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RESEARCH

From ventures to citizens: rethinking the role of teamwork in entrepreneurship education

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Abstract

In a world of growing complexity and metacrisis, democratic participation is more important than ever. Entrepreneurship education (EE) is increasingly recognized as a vehicle for societal transformation through the development of skills beyond business. Despite being a central didactic feature of EE, the role of teams in fostering interpersonal and democratic capacities remains largely unexplored. This paper addresses that gap by examining how teamwork can serve as a learning ground for building democratic citizenship skills. Drawing on a qualitative multi-method approach, this study combines a systematic literature review (SLR) of 44 papers with a content analysis of entrepreneurship course descriptions from two periods (2021–2022, n=382; 2025–2026, n = 262) across 20 leading universities worldwide. Findings from the SLR reveal that teams in EE are addressed in three dimensions corresponding to Nussbaum's democratic capacities: Critical Examination, World Citizenship and Narrative Imagination, alongside a fourth, Enabling dimension that provides the structural support for them. The analysis of course descriptions showed that the Enabling dimension was most strongly represented, whereas the three democratic capacities themselves could only be identified implicitly. These findings suggest that EE curricula already feature much of the structural scaffolding to foster democratic capacities, yet rarely intentionally target or name them. The paper calls for intentionality in integrating and facilitating teamwork in EE and proposes implications for educators and researchers.

Keywords Entrepreneurship education · Transformative education · Team learning · Experiential learning · Democratic capacity · Citizenship

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Introduction

Despite the clear need for fundamental transformations towards a sustainable and just future, as proclaimed in the Sustainable Development Goals (SDGs), it remains unclear how such transitions can practically be facilitated (Allen & Malekpour, 2023). The Sustainable Development Report 2023 (Independent Group of Scientists appointed by the Secretary-General, 2023) demonstrated that many goals were out of reach already at the halfway point of the 2030 Agenda, suggesting that measures up to now have been insufficient. To create the urgently needed societal transformation towards a better future, a democratization of shared aims, such as the SDGs, instead of a simplistic top-down approach is the key (Kühne et al., 2025; Sachs et al., 2019). Such transformation requires participation, engagement and involvement—in short, democratic citizenship. Active democratic citizenship refers to the participation of individuals in social and political processes (Kearns, 1992), while education for democratic citizenship aims to equip people with the knowledge, skills, and attitudes necessary to participate responsibly and actively in democratic life (Council of Europe, 2017).

While EE has been identified as a driver of sustainable development by equipping students with the competencies to navigate complexity (Dyantyi et al., 2024; Jaramillo & Lockwood, 2022), we argue that EE can serve as a catalyst for developing the capacities needed for democratic citizenship. Processes central to EE such as team-based learning, collaborative decision-making, peer reflection, and shared responsibility closely mirror the competencies required for active democratic participation (Biesta, 2011; Dewey, 1916; Nussbaum, 2006).

To address the multitude of challenges at the environmental, societal, economic, and international levels, education holds great promise in facilitating the transformation. EE is increasingly conceptualized as a transformational learning process centered on individual development (Dimov & Pistrui, 2022; Kuckertz, 2021) facilitated through real-world experience, critical reflection and the emancipation of students through dialogical teacher–student interaction (Walmsley & Wraae, 2022). This transformation extends beyond the individual by enabling participants to reinterpret and enact their roles as citizens. In doing so, it creates pathways for societal change through cumulative individual transformation within EE and through entrepreneurial action during and beyond degree programs.

While research has examined EE's potential to strengthen democratic citizenship capacities (Ernø, 2018; Mailhot et al., 2021; Moghaddam, 2018; Tiemensma & Rasmussen, 2019) and facilitate societal transformation (Dodd et al., 2022), a critical aspect of EE has been overlooked: the team. Teamwork can generate learning experiences that extend well beyond the degree program (Blass, 2018), fostering character-building transformations (Lackéus, 2014) through communication, collaboration, and social emotions (Rose et al., 2019). Despite this potential, research on teams in EE remains scarce (Haneberg & Aadland, 2020; Steira & Steinmo, 2021) and no study has systematically examined the role of teams in EE with respect to democratic citizenship competencies. Teams appear to be treated as a necessary evil rather than as a pedagogical approach rich in potential for entrepreneurial and individual development.

To address this gap, we seek to understand what is known about teams in EE to build theories on how educators can effectively and considerately lead team processes in degree programs to actively foster democratic capacities and unlock EE's potential to contribute to societal change. Our research addresses the following question:

In what ways do teams and teamwork in EE foster individual students' capacities for democratic citizenship?

A multi-method approach combining an SLR and a content analysis of entrepreneurship course descriptions was employed. The SLR captures what research knows about teams in EE, a synthesis maps EE team processes onto defined democratic capacities, while the curriculum analysis reveals how this knowledge is reflected in teaching practice; together, they illuminate both the existing knowledge base and its real-world application.

The paper proceeds as follows: Sect. "Theoretical background" presents relevant theoretical frameworks; Sect. "Methodology" outlines the methodology as well as the results; Sect. "Discussion" discusses those results; Sect. "Implications" proposes implications for practice and future research, Sect. "Limitations" addresses the limitations and Sect. "Conclusion" closes the paper with the conclusion.

Theoretical background

Entrepreneurship education as transformational learning

Entrepreneurship has been conceptualized as transformative socio-economic engagement (Dodd et al., 2022) with the potential to catalyze positive social change (Dyantyi et al., 2024; Hoppe & Namdar, 2023; Price et al., 2021).

Through experiential approaches, EE may facilitate transformative learning experiences (Dodd et al., 2022; Vettraino & Jones, 2022), particularly with regard to individual-level changes and an improved understanding of interconnectedness (Dimov & Pistrui, 2022). Transformative learning, as described by Mezirow (1991), is a process that fundamentally changes self-perceptions and worldviews by fostering critical reflection on existing norms and value systems, enabling analytical examination of the status quo and supporting the identification of alternative ways of thinking and acting.

In this regard, Klapper and Fayolle (2023) draw on Freire's (2017) concept of conscientisation, which describes the process by which students become aware of their socio-cultural reality, leading to a more critical understanding of and perspective on their world. Through dialogue and problem-based learning, learners are empowered to analyze and understand the world, with all its potential for change and transformation, and thereby enabling students to envision alternative future realities in which they can act as agents of change (Klapper & Fayolle, 2023; Schreiber-Barsch & Mauch, 2019).

Societal transformation is central to navigating the complexity of global crises and meeting the challenges of a highly interconnected, rapidly changing world. As an open system interacting with society, education is crucial for social change and must therefore be oriented towards desired values, norms, and social aims (Reigeluth,

1994). According to (Hooks, 1994), this kind of emancipation from traditional teaching requires professors and students to engage as equals. Dodd et al. (2022) elaborate that transformative learning is based on the democratization of learning, with educators making students co-responsible and giving them a role as co-creators of new knowledge. In this way, EE can nurture a sense of engagement and civic responsibility by cultivating the mindset and skills needed to identify and address societal challenges and by developing students' agency and capabilities to act in the face of an open future (Dahlstedt & Fejes, 2019; Han et al., 2024). Building such individual and collective capabilities requires freedom from oppression and access to foundational enabling conditions—such as education itself—and ultimately contributes to the expansion of human freedom (Evans, 2002). In this regard, educational policies have long sought to integrate the fostering of democratic capabilities into education; yet the approaches to implementing this goal remain underspecified or inconsistent (Tiemensma & Rasmussen, 2019).

Entrepreneurship education and democratic citizenship

> "*The relationship between enterprise and citizenship education is a close one, and it is possible that one may lend itself to the other".*
>
> (Deuchar, 2004, p. 238, as cited in Norberg et al., 2015).

Generally, active citizenship describes participation in social and political life, the relationship between the individual and the state, and engagement in participatory democracy (Kearns, 1992). Such participation can be viewed as a good within itself, as it represents human agency and freedom of choice and has been described as part of a good life and self-actualization (Bonvin & Laruffa, 2018; Sen, 2001). Within democratic societies, education should therefore cultivate capacities for democratic citizenship to ensure the participation of all citizens and drive the societal change necessary for collective progress (Dewey, 1916). Although several authors have raised concerns about a neoliberal agenda being advanced through EE and its emphasis on outcomes (e.g. Kuckertz, 2021; Lackéus, 2017), there is considerable conceptual overlap between democratic citizenship and entrepreneurship (Audretsch & Moog, 2022; Norberg et al., 2015). Equipping students to create positive social, sustainable, political, or economic impact, through a strong emphasis on 'others-oriented' EE can result in a more holistic EE and mitigate neoliberal tendencies (Kuckertz, 2021; Lackéus, 2017).

Existing competence frameworks for EE identify domain-specific, personal, and social competences (Tittel & Terzidis, 2020); however, the connection to the societal sphere—in terms of democratic capacities and citizenship—remains largely unaddressed. Research suggests that fostering pro-democratic collective capabilities and action is challenging, as individuals often prioritize their own interests over the common good (Han et al., 2024). However, democratic participation is central to the development of collective knowledge and the constitution of societal values and priorities (Bonvin & Laruffa, 2018) and a transversal competency urgently needed

to effectively function in the complex, globalized world of the twenty-first century (UNESCO, 2016).

Contrastingly, we have recently seen a global rise in populist, authoritarian, xenophobic movements in many parts of the world, marking a democratic decline and putting at risk many of our collective achievements (Reimers, 2018). Therefore, education must be transformed and direct behavior toward shared goals in order to build a more inclusive and responsive democratic mindset (Han et al., 2024; Stein, 2019).

Democratic capacities

Entrepreneurship and democracy, two concepts inextricably linked to the other, are grounded in the assumption that humans are skillful, resourceful beings striving for agency (Audretsch & Moog, 2022; Spinosa et al., 1995). EE fosters capacities for democratic citizenship by transforming students into proactive, responsible entrepreneurial citizens with both economic and social agency (Dahlstedt & Fejes, 2019; Tiemensma & Rasmussen, 2019). Martens and Gainous (2013) highlight that an open classroom climate, where students can interact and provide input, is the most effective way of promoting democratic capacities. To ultimately address societal challenges, democratic capacities are urgently needed, as hierarchical decision-making and governance approaches have failed to provide the necessary transformation (Vickers et al., 2025).

Vincent (2008) highlights that the term 'capacity' can be understood as the possibility to do something, whereas 'capability' describes the action itself. Through the lens of the capability approach (Sen, 2001), people—with their abilities and skills—can be seen as potential drivers of change in systems and structures. Consequently, experiential learning approaches should emphasize building capacities for democratic citizenship and engagement.

Viewing education from a conceptual and structural standpoint, Nussbaum (2006) proposed three democratic capacities that should be fostered through education: the capacity for Critical Examination, the capacity for World Citizenship, and the capacity for Narrative Imagination.

The capacity for Critical Examination, an antecedent for both intellectual independence and democratic participation, enables students to critically examine, question, and reflect on current norms and values in society (Nussbaum, 2006). The capacity for World Citizenship highlights the relationship between the self and the world, enabling students to understand differences while recognizing that all humans form a global collective in which each person bears responsibility. Lastly, the capacity for Narrative Imagination develops the ability to empathetically engage with the experiences and perspectives of others, making possible the mutual understanding on which democracy depends (Nussbaum, 2006).

To equip young people with the competences necessary for democratic participation and active citizenship the Reference Framework of Competences for Democratic Culture (RFCDC) (Council of Europe, 2018a) was developed as descriptions and guidelines for education. The RFCDC structures the competences for democratic culture five areas: values, attitudes, skills, knowledge and critical understanding. Each of these dimensions carries certain descriptors which specify what skills and under-

standing students need to develop (Council of Europe, 2018b). To address educators especially in higher education, a guideline on formats and approaches followed (Council of Europe, 2020). While those theories focus mainly on the individual, we argue that teams play a critical yet underrated role in developing entrepreneurial citizens, as they may serve as a learning ground for democratic capacities.

The role of teams in entrepreneurship education

Teams are a crucial part of EE, yet research on the role, effects and potential of teams, and teamwork, as well as approaches to facilitation and building of teams in EE remains scarce (Brattström et al., 2020; Haneberg & Aadland, 2020; Steira & Steinmo, 2021). Especially in experiential and venture-creation EE programs, teams are a critical part of the entrepreneurial learning journey.

Most new ventures are created by entrepreneurial teams (Aldrich & Ruef, 2006; Boerner et al., 2024), which is why venture capitalists treat the team as a critical evaluation criterion for investments (Blume & Hsueh, 2024). Evidence suggests that success rates of ventures led and operated by entrepreneurial teams are higher than those of solo-founded ventures (Berman et al., 2024; Delmar & Shane, 2006; Schjoedt & Kraus, 2009). Still, teams are frequently overlooked in entrepreneurial learning, both in research and in academic practice.

Acknowledging the team dimension introduces a new variable and requires widening the perspective from individual attitudes and behavior to the collective. So far, many widely used theoretical concepts in EE focus on studying the individual. Concepts such as Individual Entrepreneurial Orientation (IEO), Personal Initiative (PI), and Self-Efficacy illustrate this individual focus. Even though many formats, especially in experiential EE programs, use teams as the preferred didactic approach, they are more often treated as a necessary evil than as a teaching approach with significant potential for entrepreneurial development. By contrast, Blass (2018) stated that teams in EE are one of the most important sources of learning and hypothesized that students might even learn more from one another than from their instructors. Teams in new ventures must negotiate hierarchies, norms, and rules, and coordinate actions toward desired outcomes in an interdependent and dynamic manner (Brattström et al., 2020). But teamwork also carries risks, as it can lead to stress and negative emotional experiences (González-López et al., 2019) and often heightens ambiguity in EE formats for students (Pittaway & Cope, 2007). Currently, it seems that we are pushing students to work in teams without adequately preparing them for teamwork. Nevertheless, teamwork may lead to very valuable experiences that bring meaningful realizations and learnings for students' future careers and life (Lackéus, 2014) and potentially serve as the basis for developing democratic capacities (Brattström et al., 2020; Mailhot et al., 2021). Especially the processes and roles within teams, as well as the collaboration and negotiation involved help students to develop the skills for successfully working with others (Pazos et al., 2022). Such collective capabilities, which are necessary for democratic participation and processes, have been shown to arise from interactions within groups oriented towards mutual learning and collective, supportive action (Vickers et al., 2025).

Methodology

Using a qualitative multi-method research approach, this paper explores the role of teams in EE, especially with regard to the development of democratic citizenship capabilities among entrepreneurship students. As a first step, an exploratory SLR of research on teams in EE was conducted, taking into account literature published between 2014 and 2024. The results of the SLR were then synthesized with the theoretical background on democratic capacities. To complement the literature analysis, we then conducted a deductive content analysis of entrepreneurship modules from 20 universities worldwide drawing on course-level data from 2021–2022 and 2025–2026 to understand if and how teams and teamwork are intended to be positioned within EE curricula (see Fig. 1).

We discuss the results in light of EE's potential to foster democratic capacities and derive implications for research and practice.

Systematic literature review

To gain an overview of relevant literature in the field, an SLR was conducted (Tranfield et al., 2003). Search queries included:

- TITLE-ABS-KEY: ({entrepreneurship education} AND teams)
- Years: 2014–2024
- Document Type: Journal Articles, Book Articles, Conference Papers
- Publication Stage: Final
- Language: English
- Research Areas: Social Sciences, Business, Management & Accounting, Economics

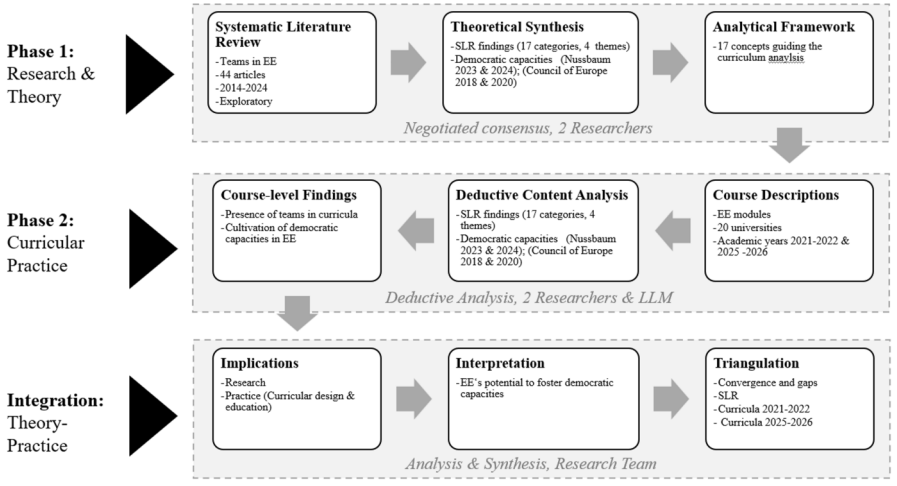


Fig. 1 – Sequential multi-method research design on teams and democratic capacities in theory and practice

- Topics: Entrepreneurship Education, EE Curricula, EE Teaching, Experiential Learning

Literature was excluded from further analysis based on the following exclusion criteria:

Thematic irrelevance: Focus on EE in general.

Scope mismatch: Teams are mentioned only as part of the lecture, Teams are not addressed directly.

Editorial mismatch: Literature from other fields of research; Reviews; Editorial, Articles in press.

Other research areas: Records cross-listed with unrelated fields were removed manually during screening.

Access problems: Unavailable as full text.

The keywords for the literature search were selected after a preliminary literature review. Because papers explicitly addressing teams, team learning, team interventions, and team dynamics proved difficult to find, we adopted a broad, exploratory lens for the SLR to ensure coverage relevant to the research question. The search queries led to 215 search hits in the Scopus database. Scopus was used as the only database because it provides comprehensive coverage of literature on business and management and has been evaluated as suitable for searching systematically on its own (Gusenbauer & Haddaway, 2020). After screening titles and abstracts for relevance to the research question, 56 records were selected for full-text screening. Nine records were excluded during full-text screening due to thematic irrelevance, three more were excluded at a later stage due to scope mismatch, leaving 44 papers for the SLR.

Data were coded inductively, moving from codes to categories to themes (Saldaña, 2013). All articles were scanned for content related to teams in EE. The aim was to explore the field and survey existing knowledge on teams, in order to thereafter analyze it from the perspective of democratic citizenship and capacity building and ultimately integrate the findings with data from EE practice. A total of 888 segments were inductively drawn from the material and merged into 157 codes. These codes were clustered into 17 categories and subsequently grouped into four themes, taking differences in frequency and relevance into account.

To ensure a rigorous methodological process, two researchers were involved in the SLR at all stages. The coding process was conducted collaboratively applying a consensus-based, negotiated approach, rather than a single-coder design with subsequent reliability testing. This is a form of triangulation strengthening the credibility of results (Denzin, 2017; Lincoln & Guba, 1985). Across consecutive rounds of analysis, the researchers jointly developed, applied, adjusted and refined the codebook and the corresponding coding framework. Coding decisions, different interpretations, labeling and boundary conditions of codes were negotiated until consensus was reached. Additionally, categories were clustered and themes were allocated in joint effort. During qualitative research the notion of objectivity is approximated through intercoder agreement (Schreier, 2013). Intercoder agreement is achieved through discussion and reconciliation between the coders (Campbell et al., 2013; Lincoln & Guba, 1985).

In addition, the coding framework was presented and discussed at the 3E 2025 Conference – ECSB Entrepreneurship Education Conference in Munich, Germany, providing external scholarly scrutiny. Such communicative validation can strengthen validity (Schreier, 2013) and credibility (Lincoln & Guba, 1985) if findings are conveyed to an expert audience and they concur with the results. As the framework was discussed and no substantive revisions emerged from that discussion, the presented version of the codebook was subsequently used without further revision and corresponds to the version presented in this paper.

The codebook served as a central instrument and record of the coding process. Although the reconciliation discussions were not recorded separately, each agreed refinement was incorporated into the codebook and applied by both researchers. Therefore, it is the detailed codebook, rather than the meeting records, that documents the analytical decisions taken. As the codebook itself exceeds the space available in this article, an exemplary code from the codebook is provided (Table 1).

Preliminary results of the SLR

The SLR served as an initial exploration of teams in EE. The aim was to map existing research on teams and assess the potential for democratic citizenship and capacity building.

The analysis revealed that teams were mentioned in the title, abstract or keywords of 215 articles between 2014 and 2024. However, in most cases, teams were mentioned only in passing, without further explanation or data, and were therefore excluded from the analysis. Only 44 of those papers included content about teams in EE.

The literature was scanned in an exploratory manner. All contents related to teams and teamwork were coded. Among the 44 papers in the SLR, a total of 888 segments were coded. Those coded segments were translated into 157 codes and then

Table 1 – Exemplary code from detailed codebook for SLR on teams in EE

Main Category	Teamwork is a liminal space
No	K11
Frequency (codes)	36
Indicators/ Subcodes	Team develops resilience through working together; Team learning required self-regulation outside the classroom; Teamwork as a liminal space in EE; Teams in EE can be a home to transformation process; Shifting from I to We and being part of a whole; Teamwork promotes innovation; Increased personal resilience through teamwork
Definition	Positions that frame teamwork as a space for transition and transformation—from I to We, resilience development, personal transformation/ development through the team
Inclusion	Use when the topics of transformation, transition, resilience development or the shift from “I” to “We” through teamwork are being discussed
Exclusion	Not: measurable results (→K6); team building (→K17)
Key Citations	"Transformational learning is enabled through reflecting on values, needs and goals, as generated by positive feedback from peers and negative and troublesome team experiences."
Theme	Dialogue & Conflict as Transformative Learning

merged into 17 categories capturing recurring patterns in how teams and teamwork are addressed in EE literature (see Table 2).

The most strongly represented categories were 'Experiential team learning as part of EE' (106 codes), 'Dialogue & reflection lead to shared understanding' (106 codes), 'Holistic team formation should be part of EE' (92 codes), 'Teamwork impacts learning and performance' (86 codes) and 'Conflict management is a critical skill' (69 codes).

The first category highlights 'Experiential team learning as part of EE'. This category captured how teamwork is embedded in the design and delivery of EE, comprising experiential approaches such as design thinking, simulations, product development and team projects, as well as the frequent use of group work, team presentations and pitches in assessment (Scott et al., 2020). At the same time, the underlying codes point to a discrepancy between the widespread use of teams in EE and the limited explicit attention given to team learning: team-related topics remain understudied (Wang et al., 2019; Warhuus et al., 2021) and elements of team collaboration are rarely explicitly included in EE courses (Krawczyk-Bryłka et al., 2020). Thus, although teamwork is frequently used as a pedagogical approach, the development of teamwork itself receives considerably less explicit attention (Reimers, 2020).

'Dialogue and reflection lead to shared understanding' captured the role of communication, knowledge sharing and collective reflection in team processes. The underlying codes indicate that dialogue within teams fosters shared cognition, mutual understanding, psychological safety, decision-making (Cao & Jiang, 2017), soft-and meta skill development. The codes further connect shared visions, mental models and common values with coordination (Pokidko et al., 2021), trust and cohesion (Karlsson & Nowell, 2021) and adaptability (Neumeyer & Santos, 2020). Cao and

Table 2 — Codes, Categories and Themes from SLR

Category	Segments	Theme	Codes
Feeling of personal ownership increases responsibility & agency in teams	23	Agency & Shared Responsibility in Teams	247
Collaborative decision-making toward common goals	51		
Teamwork as a catalyst for collaboration	65		
Holistic team formation should be part of EE	92		
Leadership as a driver for team effectiveness	16		
Conflict Management is a critical skill	69	Dialogue & Conflict as Transformative Learning	211
Dialogue & Reflection lead to shared understanding	106		
Teamwork is a liminal space	36		
Team Dynamics influence learning	30	Relational & Emotional Team Dynamics	78
Female team members positively influence teamwork	17		
Teamwork has emotional impacts	31		
Teamwork impacts learning and performance	86	Structured Support for Team Learning	352
Coaching & Facilitation can enhance team learning	41		
Team development should include structural elements	55		
Experiential team learning as part of EE curricula	106		
Facing uncertainty is a part of teamwork in EE	14		
Dualistic impact of diversity on teamwork	50		

Jiang (2017, p. 6340) argue that reflecting entrepreneurial decisions from multiple angles improves both the development and the quality of the decision-making process. Wang et al. (2019) report participants describing how internal dialogue and debates prompted the team to communicate, generate new ideas, and develop their skills collaboratively. Experienced members shared knowledge with less experienced ones, and participants reported feeling more confident as productive contributors and more optimistic about pursuing entrepreneurial careers (Wang et al., 2019). Building shared mental models through team dialogue emerged as especially important, as several authors found a positive connection to performance of the respective team (e.g. Neumeyer & Santos, 2020; Ziemiański et al., 2023).

'Holistic team formation should be part of EE' brought together different approaches to forming entrepreneurial student teams. The underlying codes address educator-led versus self-selected formation, team size, heterogeneity, competencies and business ideas as formation criteria. While no clear ideal team configuration emerged, team formation itself was repeatedly conceptualized as an entrepreneurial skill that can be taught and as a process requiring more deliberate integration into EE (Arpiainen & Kurczewska, 2017). Furthermore, the literature stated that team formation contributes to skill development for future entrepreneurial careers and shapes both the experience and performance of the team (Arendt, 2024; Backs et al., 2019). Team formation should therefore be treated as an integral element of EE course design rather than an afterthought.

The category 'Teamwork impacts learning and performance' captured both beneficial and detrimental consequences of working in teams. The underlying codes associate teamwork with resource utilization (Neumeyer & Santos, 2020), problem solving (Karlsson & Nowell, 2021), learning and improved results (Joseph, 2014), while also showing that team-based learning can hinder learning (Ilonen, 2021) and that poor team experiences or interaction quality can negatively affect outcomes (Neumeyer & McKenna, 2016). Thus, the category reflects the importance of the quality of the team experience rather than assuming an inherently positive effect of teamwork. Many studies highlighted that teamwork may also impact the overall experience that students have from EE courses (Yang et al., 2022). This finding may also relate to the effect of EE on students' entrepreneurial orientation - an avenue that warrants further research.

Finally, 'Conflict Management is a critical skill' captured conflict as both a recurring element of team-based learning and a capability required to navigate teamwork effectively. Differences in proactiveness and innovativeness, as well as interpersonal conflict, were associated with negative consequences for knowledge sharing and performance (Chen & Agrawal, 2018), whereas task-related or constructive conflict could also have beneficial effects (Pazos et al., 2022). Notably, students were often expected to resolve team conflicts despite receiving little explicit instruction in conflict management (Mendoza & Hillinger, 2016). Coaching and facilitation may provide mechanisms to support students in handling and learning from team conflicts (e.g. Nevalainen et al., 2021; Wang et al., 2019).

Notably, the literature offered little discussion of methods or critical factors for team performance in EE courses. Only diversity was frequently discussed as a potential factor influencing teamwork and performance; however, the findings were con-

tradictory. While some papers reported a positive impact of diversity (Cao & Jiang, 2017), others found that homogeneity supports teamwork and performance more effectively (Rosendahl Huber et al., 2020). A positive effect of women's participation in entrepreneurial teams emerged as one point of relative consensus (e.g., Harms, 2015; Neumeyer & McKenna, 2016).

At the highest level of abstraction four themes emerged:

- 'Structured support for team learning' (352 coded segments),
- 'Agency & shared responsibility in teams' (247 coded segments),
- 'Dialogue & conflict as transformative learning' (211 coded segments) and
- 'Relational & emotional team dynamics' (78 coded segments).

These themes provide an overarching structure for understanding the role of teams in EE and suggest that teams may serve not only as a pedagogical format but indeed act as context for capacity development. The identified capacities show conceptual alignment with Nussbaum's (2006) works on democratic capacities, which is examined in the following section.

Synthesis of results of SLR

To develop systematic correspondence of the theoretical anchors on democratic capacities, three sources were triangulated: the findings of the SLR, Nussbaum's democratic capacities (2006; 2024) and the descriptors of competences for democratic culture from the Council of Europe's RFCDC (2018b; 2020).

As a first layer of synthesis the themes of the SLR were mapped against Nussbaum's democratic capacities (2006). 'Dialogue & Conflict as Transformative Learning' maps onto Nussbaum's capacity for Critical Examination, 'Agency & Shared Responsibility' onto World Citizenship, and 'Relational & Emotional Team Dynamics' onto Narrative Imagination. The fourth theme, 'Structured Support for Team Learning', does not correspond to a single capacity but cuts across all three, functioning as the pedagogical scaffolding and functions as an Enabling Condition. This correspondence was then translated into a set of concrete, codable indicators.

To define how these capacities can be cultivated according to the chosen theories, keywords were manually extracted from Nussbaum (2006) and the RFCDC by the Council of Europe (2018b). As those sources provided little guidance on enabling conditions, additional literature was consulted. Nussbaum's *Not for Profit* (2024), originally published in 2010 and the RFCDC's extension *Competences for democratic culture in higher education* (Council of Europe, 2020) provided additional information which was integrated into the synthesis to produce a more complete overview of the democratic capacities inherently present in EE.

The resulting synthesis framework is presented in Table 3.

Derivation of indicators for deductive analysis of course-level data

In a next step, indicators for the deductive analysis of selected course descriptions were derived from the identified team processes. For each of Nussbaum's three

Table 3 —Synthesis framework: Mapping of inductively derived team processes onto Nussbaum's democratic capacities and the Council of Europe RFCDC descriptors

Team process (SLR theme)	Democratic capacity	Nussbaum (2006; 2024)	Council of Europe, (2018; 2020)
Dialogue & Conflict as Transformative Learning	**Critical Examination**	2006: Reflect; Critical examination of oneself and one's traditions; Examine (oneself); Question; Probe; Debate; Engage critically with tradition; Deliberation, Dialogue; Respect the opposing position; Reason logically, Consistency and justification; Argue; Test, Critical scrutiny, Accuracy of judgment; Think for themselves; Critical and self-critical capacities; Peaceful resolution of differences; Exchange ideas, Shared human needs and interests; Transformation; Negotiate multiple allegiances 2024: Discuss; Evaluate evidence, Recognize (others)	2018: Knowledge and critical understanding of the self; Analytical & critical thinking skills; Knowledge and critical understanding of language and communication; Autonomous learning skills; Conflict-resolution skills; Co-operation skills; Tolerance of ambiguity 2020: Giving voice to all arguments and perspectives; Safe spaces for deliberation
Agency & Shared Responsibility in Teams	**World Citizenship**	2006: Take responsibility for one's own reasoning; Human beings bound to all other human beings; Reason together about their choices; Pluralistic democracy, peaceful resolution of differences; Common problems, Shared human needs and interests; on-hierarchical community; Negotiate multiple allegiances; Understand the differences, Awareness of differences; Respect and understanding; Multicultural education; Pluralistic democracy 2024: Accountability as responsible agent; Cooperate; Confront cooperatively; Recognize (others); for the good of the nation as a whole; Respect (others); Undermine thinking of others as 'lower'; See the world from the viewpoint of other people	2018: Responsibility; Co-operation skills; Civic-mindedness; Valuing cultural diversity; Openness to cultural otherness; Respect; Valuing human dignity & human rights; Valuing democracy, justice, fairness 2020: Community-based and service-learning; Participative decision-making structures; Authentic participation (not pseudo-participation); Mutual respect and trust; Setting and respecting of ground rules
Relational & Emotional Team Dynamics	**Narrative Imagination**	2006: Empathetic imagining; In the shoes of a person different from oneself, Insight into the experience of another; Understand emotions and wishes and desires of others; Recognition and concern; Reading another person's story 2024: Cultivation of sympathy; see the world from the viewpoint of other people, mutual understanding; to be vulnerable; Weakness is not shameful	2018: Empathy; Skills of listening & observing 2020: Encouraging perspective-taking; Safe spaces for deliberation; Open, participative and respectful classroom environment

Table 3 (continued)

Team process (SLR theme)	Democratic capacity	Nussbaum (2006; 2024)	Council of Europe, (2018; 2020)
Structured Support for Team Learning	**Enabling condition** (scaffolding for the three capacities)	2024: Care and challenge by the educator; Supporting emotional development; Dialogic engagement on eye-level; Feedback from instructor; Questions and probing from educator; Non-hierarchical community; Socratic dialogue; Inspire active thinking; Active learning (learning by doing); Active & participatory education; Learning through creative activity; Cooperative activity; Strengthening emotional and imaginative resources; Responsiveness and interactivity	2018: Co-operation skills; Tolerance of ambiguity; Flexibility and adaptability; Linguistic, communicative & plurilingual skills 2020: Create opportunities for students to participate in their own learning; Peer support / tutoring; Facilitate co-operative learning; Democratic teaching & learning methods; Small-group teaching; Giving voice to all arguments and perspectives; Different forms of group and teamwork; Learning by doing; Community-based and service-learning; Learning projects; Research on real-life issues; Support for student organizations; Safe learning environment; Open, participative and respectful classroom environment; Community engagement through training opportunities and visiting experts

democratic capacities action-oriented, searchable terms were derived naming a concrete team practice that could be evidenced in at least two of the three sources. Nussbaum's works from 2006and 2024 were treated as a single deductive source as well as the descriptors of competences for democratic culture from the Council of Europe's RFCDC (), to preserve three triangulated streams—SLR (S1), Nussbaum (S2), RFCDC (S3). This process yielded 44 indicators that operationalize the four categories (Table 4). Full indicator-level derivation with page-level citations is provided in the Appendix.

Deductive analysis of EE course descriptions

The SLR indicated that existing research on teams does not adequately reflect their practical use as a didactic tool in applied EE. In response, the second stage of the multi-method methodology examined how teams are represented within academic settings. The aim was to explore how EE curricula incorporate teamwork and whether teams serve as catalysts for developing democratic capacities.

Table 4 – Derivation table: Indicators for democratic capacity building in EE

Democratic capacity	Indicators (searchable keywords)
Critical Examination (C1)	reflection · questioning/challenging assumptions · debate/discuss · deliberation/dialogue · reasoning · testing claims · independent & self-critical thinking · conflict as learning · exchange of ideas · transformative learning · tolerance of ambiguity
World Citizenship (C2)	shared responsibility · collaborate/co-operate · collective decision-making · shared goal/common good · shared/non-hierarchical leadership · participation · diversity · respect for others · intercultural orientation · civic-mindedness · rules & fairness
Narrative Imagination (C3)	empathy · perspective-taking · understanding others' emotions · listening & observing · psychological safety/trust · emotional engagement
Enabling/ Structured Support (C4)	coaching · mentoring · facilitation · Socratic/ dialogic teaching · team formation · roles & responsibilities · experiential learning · project-based learning · community-based/real-world · team-skills training · participative environment · tolerance of uncertainty · flexibility · communication skills · structural support · authentic participation

Sample and corpus construction

A sample of top universities offering entrepreneurship courses and programs was selected. In an attempt to construct an objective sample the selection was based on the results of 15 higher education institution rankings, including the Times Higher Education World University Rankings, QS World Rankings, Shanghai Academic Ranking of World Universities, Leiden Ranking, NTU Rankings, Scimago Institutions Ranking, Ranking Web of Universities, EduRank, The Princeton Review, U.S. News & World Report, Bloomberg's European Business School Ranking, América Economía Ranking, Full-time MBA Ranking 2021, Business School Rankings, and the WSJ/THE Rankings. For each ranking, the top twelve universities were identified. Based on their frequency of occurrence across the rankings, a consolidated list was created and ordered accordingly. From this consolidated list, the 20 universities appearing most frequently were selected for the sample. We acknowledge that the underlying rankings use different evaluation methodologies; the consolidation procedure was designed to mitigate, though not eliminate, this heterogeneity. Course-level data were collected at two points:2021–2022 and 2025–2026, with the institutional sample of 20 universities held constant to ensure that observed differences reflected curricular change rather than sample turnover.

Information on modules and courses published on the selected universities' websites provided the basis for the analysis. The analysis focused specifically on entrepreneurship courses and seminars, drawing on sources that ranged in granularity from detailed syllabi to brief course descriptions, a heterogeneity we account for in the analysis and is recognized as a limiting factor. Table 5 presents the selected university sample, along with the number of courses identified and the subset for which sufficient information was available.

Table 5 - Sample of universities and number of EE modules/courses considered

	Number of courses found	
University	2021–2022	2025–2026
Harvard University	26	18
Massachusetts Institute of Technology	40	33
Stanford University	22	18
University of Oxford	4	3
University of Michigan	27	20
University of Pennsylvania	6	5
Yale University	25	15
University of Cambridge	9	7
Columbia University	26	19
Johns Hopkins University	40	33
HEC Paris	20	1
California Institute of Technology	2	2
Imperial College London	6	4
The University of Chicago	29	18
University of California Berkeley	19	12
Babson College	38	24
Toronto University	8	6
IESE Business School	20	18
Shanghai Jiao Tong University	10	1
University of Bocconi	5	5
Total number of courses with available information	**382**	**262**

The information collected was organized into two corpora, one for each period. After an initial text-mining analysis using Voyant tools, a deductive analysis using the searchable terms from Table 4 was conducted using the Large Language Model (LLM) Chat GPT to gain insights from the data. The Course Content Corpus 2021–2022 (CCC-21/22) comprised 7,178 words across 382 courses, while the Course Content Corpus 2025–2026 (CCC-25/26) comprised 18,610 words across 262 courses, indicating a higher level of detail in the more recent course descriptions. The smaller number of courses in the later period may reflect changes in how course information is structured, with universities providing broader or more integrated course descriptions rather than itemized listings. In some cases, course information was limited, which may have affected the granularity of the analysis.

Descriptive corpus overview

A preliminary text-mining analysis with Voyant Tools (LeBlanc, 2024) examined how prominently teams feature in the two corpora. In both periods, team-related terms were marginal against a dominant business vocabulary. In the CCC-21/22, the most frequent terms were ‘business’ (81), ‘course’ (42), ‘market’ (40), ‘financial’ (37), and ‘management’ (35), whereas ‘team’ and ‘teams’ appeared only 24 and 10 times, respectively. The larger CCC-25/26 shows the same pattern: ‘business’ (253), ‘new’ (103), ‘venture’ (88), and ‘market’ (83) dominate, while ‘team’, ‘teams’, and ‘teamwork’ remain peripheral, with 48, 48, and 3 occurrences (Fig. 2). The only term



Fig. 2 - Word cloud of the Course Content Corpus 2025–2026 (CCC-25/26), generated with Voyant Tools

pointing to a broader societal dimension, 'social', occurred in largely generic usage, offering limited evidence that citizenship or democratic concepts are explicitly integrated into course design.

A co-occurrence analysis reinforced this picture. Across both periods, 'team' and 'teams' clustered with business- and management-oriented terms—such as 'business', 'corporate', and 'leadership' in 2021–2022 and 'dynamics', 'leadership', and 'managing' in 2025–2026—rather than with vocabulary of collaboration, civic engagement, or capacity building. Team-related vocabulary in EE course descriptions thus clusters consistently around business, management, and venture creation, with little evidence of attention to teams as sites of collaborative learning, civic engagement, or democratic capacity building.

Deductive coding procedure

To deepen the understanding of the didactic use of teams in EE, the four categories and 44 indicators (derived in 3.1.3) were translated into deductive, category-specific coding prompts with the assistance of Claude AI (Opus 4.8). The deductive analysis itself was carried out with the LLM Chat GPT (GPT-5.6 Sol Plus). Besides an introductory prompt introducing the LLM to the research context, there were four category-specific deductive prompts. Each prompt is directed at concept-based matching and has a definition of the category, outlines all indicators with an example statement, as well as exclusion criteria.

ChatGPT, by now, is the single most used LLM in research contexts and, specifically, systematic literature reviews (Lieberum et al., 2025). The test of different models revealed that there are differences in the accuracy and sensitivity with which LLMs search information (Nawrath et al., 2026). Higher accuracy leads to fewer false positive matches, while higher sensitivity leads to fewer false negatives. To influence the level of randomness or determinism, the temperature can be adapted with different LLM models (Rochlin, 2024). With most models though this is only possible with a local API and not accessible to normal users. Therefore, the intended level of determinism or randomness of the output has to be defined within the prompt. For this study there were four different prompts. One for each category C1 – C4. The prompt included specific matching instructions: *Code by CONCEPT, not literal word: morphological variants and paraphrases of the same concept count (reflect / reflective / debrief = C1-01). Do NOT expand to open synonyms or loosely related terms. Each indicator's boundary is its definition above plus the EXCLUSIONS — nothing wider.* Furthermore, the prompt included rules:

- The evidence span (≤10 words) AND its full carrier sentence must appear VERBATIM in the text and attribute the activity to students. Do not paraphrase, complete or correct them.

- Echo course_id and corpus exactly as given. Invent no other fields, ids or positions.

- When unsure, code 0. C1_n_hits must equal the number of entries in evidence_log.

As the authors' decision was to use Chat GPT as the preferred LLM to run the deductive analysis and Nawrath et al. (2026) pointed out that the model's sensitivity may lead to false positives, a sentence was added to the prompt to diminish the risk of over-coding: *over-coding is a worse error than under-coding.*

Every match converted into a predetermined format: course-ID, corpus/year, indicator-ID, verbatim span and sentence in which it was mentioned (Table 6). Every course was allocated a course ID, since LLMs cannot read or locate Excel cells. The ID made it possible to pinpoint exactly where a given text passage occurred, which was necessary for comparison during the human validation process.

To assess consistency of the deductive coding, an independent human audit was conducted with 10% of the sample—38 courses from the period 2021–2022 and 26 courses from the period 2025–2026. As one researcher carried out the deductive analysis, another one blindly coded the courses manually. The human coder manually applied the same 44 indicator codebook and binary decision rules. The results were compared, and the overall agreement was very high. This agreement is mainly

Table 6 – Representation of the 44 indicators of democratic capacities in the course corpus by period

ID	Indicator (searchable term)	2021–2022		2025–2026		Change
		n	**% corpus**	**n**	**% corpus**	**(period)**
C1 — Critical Examination						
C1-01	Reflection	5	1.3%	3	1.1%	−0.2
C1-02	Questioning assumptions	0	0.0%	3	1.1%	+1.1
C1-03	Debate/discuss	5	1.3%	20	7.6%	+6.3
C1-04	Deliberation/dialogue	2	0.5%	3	1.1%	+0.6
C1-05	Reasoning/argument	0	0.0%	2	0.8%	+0.8
C1-06	Testing claims	0	0.0%	2	0.8%	+0.8
C1-07	Independent & self-critical thinking	0	0.0%	0	0.0%	0.0
C1-08	Conflict as learning	0	0.0%	0	0.0%	0.0
C1-09	Exchange of ideas	0	0.0%	0	0.0%	0.0
C1-10	Transformative learning	0	0.0%	0	0.0%	0.0
C1-11	Tolerance of ambiguity	0	0.0%	0	0.0%	0.0
	Σ C1 — total indicator hits	**12**	**3.1%**	**33**	**12.6%**	**+9.5**
C2 — World Citizenship						
C2-01	Shared responsibility	0	0.0%	0	0.0%	0.0
C2-02	Collaborate/co-operate	20	5.2%	17	6.5%	+1.3
C2-03	Collective decision-making	1	0.3%	1	0.4%	+0.1
C2-04	Shared goal/common good	4	1.0%	3	1.1%	+0.1
C2-05	Shared/non-hierarchical leadership	0	0.0%	0	0.0%	0.0
C2-06	Participation	0	0.0%	2	0.8%	+0.8
C2-07	Diversity	2	0.5%	1	0.4%	−0.1
C2-08	Respect for others	0	0.0%	0	0.0%	0.0
C2-09	Intercultural orientation	1	0.3%	0	0.0%	−0.3
C2-10	Civic-mindedness	0	0.0%	3	1.1%	+1.1
C2-11	Rules & fairness	0	0.0%	0	0.0%	0.0
	Σ C2 — total indicator hits	**28**	**7.3%**	**27**	**10.3%**	**+3.0**
C3 — Narrative Imagination						
C3-01	Empathy	0	0.0%	1	0.4%	+0.4
C3-02	Perspective-taking	1	0.3%	1	0.4%	+0.1
C3-03	Understanding others' emotions	0	0.0%	3	1.1%	+1.1
C3-04	Listening & observing	0	0.0%	0	0.0%	0.0
C3-05	Psychological safety/trust	0	0.0%	0	0.0%	0.0
C3-06	Emotional engagement	0	0.0%	0	0.0%	0.0
	Σ C3 — total indicator hits	**1**	**0.3%**	**5**	**1.9%**	**+1.6**
C4 — Enabling / Structured Support						
C4-01	Coaching	22	5.8%	10	3.8%	−1.9
C4-02	Mentoring	5	1.3%	8	3.1%	+1.7
C4-03	Facilitation	1	0.3%	1	0.4%	+0.1
C4-04	Socratic/dialogic teaching	2	0.5%	0	0.0%	−0.5
C4-05	Team formation	2	0.5%	5	1.9%	+1.4
C4-06	Roles & responsibilities	0	0.0%	1	0.4%	+0.4
C4-07	Experiential learning	26	6.8%	20	7.6%	+0.8
C4-08	Project-based learning	5	1.3%	15	5.7%	+4.4
C4-09	Community-based/real-world	9	2.4%	9	3.4%	+1.1
C4-10	Team-skills training	0	0.0%	2	0.8%	+0.8
C4-11	Participative environment	0	0.0%	2	0.8%	+0.8

Table 6 (continued)

ID	Indicator (searchable term)	2021–2022		2025–2026		Change
		n	**% corpus**	**n**	**% corpus**	**(period)**
C4-12	Tolerance of uncertainty	0	0.0%	1	0.4%	+0.4
C4-13	Flexibility	1	0.3%	3	1.1%	+0.9
C4-14	Communication skills	1	0.3%	9	3.4%	+3.2
C4-15	Structural support	1	0.3%	4	1.5%	+1.3
C4-16	Authentic participation	0	0.0%	0	0.0%	0.0
	Σ C4 — total indicator hits	**75**	**19.6%**	**90**	**34.4%**	**+14.7**
	TOTAL — all 44 indicators (Σ hits)	**116**	**30.4%**	**155**	**59.2%**	**+28.8**

Table 7 —Intercoder agreement between the independent human audit and LLM supported deductive coding (10% sub-sample; n = 64 courses, 2,816 binary decisions)

Measure	Overall	C1	C2	C3	C4
Decisions (n)	2,816	704	704	384	1,024
Observed agreement	**97.62%**	**98.86%**	**98.44%**	**98.44%**	**95.90%**
Cohen's κ	0.237	0.196	−0.008	−0.004	0.305
Krippendorff's α	0.235	0.195	−0.007	−0.007	0.302
Gwet's AC1	**0.975**	**0.988**	**0.984**	**0.984**	**0.956**

the consequence of many shared negative codes, because most courses did not show any explicit content related to the democratic capacities. Therefore, reliability was not only assessed as agreement but also using specific qualitative measures such as Cohen's κ (see Table 7).

Results of the deductive analysis

The deductive analysis produced a binary course-indicator matrix for both periods: 2021–2022 and 2025–2026. There was a pronounced difference in the representation of the four categories within the corpus. Enabling Conditions/ Structured Support (C4) was the category most strongly visible (2021–2022: 19.6% → 2025–2026: 34.4% corpus prevalence), indicating pedagogical structures supporting democratic capacity building through team-learning are indeed present in intended EE practice. Coaching and experiential learning are amongst the most mentioned approaches. The three democratic capacities—Critical Examination (C1), World Citizenship (C2) and Narrative Imagination (C3) – were found only rarely. Narrative Imagination was the category least represented (see Table 6).

Table 6 shows the results of the LLM-assisted deductive analysis using Chat GPT −5.6 Sol Plus in terms of the courses in which each indicator was found and the corresponding percentage of the corpus. For each of the four categories the total number of courses indicates how strongly the category was present in each corpus. The 44 indicators were mentioned at least once in 82 of 382 courses (21.5%) in 2021–2022 and in 99 of 262 courses (37.8%) in 2025–2026. The overall representation of the explicit indicators of the three democratic capacities was low in both periods, however courses in 2025–2026 were more differentiated. The change from the period 2021–2022 to the period 2025–2026 indicates that all categories grew with Critical

Examination (+9.5%) and Enabling/ Structured support (+14.7%) being the strongest. Even though there was a high agreement between the LLM and the human coder, it has to be noted that most of this agreement stems from shared negatives. By corpus, observed agreement was 98.15% (2021–2022) and 96.85% (2025–2026) but 2,738 out of 2,816 decisions were shared as 'not present'. The chance-corrected coefficients Cohen's κ (Cohen, 1960) and Krippendorf's α (Hayes & Krippendorff, 2007; Krippendorff, 2019) are therefore weakened and fall near zero due to the prevalence paradox (Cicchetti & Feinstein, 1990; Feinstein & Cicchetti, 1990). To better compute inter-rater reliability in the presence of high agreement Gwet (2008) proposed Gwet's AC1 measurement. As this measurement is more stable in the cases of high agreement and trait prevalence (Nawrath et al., 2026), it was chosen as an additional index to show realistic reliability. Disagreements between LLM and human coder were asymmetric and the values found by the LLM were more conservative, indicating that the human coder applied the codes more interpretively. The overall agreement between the human coder and the LLM was almost perfect (Gwen AC1 = 0.975), reaching even 0.988 for C1, despite the human coder analysing the material manually and the LLM coding it algorithmically.

Discussion

In light of the necessary societal transformation, expectations of EE are shifting toward a more holistic approach that includes personal development, sustainable business practices and the meta-competences (Brentnall et al., 2025). This study set out to answer the research question:

In what ways do teams and teamwork in EE foster individual students' capacities for democratic citizenship?

The research design comprised a qualitative multi-method approach consisting of an SLR on teams in EE, a synthesis with existing theory of democratic capacities and a deductive analysis of EE courses, to produce a comprehensive overview of teams in EE research and practice and establish a link to the intentional development of democratic capacities through education. The following sections will discuss how teams can foster democratic capacities and then lay out why this potential remains largely unrealized.

Teams as learning grounds for democratic capacities

Interaction in teams is deeply connected to the development of democratic capacities. EE is distinctive in its broad adoption of experiential approaches that address the students as teams and require them to work together with the aim of creating a shared idea and potentially products (Warhuus et al., 2017). This study positions EE as fertile ground to deliberately foster democratic capacities in education. The findings of a systematic analysis of literature revealed four inductively derived, overarching themes on teams in EE. In answer to our research question, teams foster democratic capacities in four interconnected ways: Critical Examination through dialogue and conflict, World Citizenship through agency and shared responsibility, Nar-

rative Imagination through relational dynamics. All of those functions are facilitated through structured curricular support within and for those teams in EE. To systematically integrate this dimension into the analysis, Enabling Conditions were added to the capacity level. Enabling conditions are cutting across all three capacities and are necessary to foster intentional teamwork for democratic education in EE. The links between those dimensions are the result of a systematic mapping of theories on democratic capacities (Table 3). To our knowledge this is the first explicit map of how team-based EE cultivates democratic capacities.

The theory–practice gap

Most reviewed papers agree that teams in EE remain understudied, with limited research on their potential and few established approaches to facilitating, moderating, and forming teams in EE contexts (e.g. Karlsson & Nowell, 2021; Neumeyer & Santos, 2020). This was underlined by the fact that only 215 papers between 2014 – 2024 included the word 'team' and 'entrepreneurship education' in their title or abstract – a small sample relative to the broader entrepreneurship literature. The SLR identified teamwork as a core skill and teams as essential learning units in EE. Many authors highlight the importance of dialogue, reflection and shared aims for effective teamwork (Steira & Steinmo, 2021). Factors like diversity, team size, information sharing, and the ability to deal with conflict, although challenging, can significantly affect students' performance and individual experiences.

Our research suggests that teamwork is currently used as a format without sufficient theoretical or pedagogical grounding. This points to a clear need for formats and methods that foster teamwork as an entrepreneurial skill in EE programs and that recognizes its potential for building democratic citizenship capacities.

According to the literature, teams in EE appear to serve as a learning ground especially for dialogue and conflict resolution both of which create the shared understanding needed for students to take agency and to recognize themselves as responsible members of a collective. To analyze if these insights are applied in EE practice, an LLM-assisted deductive analysis of EE course descriptions was conducted. The analysis of curricular practice showed that, at the level of modules and programs, teams are not given the attention and weight they deserve. Teamwork was mentioned in most EE modules, but teams here were viewed primarily as contexts for learning leadership and management skills, rather than as sites for democratic experimentation and mutual understanding. The literature confirmed that teams hold significant potential for developing agency, fostering participation, and cultivating the skills of interacting with others—capacities central to Nussbaum's (2006) framework of democratic citizenship. In curricular practice, however, we found these topics largely absent.

The curricular analysis further revealed that, while the indicators for the three democratic capacities were very low in prevalence, the indicators for the enabling and structured support dimension were frequently covered. It appears that EE courses and programs already exhibit the methods necessary for cultivating democratic capacities, even if the capacities themselves are not made explicit.

A limiting factor that has to be addressed here is the marketing function of those course descriptions displayed on the websites. This may highlight certain contents more than others, based on the perceived impact it has on the target group of prospective students.

Implications

Implications for practice

There are five implications for practice:

I. Teams in EE are used as a format without pedagogical foundation. Democratic capacities are not a simple by-product of teamwork. Teams, team formation, team processes and teamwork must be intentionally designed and facilitated.
II. Structured support is the densest theme and cuts across all three capacities. Literature and courses showed that EE already has the scaffolding through which democratic capacities can be cultivated in terms of coaching, facilitation, experiential and project-based work. EE offers a structure for fostering democratic capacities without naming or intending it.
III. Thoughtful team composition, reflection structures and psychological safety are therefore prerequisites of EE that cultivates democratic capacities. The curriculum or teaching approaches must keep in mind which enabling conditions are necessary to foster democratic capacities. Educators and curriculum designers should invest into enabling conditions to foster democratic capacities, as it is an important factor when it comes to democratic citizenship in EE.
IV. The capacity for critical examination is a result of dialogue and conflict. Educators should start to treat conflict in teams as a learning ground and allow productive conflict. They should provide explicit guidance on conflict resolution, as it is crucial when developing critical thinking.
V. The 44-indicator framework may be used as a self-audit or design tool. Educators have to purposefully integrate contents feeding into Nussbaum's three capacities. In addition to its analysis function, the synthesis framework presented in Table 3 as well as the 44 indicators in Table 4, may support educators and curricular design. This contribution can be applied directly in practice.
VI. Positioning EE as a conceptual frame for the development of democratic capacities. This study shows that EE is implicitly conducting democratic education in the way that Nussbaum and the RFCDC have envisioned it. Making this aspect explicit links EE to the agenda for democratic education and provides programs with legitimacy and policy grounding.

Therefore, we argue that the topic of teams in EE deserves more attention from educators as well as researchers.

Implications for research

The analysis yielded seven implications for research:

I. While research on EE predominantly focuses on the individual often applying concepts such as entrepreneurial intention, self-efficacy and personal initiative, the capacities presented here are inherently relational and enacted at the level of the team. If collaboration, dialogue, conflict and decision-making are practiced within the team, then the team is the more appropriate unit of analysis. Future studies could directly examine team-processes, researching how team composition, facilitation and development shape their democratic capacities.

II. In Europe there seems to be a larger focus on holistic entrepreneurial personality development, active citizenship and also democratic capacities, as highlighted for example in the RFCDC (Council of Europe, 2018a) or EntreComp-Framework (Bacigalupo et al., 2016) which comprises the envisioned entrepreneurial competences that should be fostered by EE in Europe. Analyzing the differences between different cultures might be a fruitful area for research in the future.

III. Our synthesis also brings to light a theoretical tension within the concept of World Citizenship. Nussbaum's (2006) defines her capacity for World Citizenship mainly receptive and cognitive. Her explanations emphasize understanding others, recognizing shared human needs and orienting oneself toward an international, connected world. The SLR extended this description and added aspects that the framework did not capture: an active, agentic dimension. In EE students take ownership, share responsibility and pursue common goals collaboratively. In this respect, team-based EE extends Nussbaum's World Citizenship capacity through lived experiences.

IV. The framework built in this study (Table 3) offers the basis for operationalizing democratic capacities as measurable outcomes of EE. Three independent sources provided the basis for the 44 indicators (Table 4). This artefact may be used as a starting point to capture democratic capacity development through empirical instruments such as observation protocols or scales. This would allow for research to analyze enacted teaching and its results instead of intended behavior as outlined e.g. in course descriptions.

V. The mapping and derivation presented establish a link between democratic capacities and team practices in EE. However, it does not demonstrate that one causes the other. Following students throughout the duration of their EE courses or programs with longitudinal research designs could examine the impact of specific enabling conditions such as coaching, facilitation, dialogical practice, reflection or psychological safety on democratic capacity development.

VI. Another interesting research question would be under which conditions diversity in teams facilitates the development of democratic capacities, as our research showed the contradictory impact of diversity in teams in EE.

VII. Furthermore, experiments and interventions could be designed to intentionally integrate democratic education into EE and test its impact. Such research may however be difficult to conduct, as most research on teams relies on archival, secondary data of pre-assigned teams to gain insights on the

characteristics-outcomes relation (Lazar et al., 2020). Researching democratic processes and learning needs more immediate access and scientific monitoring.

Limitations

This study was conducted using a mixed-methods approach, with each of the methods coming with their own limitations. The systematic literature review was done in January 2025. With the analysis in the following month. The process was an iterative approach with two researchers involved at every stage of the coding process. Analysis was done using a rigorous codebook for deductive coding of the material developed with the results of this SLR as well as the theoretical basis in Nussbaum (2006; 2024) and Council of Europe (2018b; 2020). However, the analysis has limitations, as the material that was available for the courses was different for the various courses and programs that were scanned. As module handbooks were not available for most courses, the analysis concentrated on the material that was present the information presented on the corresponding websites. Information gathered ranged from detailed syllabi to short descriptions. Furthermore, course and module descriptions show how teamwork is intended to be incorporated into the curriculum, but do not necessarily indicate how it is taught. Websites and information online are developed for marketing purposes and may exaggerate and stress certain aspects more than others.

The sample of courses chosen for the deductive analysis was based on international rankings for the period 2021–2022, leading to a sample with most universities from the US, making the sample Western-centric. Therefore, conclusions that are drawn from this analysis are not automatically reproducible or retraceable in curricula of other countries.

From the period 2021–2022 until 2025–2026 the total course number dropped from 382 to 262. This rather large difference in course descriptions may influence percentage prevalences and total outcomes.

Furthermore, the mapping of EE team practices against democratic theories displayed in Table 3 is interpretive and has yet to be tested empirically. As of now it offers a starting point for the development of new team-based teaching approaches in EE and research in this direction.

Finally, the use of an LLM as coder has to be addressed as a limitation as well. The use of Artificial Intelligence (AI) and LLM models in SLRs is currently on the rise (Lieberum et al., 2025). However, the models show differences in how data is handled, and requests are answered (Nawrath et al., 2026). A human validation of 10% of the course corpus of both relevant periods was carried out to calculate intercoder reliability, finding that the LLM output was more conservative in comparison to the human coder but overall agreement was very high. This study takes a small step in experimenting with the use of new LLM technologies in research, while pointing out the limitations.

Conclusion

This study makes three distinct contributions. Theoretically, it develops the first explicit framework mapping team processes in EE onto democratic capacities (Table 3) and extends Nussbaum's (2006) capacity for World Citizenship by adding the active, agentic dimension that team-based EE brings to it. Empirically, it reveals a gap between the potential of teams to build democratic capacities and the way teams are positioned in EE's curricular practice. Methodologically, it offers a triangulated derivation of 44 codable indicators from three independent sources: the SLR, Nussbaum, and the RFCDC, which represents a potential instrument for future research.

Teams are a taken-for-granted part of EE that deserves more attention in research and course design. When aiming for transformational learning experiences and fostering democratic citizenship, educators need to intentionally promote students as co-creators in EE formats (Dodd et al., 2022) and adopt a coaching attitude to facilitate dialogues and conflicts within teams.

The learning activity of teamwork is a common setting in most entrepreneurship courses, offering potential for competence building as well as for fostering engagement and participation. Yet the results show that teamwork as an entrepreneurial skill and learning outcome, as well as its potential for facilitating democratic citizenship, is underrepresented in research and course descriptions. The question is how we as educators can harvest the teams' potential for learning democratic citizenship in EE courses. Taking the results of the SLR and the content analysis together, we suggest fostering conscious awareness of the direct connection between students in EE and society in the economic, social and political spheres. Concretely, this calls on educators to translate the enabling structures teams already offer into intentional practices, such as structured deliberation, shared decision making and perspective taking, using the 44 indicators as a practical repertoire for embedding the cultivation of democratic capacities directly into course design.

This paper set out to highlight the role of teams in capacity building in EE, as education should facilitate personal development that supports the acceptance of responsibility (Kuckertz, 2021). EE should prepare future entrepreneurs to take on that responsibility in a way that contributes to the greater good. EE has the special opportunity to establish a learning setting that lets students experience themselves within groups, companies and society. Teams are a crucial part of this experience, as they resemble a space where students learn not only about business model generation but also about themselves, others and the world. Fostering democratic citizenship in EE through the intentional and structured integration of teams as a didactic tool can contribute to creating a more just society, as envisioned in the SDGs: "The achievement of the Sustainable Development Goals will require unprecedented collaboration at all levels. If there is one skill all learners will need to develop, it is the skill to collaborate" (Reimers, 2020, p. 88).

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Data availability The data that support the findings of this study — including tables, figures, and supplementary data — are included in the, submitted manuscript.

Declarations

Competing interests The authors declare no competing interests.

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