

Overview of included studies in the scoping review

First author (year)	Study design	Study year	Region	Country	Instruction in L1 or L2	Study Domain	Number Students	Number Teachers	Based on approach
Adipat (2021)	pre-experiment	BA	Asia	Thailand	L2	TE	30		CLIL
Arreguin-Anderson (2017)	pre-experiment	BA	North America	USA	L1	TE	12	1	Other
Baranova (2021)	pre-experiment	BA Y1	Europe	Russia	L2	Human.	47		CLIL
Batova (2019)	quasi-experiment	BA	North America	USA	L1		522		WtL
Casan-Pitarch (2021)	pre-experiment	BA	Europe	Spain	L2	STEM	69		CLIL
Chansri (2016)	pre-experiment	BA	Asia	Thailand	L2	STEM	27		CLIL
Chen (2020)	quasi-experiment	BA	North America	USA	L1	STEM	184	1	WtL
Cunningham (2019)	pre-experiment		North America	USA	L2	FLEBM	10		CLIL
Danilov (2020)	pre-experiment	BA	Europe	Russia	L2	Human.	69		CLIL
Dansereau (2020)	quasi-experiment	BA Y1	North America	Canada	L1	STEM	317		Other
De la Barra (2018)	pre-experiment	BA	South America	Chili	L2	Human.	32		CLIL
DeDieu (2018)	pre-experiment	BA	North America	Canada	L1	STEM	48		WtL
Elder (2016)	randomized experiment	BA Y1	North America	USA	L1	STEM	36	1	WtL
Filice (2020)	pre-experiment	other	Europe	Italy	L2	STEM	150		CLIL
Finardi (2016)	pre-experiment	BA Y1	South America	Brasil	L2	Military			CLIL
Fitriani (2016)	pre-experiment	BA	Asia	Indonesia	L2	FLEBM	22		CLIL
Gastreich (2021)	pre-experiment	BA	North America	USA	L1	STEM		2	Other
Godzhaeva (2019)	pre-experiment	BA	Europe	Russia	L2	Social Sciences	229	12	CLIL
Granruth (2018)	pre-experiment	BA	North America	USA	L1	Social Services	112		WAC
Griffith (2018)	pre-experiment	BA	Europe	Spain	L2	Human.		1	CLIL
Hanzawa (2018)	quasi-experiment	BA Y1	Asia	Japan	L2	Mixed	50		CBA/CBI

Hernandez-Nanclares (2017)	pre-experiment	BA Y1	Europe	Spain	Mixed	FLEBM	654		EMI
Huang (2016)	quasi-experiment	BA Y1	Asia	Taiwan	L2		238	1	CBA/CBI
Isik (2020)	pre-experiment	BA Y1	Europe	Turkey	L2	Mixed	525	17	CLIL
Jacobs (2016)	pre-experiment	BA	North America	USA	L1	STEM	22		WAC
Khanam (2017)	pre-experiment	BA	North America	Canada	L1	STEM	48		WtL
Kim (2021)	pre-experiment	other	Asia	South Korea	L2	Mixed	352		Other
Kim&Kim (2021)	pre-experiment	BA	Asia	South Korea	L2	STEM	121	10	CLIL
Koffman (2017)	pre-experiment	BA	North America	USA	L1	STEM	34		WtL
Kuzmenkova (2022)	randomized experiment	BA	Europe	Russia	L2	FLEBM	192		EAP
Lamri (2018)	quasi-experiment	MA	Africa	Algeria	L2	Social Sciences	37		CLIL
Linvill (2019)	pre-experiment	BA	North America	USA	L1	STEM	171		Other
Liu (2019)	pre-experiment	BA	Asia	China	L2	Social Sciences	100	1	CLIL
Luzik (2019)	pre-experiment	mixed BA-MA	Europe	Ukraine	L2	STEM	158		Other
McCarty (2020)	pre-experiment	other	North America	USA	L1	STEM	20		WAC
Miller (2015)	pre-experiment	BA	Asia	China	L2		60		CBA/CBI
Moon (2018)	quasi-experiment	BA	North America	USA	L1	STEM	168		WtL
Murphree (2015)	pre-experiment	BA Y1	North America	USA	L1	Human.	49	2	WAC
O'Brochta (2022)	pre-experiment	BA Y1	North America	USA	L1	Social Sciences	9	1	CLIL
Ollerhead (2020)	pre-experiment	MA	Australia	Australia	L1	TE	11		Other
Ono (2019)	pre-experiment	BA	Australia	Australia	L1	FLEBM	8		Other
Pessoa (2019)	pre-experiment	BA	Middle East	Qatar	L2	Human.	9		Other
Pessoa (2022)	pre-experiment	BA	Middle East	Qatar	L2	FLEBM			Other
Sampaio (2021)	pre-experiment	BA Y1	Europe	Portugal	L2	FLEBM	31	2	CLIL

Satilmis (2015)	quasi-experiment	BA	Asia	Kazachstan	L2	STEM	48		CBA/CBI
Sato (2022)	pre-experiment	BA Y1	Asia	Japan	L2	Human.	191		CLIL
Sherman (2020)	quasi-experiment	BA Y1	North America	USA	L1	Mixed	82		WAC
Stewart (2016)	pre-experiment	BA	North America	Canada	L1	STEM	238		Other
Swart (2018)	pre-experiment	BA	Europe	Netherlands	L1	TE		29	Other
Swart (2019)	pre-experiment	BA	Europe	Netherlands	L1	TE	32	3	Other
Tann (2021)	pre-experiment	MA	Australia	Australia	Mixed	FLEBM		1	Other
Tsai (2019)	quasi-experiment	BA	Asia	Taiwan	L2	FLEBM	33		Other
Tseng (2017)	pre-experiment	BA	Asia	Taiwan	L2	Human.	60		CBA/CBI
Uzun (2018)	pre-experiment		Europe	Turkey	L2	Human.	78		Other
Vega (2019)	randomized experiment	BA	South America	Ecuador	L2	Tourism	15		CLIL
Walenta (2018)	quasi-experiment	BA	Europe	Poland	L2	STEM	20		CLIL
Watts (2022)	pre-experiment	BA	North America	USA	L1	STEM	456		WtL
Welsh (2017)	pre-experiment	BA Y1	North America	Canada	L2	STEM	83		CLIL
Xu (2018)	randomized experiment	BA	Asia	China	L2	FLEBM	200		Other
Yang&Chen (2015)	pre-experiment	BA	Asia	Taiwan	L2	FLEBM	115		CBA/CBI
Yang, W (2015)	pre-experiment	BA	Asia	Taiwan	L2	Tourism	29		CLIL
Yang (2017)	pre-experiment	BA	Asia	Taiwan	L2	STEM	110		CLIL
Yufrizal (2017)	pre-experiment		Asia	Indonesia	L2	STEM	88		CLIL
Yufrizal (2021)	pre-experiment	BA	Asia	Indonesia	L2	Mixed	88		CLIL
Zhang (2021)	pre-experiment	BA	Asia	China	L2	Mixed	144	2	EMI

Note. BA Y1 = Bachelor first year; BA = Bachelor years (1, 2, 3, 4); MA = Master years; Mixed Ba-Ma = mixed bachelor and master years; TE = Teacher Education; Human. = Humanities; STEM = Science, Technology, Engineering, Mathematics; FLEBM = Finance, Law, Economics, Business, Management; CLIL = content-language integrated instruction; WtL = Writing to Learn; WAC = Writing across the Curriculum; CBA/CBI = Content-Based Instruction/Content-Based Approach; EMI = English as a Medium of Instruction; EAP = English for Academic Purposes