

The Role of the Learning Environment in the Transition to Higher Education – A Scoping Review

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Slides →





Problem statement and research questions

- Students' successful transition to HE has been largely investigated (e.g. Coertjens et al., 2017; Jenert et al., 2017).
- The contribution of the learning environment needs further clarification.
- **2 research questions:**
 - **Which aspects of the learning environment are addressed in empirical studies that deal with students' support in their transition to Higher Education?**
 - What can we learn from the different studies that investigate the learning environment for students' transition?



The notion of the learning environment in HE literature

Dippelhofer-Stiem (1986)	HE system	institutional level	subject area / department	course level	<i>individual level</i>
De Clercq et al. (2021)		Macro level of diversity: institution	Meso level of diversity: course + study programme		<i>Micro level of diversity: students</i>
Entwistle et al. (2002)	„broad level“ institutional and departmental context		„narrow level“: inner teaching & learning environment 1) course contexts 2) teaching & assessment 3) staff – student relationships		<i>4) students and their culture</i>
				new concept „5 dimensions of the proximal experience“ 1) organisation + structure of the course 2) teaching practices 3) assessment + assignments 4) supportive climate 5) <i>Interestingness enhancement</i>	
Schaeper & Weiß (2016) <u>5 components</u>	5 structural opportunities + resources		1b structuredness of study program 4 orientation	1a structure on micro level 2 support 3 challenge	
Abualrub et al. (2013) <u>3 major perspectives</u>	network perspective	organizational perspective		pedagogical perspective	



An integrated approach for the investigation of learning environment

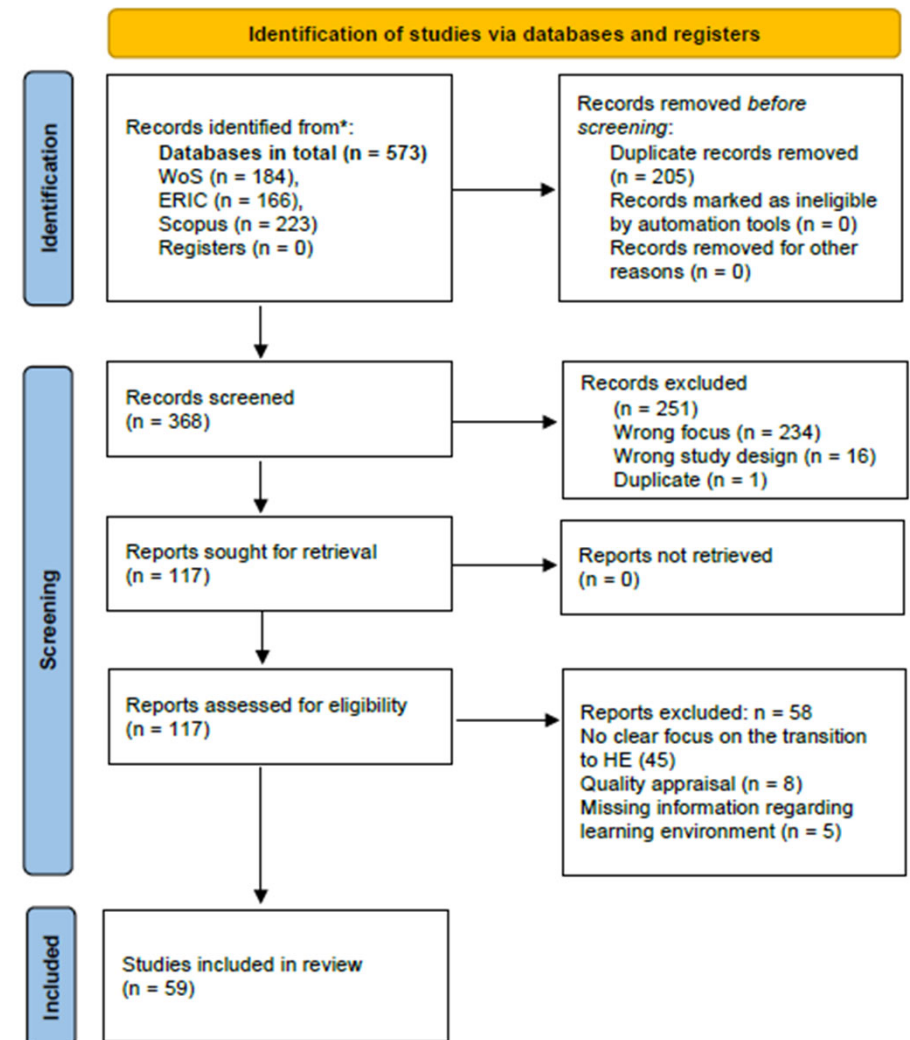
A multi-layers nested context composed of virtual and physical spaces and components that will shape students' learning experience. From a pedagogical perspective, the learning environment can be defined as the inner teaching-learning context which will directly influence student learning and success.

→3 levels of analysis

- (1) Micro level: course-specific design and experience (e.g. learning methods and technologies; assessment practices)
- (2) Meso level: study programme wide transition activities (e.g. students' perception of the program climate)
- (3) Macro level: Institutional practices and environment (e.g. characteristics of the institution)

Methods: Scoping review according to the PRISMA guidelines

- Data bases: Web of Science, ERIC (Education Resources Information Center) and Scopus
- Literature included from 2018 to 2023
- 368 individual documents
→ 117 documents included
- Agreement rate between 2 raters: 83.5%
- **59 studies** included in the review after quality appraisal





Description of the included studies

Category		n	%
Research Design	Quantitative	24	40.7
	Qualitative	22	37.3
	Mixed Methods	13	22.0
National context of the study	Europe (UK (10), France (2), Germany (2), Ireland (2), 7 studies located in another or more than one European country)	23	39.0
	North America (USA, Canada)	20	33.8
	Australia/ New Zealand	7	11.9
	Africa (South Africa)	5	8.5
	Asia (China, Vietnam, Taiwan)	4	6.8
Year	2018	13	22.0
	2019	9	15.3
	2020	6	10.2
	2021	14	23.7
	2022	8	13.5
	2023	9	15.3



Description of the included studies

Category		n	%
Journals	European Journal of Engineering Education	2	3.4
	Frontline Learning Research	2	3.4
	Journal of College Student Development	2	3.4
	Journal of Further and Higher Education	5	8.5
	Journal of University Teaching and Learning Practice	2	3.4
	Student Success	2	3.4
	And 44 different journals with only one contribution	44	74.6
Level	Micro	27	45.8
	Micro/Meso	3	5.1
	Meso	18	30.5
	Meso/Macro	1	1.7
	Macro	9	15.3
	All levels	1	1.7
Perspective	Student	51	86.4
	Teacher	2	3.4
	Student and teacher	4	6.8
	Student, teacher and program coordinator	1	1.7



Micro Level Analysis of Learning Environments (LE) – 27 studies

Category	Details
Target groups	<ul style="list-style-type: none"> Traditional students Special needs groups: International students (Brunsting et al., 2018), students at risk (Hoi, 2023; Culver et al., 2021; Schwartz et al., 2018)
Transition Outcomes	<ul style="list-style-type: none"> Academic preparedness and performance (Balakrishna, 2023; Culver, 2021; Dart & Spratt, 2021; Kodama et al., 2018; Kinnear et al., 2022; Beagon et al., 2019) Student beliefs and strategies (Bothma et al., 2022; Zhou, 2020; Lanphier et al., 2021; Ploran et al., 2023; Schütze et al., 2021; Steiner et al., 2019; Wienhold & Branchaw, 2018; Wismath & Newberry, 2019; Roldan, 2022) Social integration and well-being (Fink et al., 2023; Culver, 2021; Balakrishna, 2023; Schwartz et al., 2018; Cooper et al., 2018; Mach et al., 2018; Brunsting et al., 2018; Bagienski & Kuhn, 2022; Bai et al., 2020; Hill et al., 2023; Parada et al., 2022)
Types of transition-oriented activities	<ul style="list-style-type: none"> Bridge courses (Hill et al., 2023; Cooper et al., 2018) Discipline-specific courses (Wienhold & Branchaw, 2018; Beagon et al., 2019; Kinnear et al., 2022; Roldan, 2022) First-year experience/integration courses (Ahadi et al., 2019; Schütze et al., 2021; Wismath & Newberry, 2019; Lanphier et al., 2021; Brunsting et al., 2018; Mach et al., 2018; Culver, 2021) Short-term interventions (Bagienski et al., 2022; Bai et al., 2020; Parada & Verlhiac, 2022) Active teaching methods and practices (e.g. scaffolding, assessment...) (Hill, 2023; Ploran et al., 2023; Balakrishna, 2023; Milliken et al., 2021)



Meso Level Analysis of LE – 18 studies

Category	Details
Target groups	<ul style="list-style-type: none"> • Traditional students • Students from diverse socioeconomic and cultural backgrounds (Elliott et al., 2019; Fitzpatrick et al., 2021; Owusu-Agyeman et al., 2023) • First in family students (Lessky et al., 2021)
Transition Outcomes	<ul style="list-style-type: none"> • Analytical perspective on transition processes (Bohndick et al., 2021; De Clercq et al., 2021; Denny, 2021; Schaeper, 2020) • Understanding academic environment characteristics (Chalapati et al., 2018; De Clercq et al., 2021)
Types of transition-oriented activities	<ul style="list-style-type: none"> • Pre-entry programs (Pennington et al., 2018; O’Sullivan et al., 2019) • Induction rituals (Murray et al., 2022; Gregersen et al., 2021) • Mentoring and tutorial programs (Elliot et al., 2019; Fewster-Young & Corcoran, 2023; Mkonto, 2018; Fitzpatrick et al., 2021) • Project-based learning and work-integrated learning (Adriaensen et al., 2019; Bolstad et al., 2021; Mooney et al., 2018)



Macro Level Analysis of LE – 9 studies

Category	Details
Target groups	<ul style="list-style-type: none"> • First-generation African students (Motsabi et al., 2020) • First in family students (Lessky et al., 2021) • Latinx students (Convertino & Mein, 2020) • International students (Jones et al., 2020; Katsumoto & Bowman, 2021; Krsmanovic, 2022)
Transition Outcomes	<ul style="list-style-type: none"> • Broad approach: Whole process of transition to HE • Focus on informational capital, motivational triggers, and institutional determinants of successful transition (Lessky et al., 2021; Cassagnol-Bertrand et al., 2019; Motsabi et al., 2020)
Types of transition-oriented activities	<ul style="list-style-type: none"> • Interinstitutional diversity: Focus on differences between scientific and professional universities (Bohndick et al., 2021; Cassagnol et al., 2019). • Institutional characteristics: examines physical infrastructure, location, pedagogical differences, and digital learning tools as factors impacting student transition (Amusden et al., 2021; Mostert et al., 2023; Krsmanovic, 2022; Convertino & Mein, 2020; Denny, 2021). • Institutional support: role of social and institutional support, including the International Foundation Year, peer support, and informational capital (Jones et al., 2020; Katsumoto & Bowman, 2021; Motsabi et al., 2020; Lessky et al., 2021)



Sociocultural context
policy, culture economics,...

Summary of our insights

Student profiles

Traditional students,
students with special needs,
students at risk,
international students...

Learning environment

Micro/course level:

- Bridge courses / Introductory courses / Integration courses
- Short-term interventions : mindfulness, magic workshop, growth mindset
- Active teaching methods : experiential learning, cognitive apprenticeship, game-based learning
- Teaching practices : assessment, interactivity, scaffolding, task relevance & opportunity of choice

Meso/program level:

- The nature of the program : course schedule, social climate, academic workload, number of students, lecture/tutorial ratio...
- Discipline specific issues : approach to mathematics
- Pre-entry programs
- Social support : from staff and peers
- Tutorial & mentoring
- Active teaching designs : problem-based learning, work-integrated learning

Macro/institutional level:

- Institutional type : scientific or applied universities
- Institutional characteristics : connection to nature, infrastructure facilities, size of lecture hall, digital environment, educational approach...
- Institutional support : financial, informational, social.

Social
integration

Self-confidence

Motivation

Well-being

Engagement

Retention

Success



Discussion of RQ 1

Level	Study types	Target audience(s)	Transition outcomes	Learning design elements
Micro	23 out of 27 are intervention studies focused on immediate learning supports	Traditional students; international students; students at risk	Focus on academic performance, teaching strategies, social integration, and well-being	Bridge courses, year-long supportive courses
Meso	Balanced mix of intervention and analytical studies	Traditional students; first-in-family students	Emphasis on social support (e.g., peer, family) and disciplinary-specific interventions.	Induction rituals, mentoring, and tutorials
Macro	Exclusively analytical studies examining broader educational processes	Diverse student groups	Analyzes the entire transition process to HE	Focuses on institutional characteristics and support mechanisms



Limitations

Selection of study period and exclusion criteria

- time frame: studies limited to 2018-2023
- exclusion of Covid-19 Studies → potentially missed insights into the role of digital learning environments in supporting first-year transitions.

Categorization challenges

- allocation issues: difficulty in classifying some studies, especially qualitative ones with broad perspectives (e.g., Amundsen et al., 2021).
- overlap of findings

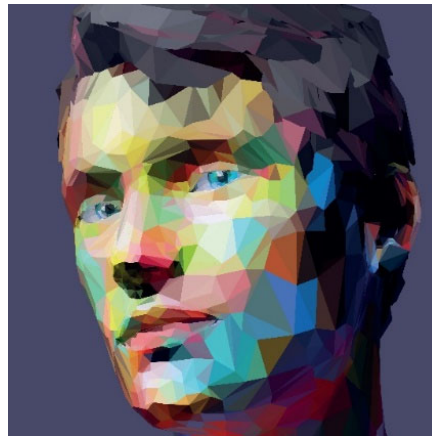
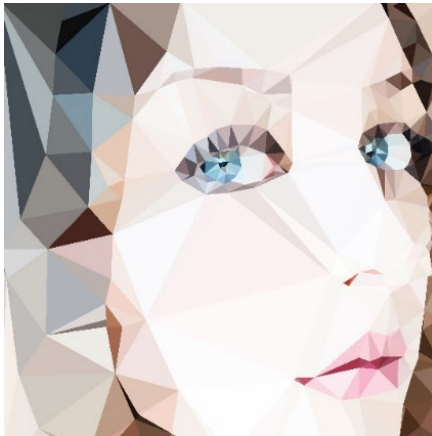
Lack of contextualization

The absence of contextual details might simplify interpretations but overlooks national and institutional specificities that could influence the findings (De Clercq et al., 2021).



Summary of our scoping review

- **Goal:** To elucidate the role of learning environments (LE) in supporting students' transitions into HE
- **Scope:** Systematic search yielding 59 papers published between 2018 and 2023, marking to our knowledge the first comprehensive documentation of LE research in the context of student transitions to HE.
- **Significance:** Responds to calls for a better understanding of institutional mechanisms that facilitate student transitions (De Clercq et al., 2021).
- **Distribution of studies:** 27 at the micro level, 18 at the meso level, and 9 at the macro level, with 5 studies spanning multiple levels.
- **Geographical Context:** Predominantly European and North American studies, but similar themes emerging in research from Africa and Asia.
- **Scattered research theme:** Journals featuring these studies do not repeat more than twice, indicating a dispersed research field.



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Thank you!

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