Hybrid Learning Dimensions: First Results of a Systematic Literature Review

1. Introduction

The notions of "Hybrid Learning" (HL) or "Blended learning" (BL) became umbrella terms for a relevantly new education environment encompassing on-campus and online learning. A lot of academics and teachers have been adopting and researching this educational innovation (Graham 2006, 2022, Peraya et al, 2014, Linder, 2017; Dziuban et al. 2018). In addition to blended learning (BL) and hybrid learning (HL), there are other terms such as multimodal learning, hy-flex, flexible, flipped learning or flipped course among the others. With multiple definitions, it is difficult for teachers and students to see the differences and similarities in contexts, learning designs, objectives, and roles. Researchers are also faced with the challenge of understanding what kind of BL or HL is being studied in the articles due to the vague definitions, which makes it complex to assess the state of knowledge, to identify gaps and to envision perspectives.

2. Research problematic

To communicate the results of the research of BL or HL, the researchers may need to present an extended definition of the research phenomenon to align the definition of the research phenomenon with the research phenomenon itself.

- 3. Research aims at doing a systematic review of the literature, selecting scientific papers that precise the definition of studied phenomenon to contribute to a deeper understanding of the definitions of the concepts and approach the problem of hybrid learning dimensions expressed in the definitions of BL and HL.
- 4. Research question: What are the common dimensions of hybrid learning in the selected definitions?

5. Methods

We employed a textual narrative synthesis approach to convert the results into qualitative findings. The included dimensions were analyzed, coded and grouped according to the dimensions defined in frames of HY-SUP project.

Table 1 Learning dimensions and labels

Items	Labels
Type of the definitions	Generic, Extended
Dimensions	Articulation of presence-distance, Mediatisation,
	Mediation, Guidance, Openness, the other
	dimension

6. Search strategies:

According to the PICo model (Population-Phenomena of interest-Context (McArthur, 2015) search strategies were defined as described in Table 2.

Table 2 Search strategies

Search string			
1	P - Population	"Higher education" OR undergraduate OR postgraduate OR bachelor OR master OR college	
2	I - Phenomena of interest	"blended learning research" OR "blended learning" OR "blended teaching" OR "blended learning environment" OR "hybrid learning environment" OR "hybrid learning" OR "flipped course" OR Hy-Flex OR "Co-modal learning" OR "flexible learning"	
3	Co-context	(classroom OR "face to face") OR (virtual OR synchronous OR asynchronous OR distance OR online)	

7. Results

Table 3

Identified studies

I. Identified studies	SEARCH 1.	SEARCH 2.
	3138 – identified from	345 – identified from
	SCOPUS; WoS,	GOOGLE scholar, ERIC,
	ERIC in June 2022	WoS – snowball search
		in October 2023
Excluded	909 studies	9 studies
II. Screened abstracts	2229 studies	336 studies
Excluded	1423 studies	27 studies
III. Full texts screening	806 studies	309 studies
Excluded	779	297
Included	27	12

Figure 1

Dimensions

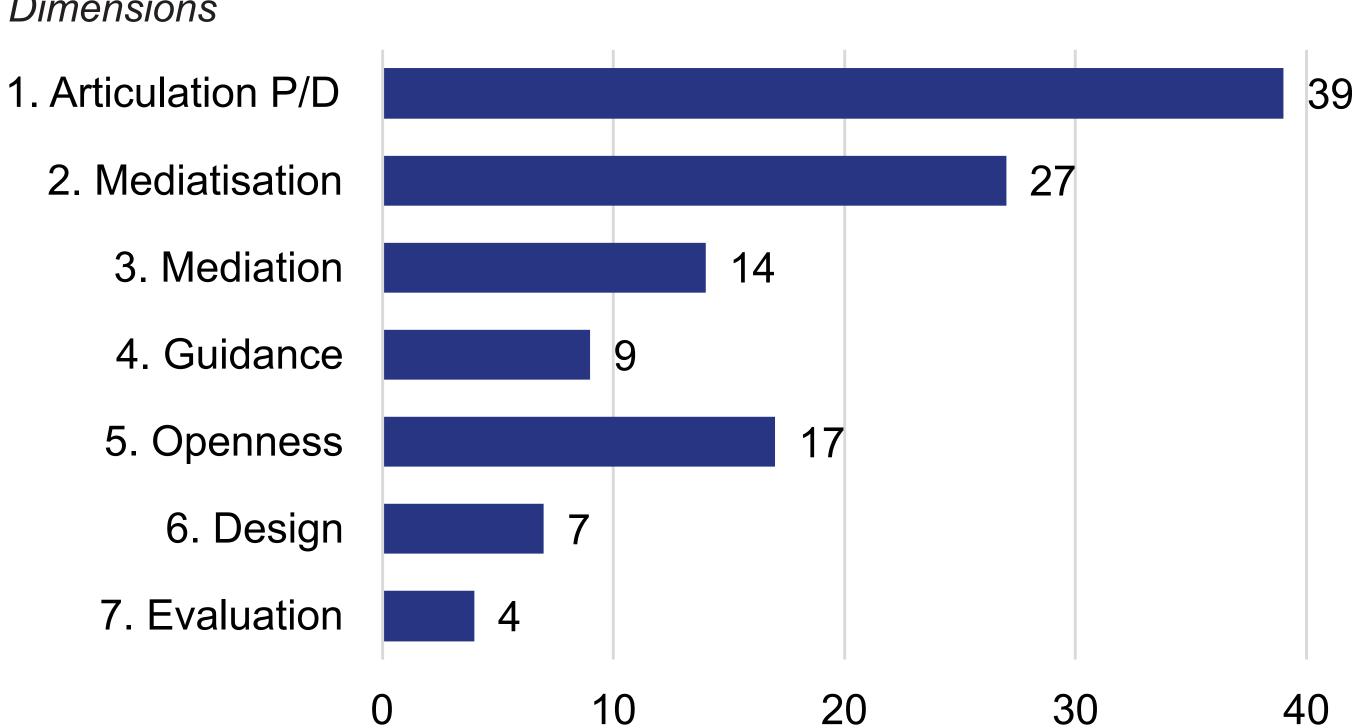


Table 4 Dimensions configurations and labels

Labels	N
blended course	1
blended learning	3
hybrid learning	1
hybrid learning environment	1
	6
blended learning	4
HyFlex	2
	6
blended learning	2
blended learning environment	1
hybrid learning	1
HyFlex	1
	5
blended learning	1
flipped learning	1
	2
blended approach to teaching	1
blended learning	1
	2
	blended course blended learning hybrid learning environment blended learning HyFlex blended learning blended learning environment hybrid learning HyFlex blended learning HyFlex blended learning HyFlex blended learning blended learning blended learning blended learning flipped learning

8. Conclusions

The results show that the concept of the HL/BL is complex and multidimensional. The researchers have to consider the dimensions they include in the definition of the phenomena (BL and HL) they study in the research. The definitions may differ, but the included dimensions will be precise and make them clear. This alignment of the definitions with the phenomena studied in the research would facilitate the comparison of the research results.

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