionnaire
(cognitive elements)

Social network questionnaire
(social elements)

Online learning analytics
(material elements)

Final marks
(responses were matched with the online learning analytic data)

Figure I. Full collaborative network and five collaborative patterns

Choices made by Understanding students
Choices made by Reproducing students
F   Face-to-face collaboration
b   Both face-to-face and online collaboration

Full collaborative network

Understanding students
Reproducing students

Understanding Alone
Reproducing Alone
Understanding Collaboration
Mixed Collaboration
Reproducing Collaboration

RESULTS

- Qualitative variations when used to investigate student learning (different cognitive engagement between an understanding and a reproducing learning orientation towards learning)
- Five collaborative patterns

CONCLUSIONS

1
To continuously identify and expand key elements and dimensions in university students' blended learning experience in order to better explain factors that can impact academic success

2
Learning networks were characterized by positive perceptions of the integration between online environment and the course design; the students were more engaged with online learning activities in the course

3
Significant implications to inform theory development in Learning Ecology research and to guide curriculum design, teaching, and learning

Comunicar

www.revistacomunicar.com