

## LEARNING CREATIVITY IN HIGHER EDUCATION: INTERNATIONAL STUDENTS' CLASSROOM EXPERIENCES

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### Abstract

Creativity is increasingly emphasised as a crucial competence in contemporary higher education. However, little is known about how international students experience its development in classroom contexts, especially in Lithuania. This article analyses the perceptions of 15 international students at VIKO University of Applied Sciences in Lithuania regarding creativity and its role in learning during the course. The study applies a qualitative methodology, drawing on three focus group discussions, and employing a reflexive thematic analysis. Five themes were identified: creativity as a personal and boundless phenomenon; creativity as learnable but dependent on the environment; pedagogical scaffolding and assessment as factors that either encourage or constrain creativity; cultural and linguistic influences shaping expression; and personal growth and confidence gained through creative tasks. These findings highlight the importance of transparent assessments, supportive new teaching strategies, and intercultural collaboration in fostering creativity among diverse student cohorts. The study contributes to discussions on how to enhance creativity-oriented pedagogy in higher education. KEY WORDS: creativity, higher education, thematic analysis, qualitative research, international students, pedagogy.

### Anotacija

Kūrybiškumas vis labiau pabrėžiamas kaip svarbi kompetencija šiuolaikiniame aukštajame moksle, tačiau mažai žinoma, kaip užsienio studentai patiria jos ugdymą auditorijose Lietuvos kontekste. Šiame straipsnyje analizuojami penkiolikos užsienio studentų, studijuojančių Vilniaus kolegijoje, požiūriai į kūrybiškumą ir jo vaidmenį jų mokymosi procese kūrybiškumo kurso metu. Tyrime taikoma kokybinė metodologija, remiantis trijų diskusijų grupių diskusijomis ir taikant refleksyvią teminę analizę. Buvo nustatytos penkios temos: kūrybiškumas, kaip asmeninis ir neribotas reiškinys; kūrybiškumas, kaip gebėjimas, kurį galima išlavinti, bet kuris priklauso nuo aplinkos; pedagoginė pagalba ir vertinimas, kaip kūrybiškumą skatinantys arba ribojantys veiksniai; kultūriniai ir kalbiniai veiksniai, formuojantys išraišką; asmeninis augimas ir pasitikėjimas savimi, įgytas atlikus kūrybines užduotis. Tyrimo rezultatai pabrėžia skaidraus vertinimo, palaikančių mokymo strategijų ir tarpkultūrinio bendradarbiavimo svarbą skatinant kūrybiškumą įvairiausių studentų grupėse. Straipsnis prisideda prie kūrybiškumo skatinimo (andragogikoje) aukštajame moksle diskurso. PAGRINDINIAI ŽODŽIAI: kūrybiškumas; aukštasis mokslas; tematinė analizė, kokybinis tyrimas, tarptautiniai studentai, pedagogika.

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## Introduction

Creativity is no longer treated as a given in higher education and business, but rather as an opportunity that needs to be developed, learned and cultivated through personal effort (Fleck, Asmuth, 2021). The World Economic Forum has identified creativity and problem solving among the ten most essential skills required for the labour market in 2025 (Crabtree-Ireland, 2025). Similarly, creativity is emphasised as a key 21st-century skill that is indispensable for social, cultural and economic development (Ahmad et al., 2023). However, despite this focus, many educational institutions still lack sufficient measures to effectively endorse creativity (Grey, Morris, 2018).

Encouraging creativeness in the higher education context is a multifaceted task. More students are exposed to algorithmic thinking processes, social networks' echo chambers (Liu, 2022), and the spread of concise content types like videos via Instagram and TikTok (Bhandari, Bimo, 2022). What makes it even more debilitating is that it weakens their stamina for writing longer creative work, and restricts their potential for deeper cognitive engagement (Kalmani, 2025). Again, widespread access to tools based on artificial intelligence provides scope for creative experimentation, but at the same time brings with it the risk that cognitive processes become fixed in short-term modes and lead to the immobilisation of decision making through excessive digital choice (Gerlich, 2025; Hemraj, 2025). These contextual pressures raise a critical pedagogical question: *can creativity truly be taught and sustained in higher education, especially for international students navigating diverse learning environments?*

The article addresses this problematic issue by analysing the creative learning experiences of foreign students at VIKO University of Applied Sciences. Using thematic focus group data analysis, the study examines how pedagogical practices, cultural-linguistic contexts and personal experiences shape creative learning, which ultimately leads to the development of self-confidence and a creative identity.

### Research questions:

1. Can creativity be learned by international students in higher education?
2. What factors enable or hinder their creative development?
3. How do cultural and linguistic backgrounds shape their experiences of creativity?

## **The theoretical framework**

### 1.1. Creativity as a 21st-century competence

Creativity is increasingly recognised as a central skill in contemporary societies and economies. The OECD (2011; 2013; 2016) frames creativity as an essential driver of social, cultural and economic development (Bouckaert, 2023). Although creativity and critical thinking are widely discussed in higher education policy systems and qualification standards, these competencies are not consistently reflected in centralised assessment systems in all OECD countries, of which Lithuania became a member only in March 2025. Given that these competencies are not considered sufficiently relevant, most educational institutions and training programmes do not consider them when developing training programmes and assessment systems. Therefore, the emphasis is at the level of institutional autonomy and academic freedom. Such policy objectives often do not translate into actual changes in assessment practices at the classroom or course level (Dieudé, Prøitz, 2024). Therefore, although the importance of these 21st-century skills is increasingly being discussed at the policy level, their implementation remains uneven, and depends largely on individual lecturers rather than systemic reforms (Bouckaert, 2023).

Despite the value of creativity being widely recognised by researchers and the general public, contemporary educational paradigms often lack the appropriate foundations, tools, opportunities and momentum to foster creativity in students (DeWitt, Alias, 2023). This paradox between the recognised value of creativity and the unpreparedness of education systems to nurture it has prompted much research in the field of education, as well as a general understanding of what creativity is and how it is described in other scientific sources and studies.

### 1.2. The historical foundations and definitions of creativity

Despite four decades of research, creativity is still hard to define (Simonton, 2023; Vinchon et al., 2023). One perennial challenge to the field has been the lack of a common, generally accepted definition of creativity. Taylor and Littleton (1996) documented over 60 different conceptualisations, while Tadik et al. (2025) later substantiated this definitional uncertainty. To overcome this difficulty, Plucker et al. (2004) suggested a relational approach, with creativity being situated in the relationship between aptitude, process and environment, with products being innovative and socially beneficial. Bolen and Torrance extended this work by discussing the contribution of the researcher in creativity to assisting with teaching work (1978), while Sternberg et al. (2024) emphasised the combination of education and psychology to foster creativity and critical thinking, with implications for marketing, innovation and education. Eventually, this concept shapes the need

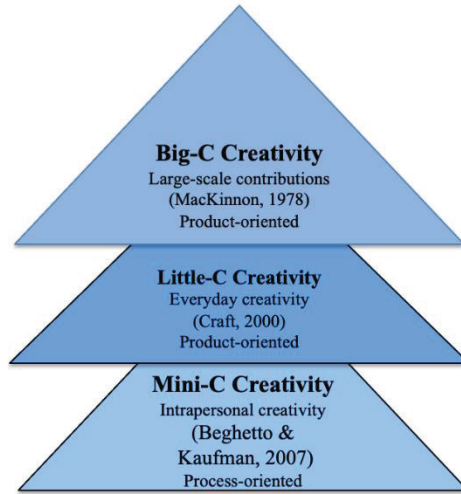


Figure 1. The Four-C Model of creativity

Source: Compiled by the author, adapted from MacKinnon, 1978; Craft, 2000; Beghetto, Kaufman, 2007

for current research in education, especially when flexibility is required to enable faster changes in the ways learning and creativity are perceived.

In addition, as a virtue, creativity has seldom been systematically fostered in education, art and industry (Green et al., 2024). To introduce clarity, Vinchon et al. (2023) introduced the Four-C Model, with a mini-c and a little-c characterising personal insight and everyday creativity, and with Pro-c and Big-C representing professional and eminent creativity.

In university education, mini-c and little-c are most appropriate, since they allow students to venture beyond problem solving, foster graduate identity, and adapt to various learning environments based on cultural backgrounds (Vinchon et al., 2023; Mullen, 2024). Pro-c takes prominence when learning is at the professional and global workplace preparatory level, while Big-C, although it is an exception, inspires breakthrough contributions (Evers, Bell, Hicks, 2025), see Figure 1.

Based on these points and the explanation, Cropley and Cropley (2021) made the identifications of creativity and added creativity as a crucial soft skill for working in the future, and contended that novelty and utility are two necessary conditions. Also, Simonton (2023) specified creativity as a ubiquitous human endeavour transgressing the limits of culture and domain specificity, and Sawyer (2020) suggested an interdisciplinary framework connecting creativity with individual flourishing, cultural endeavour and social advancement, with the need to see creativity as a global educational task in any HE environment.

### 1.3. Creativity in global educational contexts

Cross-cultural studies provide convincing evidence that even at an individual level which makes an influence in the global sphere here, creative experiences are influenced by cultural prescripts: certain contexts empower actors to take risks and pursue divergent thinking, while others focus on conformity and improvement (Kozbelt, Xu, 2022). These differences highlight the fact that although creativity is an innate ability of humankind, it cannot be fully addressed without considering the cultures in which each act of creativity is situated, especially in classes. For instance, in the United States, an association with creativity often includes originality, individual accomplishment and self-expression, whereas in eastern contexts, creativity is often associated with appropriateness, use, and the harmony of the collective (Gong et al., 2023).

Estonia had the strongest PISA 2022 creative thinking assessment in the Baltic region, ranking among the best on the European continent. Latvia and Poland were also above the OECD average. According to the OECD’s *PISA 2022 Results (Volume III)*, Latvia and Estonia also had a significant percentage of students at baseline proficiency (92% and 89% respectively), with many students at advanced level. Even though Lithuania is larger than both Latvia and Estonia by population and territory, it is not included in any of the OECD’s published reports by the country

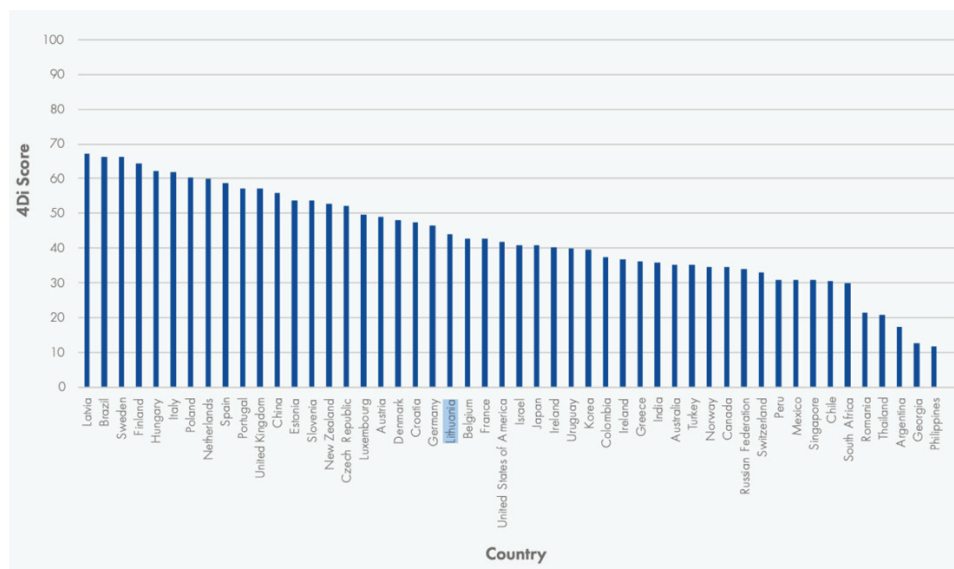


Figure 2. Lithuania’s position in the international 4Di index of digital and creative readiness

Source: Compiled by the author, based on Fadel (2021, 8)

or any absolute measures (OECD, *PISA 2022*). There are no results or country notes on Lithuania in the most recent 2025 OECD policy paper on creative thinking. Although it is significant, this exclusion should not be taken as an indicator of any lack of expected creativeness by Lithuanian students, but rather as a signal of some form of lack of reporting on the global scale of national educational perspectives.

However, Lithuania's respectability, if not stellar, results in creativity-related capabilities that may be discerned in broader international contexts, such as the 4Di index of digital and creative readiness (Figure 2). Lithuania is presented alongside a range of other European countries, providing at least some information on its standing in the area of building skills for creativity, even if it has not been directly raised in the OECD's creative thinking production. This makes this research even more valuable, and highlights the necessity for fostering pedagogical and educational challenges.

#### 1.4. Pedagogical challenges in fostering creativity

Even though most researchers agreed and acknowledged the importance of creativity and the need for increasing it, as well as indicating at the state level, educators face multiple barriers in integrating creativity. Kopcha et al. (2020) and Stefaniak (2021) point to time constraints, curricular pressures, and the tendency to emphasise products over processes in instructional design. Since AI has become easily accessible and inexpensive, there has been a lack of experimental analysis requiring various creative involvements by students (Saritepeci, Durak, 2024). Similarly, Warr et al. (2020) identified limited opportunities for creative risk taking. The role of the instructor's attitudes, perceptions and conceptual understanding of creativity has been highlighted as critical, influencing whether students experience creativity as nurtured or constrained (Cuesta-Hincapie et al., 2024; McDonald et al., 2020). These findings suggest that cultivating creativity requires more than curricular changes; it involves the systemic reorientation of pedagogy, assessment and institutional culture, as well as the involvement of students.

#### 1.4. Contemporary pressures on creativity in higher education

The studies discussed above, and the entire scientific community, feel the constant pressure to promote creativity, but at the same time, there are many obstacles. The current situation is influenced by social media algorithmic systems, which reinforce 'echo chambers', and thus limit opportunities to encounter a variety of ideas that arise from individuals. In addition, short-form content, such as Instagram and TikTok videos, reduces the persistence and concentration required for complex creative work. Mariana (2025) points out that 67% of content is reposted

within a 15-minute period, 78% of users see reposted content, and 65% experience a lack of diversity in the content offered. Gao et al. (2023) identified more than 400 echo chambers for each topic on Douyin and Bilibili that were affected by selective content delivery, while Gong et al. (2025) noted that TikTok recommendations were 41% to 53% identical across major topics.

Additionally, these enquiries have documented the influence of short-form content on cognitive and creative processes. Theoretical examinations conducted by Kim (2024) and Singh (2025) agree that the rapid and succinct nature of video formats causes attention deficit and diminishes critical thinking abilities. More empirical research conducted by Herman (2023) indicates that TikTok creators adapt their content to conform to algorithmic preferences, which may limit persistence in intricate creative tasks. Moreover, and as has been observed before, generative AI development complicates this focus scenario even more by supporting rapid creative prototyping, and promoting cognitive simplifications that ‘help’ to avoid deeper ideation processes (Vinchon et al., 2023). Accordingly, because of this overexposure of information, students are progressively faced with decision paralysis in situations with indefinitely enormous choices, where such overstimulation weakens independent critical thinking skills (Chavan, 2024) for easier AI suggestions and makes it harder for any individual assignment to be fulfilled.

The overall research outcomes suggest that student creativity is determined through cognitive and social factors, and the institutional context in which creative activity is taking place (Table 1). The teaching traditions applied, assessment systems adopted, and prevalent institutional culture significantly determine students’ perception while practising creative activities with students actively operating between and with these interactions. In order to comprehend in a more visually elaborated way, the following table presents an overview of recent research regarding algorithmic settings, and also the effects on algorithmic creativity, pedagogy, and students’ engagement (the comparison of recent studies in Table 1).

Incorporating such studies as part of an expanded conversation about pedagogy, assessment modalities and institutional culture shows the wider prevalence of algorithmic presence in higher education. Paradigms oriented toward rapid evaluation may reflect ideals that inform platforms such as TikTok, where speed and visibility are desirable (Karizat et al., 2021; Scalvini, 2023) in order to reach the largest possible audience in a very short time. Similarly, institutional cultures that emphasise efficiency may, as a side effect, encourage algorithmically motivated practices that reflect concerns about echo chambers, attention cycles and cognitive bias (Mariana, 2025; Singh, 2025; Gao et al., 2023), but the result achieved in this way is shorter and not always as effective as the proposed algorithms, and also requires enhanced cognitive abilities on the part of the student.

*Table 1.* Characteristics of included studies on algorithmic environments and implications for creativity in higher education

Study	Study Focus	Platform(s) Examined	Methodology	Key Population
Simpson & Semaan, 2021	Algorithmic exclusion and LGBTQ+ identity work	TikTok	Qualitative interview study (16 interviews)	16 LGBTQ+ users (17–53 years, mostly female, predominantly white)
Karizat et al., 2021	Algorithmic folk theories and identity resistance	TikTok	Qualitative interview study (15 interviews), conceptual analysis	15 US-based TikTok users (some marginalized identities)
Gong et al., 2025	Auditing recommendation systems with AI models	TikTok (framework applicable to YouTube Shorts, Instagram Reels)	Mixed methods (quantitative data scraping, qualitative annotation)	No human participants (automated accounts)
Kim, 2024	Cognitive and social effects of short-form video on adolescents	TikTok	Theoretical/conceptual analysis	Adolescents (no age range mentioned in abstract)
Scalvini, 2023	User perceptions of algorithmic pluralism and responsibility	TikTok	Qualitative interview study (40 interviews)	40 users (no demographics mentioned in abstract)
Singh, 2025	Algorithmic effects on cognition, attention, and mental health	Instagram, TikTok, Facebook, YouTube	Mixed methods (survey, engagement metrics, literature review)	Not mentioned
Herman, 2023	Algorithmic dependencies and creative processes	TikTok	Mixed methods (autoethnography, interviews, observation)	8 TikTok creators (18–34 years, mixed gender)
Yin, 2025	Personalization, user experience, and ethical concerns	Douyin	Mixed methods (literature review, survey)	Not mentioned
Mariana C. H., 2025	Algorithmic “information loop” and interest solidification	TikTok	Mixed methods (quantitative survey, data analysis)	General TikTok users (no demographics mentioned in abstract)
Gao et al., 2023	Echo chamber effects and group polarization	Douyin, TikTok, Bilibili	Social network analysis	298,762 users (age and platform-specific breakdowns)

*Source:* Compiled by the author, based on the literature analysis

Despite more convenient tools, students demonstrate persistence and adaptability and develop creative techniques that either reinterpret algorithmic stimuli or resist them (Herman, 2023; Simpson, Semaan, 2021). These techniques are characteristic of individuals who are confronted with decisions made by platforms and seek other alternatives to maintain creative productivity.

Given the contradictions and difficulties, which unfortunately cannot be addressed through a literature review alone, a thematic analysis was chosen, which allows for the scrutiny of subjective experiences embedded in the social environment (Braun, Clarke, 2006). After a detailed analysis of student stories, the the-

matic analysis reveals a tension between digital forces (such as algorithmic content and artificial intelligence tools) and the ways in which students experience creativity throughout their learning journey (by forcing themselves to concentrate and engage in artistic activity, or decide to try new experiences). Rather than seeking a single definition, this study highlights recurring patterns of creativity use, restriction and negotiation in the context of contemporary higher education. As a result, in order to better develop and maintain creative potential, each of them becomes an invitation to collaborate with students.

## 2. Methods

### 2.1. Research design

Reflexive thematic analysis (Braun, Clarke, 2006) was used to conduct this study, which examined participants' experiences and understanding of creativity in higher education institutions and creativity lectures. In fact, this method was chosen because creative abilities are not an internal mental capacity, but rather the result of social and cultural practices (Ummar, Saleem, 2020; Ingold, Hallam, 2021). It is necessary to emphasise that thematic analysis must be reflective in order to ensure that researchers' preconceptions do not overshadow the experiences and opinions expressed by participants (Morse, Mitcham, 2002; Patton, 2015). As Scriven (1991) points out, 'aimless' evaluation is also possible, which is particularly well suited to inductive research, where theoretical insights are derived from data provided by subjects rather than from preconceived insights. Therefore, thematic analysis is a research method which allows for the identification and interpretation of patterns or themes in a dataset, and often leads to new insights and conceptual understanding (Boyatzis, 1998; Thomas, 2020). As for more, it is a foundational method that helps researchers build transferable skills to conduct other types of qualitative analysis (Braun, Clarke, 2006). Thematic analysis requires reflexivity to ensure that researchers' preconceptions do not overshadow the emergence of participants' meanings (Morse, Mitcham, 2002; Patton, 2015). As Scriven (1991) notes, a 'goal-free' evaluation aligns particularly well with inductive research, in which theoretical insights are derived from data rather than imposed beforehand.

Recent studies have illustrated how thematic analysis can be used to develop conceptual models of complex social phenomena. For example, Naeem et al. (2023) constructed a conceptual model of consumer behaviour by applying thematic analysis across multiple analytical steps, including keyword and quotation selection, coding, theming, interpretation, and model development. What it shows is that systematic coding and iteration of refinement can build theory-informed

conceptual systems. Similarly, the present study applied a six-stage thematic analysis framework, and moved from familiarisation with the data through to the development of a conceptual model of creative experiences of international students.

The decision to adopt thematic analysis is also shaped by contemporary pressure on the lack of creativity in higher education. However, these challenges are not easily captured through quantitative measures alone, and it is necessary to reveal these challenges and possible decisions. Here, thematic analysis offers the flexibility to examine how such external pressures are reflected in students' narratives, revealing how creativity is *defined, constrained, and negotiated* in today's learning environment.

## 2.2. Participants and context

Fifteen international students (aged 17 to 25, a few did not want to indicate their age) from Pakistan, Ukraine, Germany, Nigeria, Italy, Morocco, Belgium and Lithuania were enrolled in a creativity-focused course at the VIKO University of Applied Sciences. All the participants volunteered to participate and provided informed consent. Anonymity was maintained by using pseudonyms.

### Data collection

Three focus group sessions (approximately 90 minutes each) were conducted using a semi-structured guide. The topics included definitions of creativity, whether creativity could be learned, classroom support and barriers, cultural/linguistic influence, and suggestions for teaching creativity. Sessions were audio-recorded and transcribed verbatim via Maqxda24 and coded with software and manuals, as shown in Figure 3.

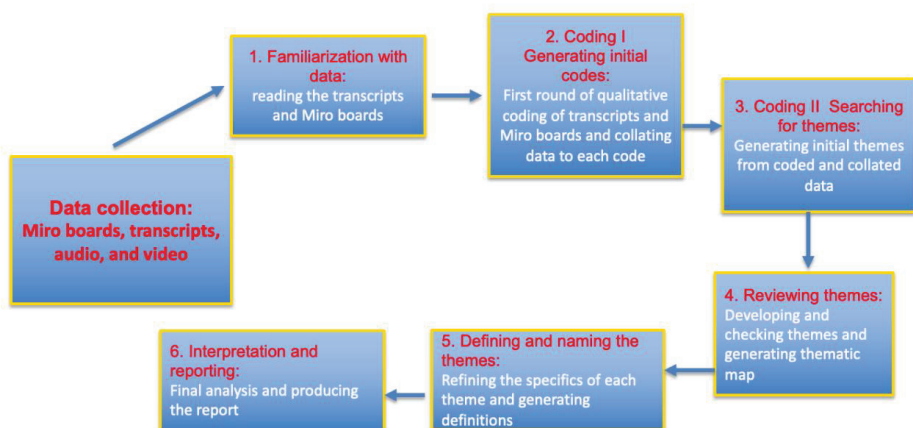


Figure 3. Diagram of data analysis steps

Source: Compiled by the author, based on Braun, Clarke, 2021.

## Data analysis

The transcribed material was analysed using the six-phase reflexive thematic analysis framework outlined by Braun and Clarke (2006). The process began with familiarisation, involving the repeated reading of transcripts to identify the initial impressions. In the coding phase, meaningful text segments were systematically labelled; this inductive approach allowed codes to emerge directly from the data (Boyatzis, 1998; Basit, 2003).

At the stage of development of the theme, codes were gathered into potential themes so that patterns of meaning amongst the participants (Thomas, 2020) could be identified. Then in a subsequent process of refining and reviewing, these themes were made coherent, and thus ensured analytical distinctiveness, whilst accurately reflecting the dataset. At the phase of defining and naming, themes were neatly grouped into higher-order categories, and their extent clarified yet further. At the final stage of reporting, the themes were linked back to the research questions, and situated amongst the broader body of literature.

At all times throughout the research, reflexivity was upheld to restrict the extent of the imposition of researcher bias (Morse, Mitcham, 2002; Patton, 2015). In accordance with Scriven's (1991) conceptualisation of 'goal-free' evaluation, the analysis was inductive, with an emphasis on participants' perspectives. Moreover, advice was taken from Naeem et al. (2023) regarding changing from direct quotations and key words to forming codes, themes, and the creation of a conceptual framework.

To increase credibility, writing memos and peer debriefing were used throughout the analytical stage, as well as using an audit trail to track analysis decisions. The nature of an iterative framework in thematic analysis allows for constant comparisons between raw data, coding themes and emergent themes, with the final product being a refined model *of developed creative identity and confidence*.

Following Braun and Clarke's six-phase process:

1. Familiarisation with the transcripts.
2. Initial coding (e.g. 'creativity as innate vs learnable', 'assessment clarity' and language constraints).
3. Theme development and review across all data.
4. Defining and naming five coherent themes.
5. Selecting compelling verbatim quotes for illustration.
6. Reflexive memoing, peer debriefing, and an audit trail ensured credibility.

### 3. Results

Five themes emerged from the analysis. Each theme is illustrated with anonymised verbatim quotes. Full excerpts appear in the codebook table below.

*Table 2.* Inductive thematic analysis framework of international students' creativity experiences

Quotations	Key words	Codes	Themes	Conceptual outcome
'A, a 21-year-old from Pakistan, shared his transformative experience in the business management department, which altered his belief in his capabilities.'	Transformative experience; self-belief; academic exposure	Personal growth	Personal & Environmental Contexts	Developed Creative Identity & Confidence
'T a 17-year-old from Ukraine, discussed how creativity was influenced by both his classes and personal insights.'	Influenced by classes; personal insights	Learning influence	Pedagogical Supports	Developed Creative Identity & Confidence
'F, 22, Germany, noted that creativity was shaped by classroom exposure and his personal experiences'	Class influence; personal experience	Academic shaping	Pedagogical Supports	Developed Creative Identity & Confidence
'O from Nigeria emphasised creativity as a means of self-expression, encouraged by educational courses'	Self-expression; encouraged by education	Expression through learning	Cultural-Linguistic Scaffolds	Developed Creative Identity & Confidence
'A, 20, Italy, suggested creativity is learnable but difficult, and tasks improved his creativity in small ways'	Learnable; task-based improvement	Incremental learning	Pedagogical Supports	Developed Creative Identity & Confidence
'G from Germany described the creativity class as providing the freedom to express without fear or judgment'	Freedom; no fear; safe space	Emotional safety	Pedagogical Supports	Developed Creative Identity & Confidence
'A, 25, Pakistan, believed creativity exists in everyone, but needs nurturing through practice'	Universal creativity; practice needed	Nurturing potential	Personal & Environmental Contexts	Developed Creative Identity & Confidence
'A, 23, Lithuania, reflected that creativity can be learned and is influenced by teaching and the surroundings'	Learned creativity; influenced by environment	Environmental shaping	Personal & Environmental Contexts	Developed Creative Identity & Confidence

Quotations	Key words	Codes	Themes	Conceptual outcome
‘S from Pakistan explained that creativity is both natural and learnable, polished by exposure.’	Natural and learned; exposure	Hybrid capacity	Defining Creativity	Developed Creative Identity & Confidence
‘A from Ukraine stated creativity is inherent, but develops through life experiences’	Inherent; develops through experience	Life-shaped creativity	Personal & Environmental Contexts	Developed Creative Identity & Confidence
‘K, 21, Belgium, argued that creativity is shaped by social reinforcement and a growth mindset’	Social reinforcement; growth mindset	Peer influence	Cultural-Linguistic Scaffolds	Developed Creative Identity & Confidence
‘O described group collaboration as energising, with supportive peers boosting creativity’	Group work; peer support	Collaborative learning	Cultural-Linguistic Scaffolds	Developed Creative Identity & Confidence
‘M explained that being introverted initially limited participation, but group tasks and flow methods encouraged contribution’	Introversion; adaptation; flow	Adaptive participation	Personal & Environmental Contexts	Developed Creative Identity & Confidence
‘N, 19, Lithuania, found that working with international peers broadened the horizons and enhanced creativity.’	International peers; broadened horizons	Inter-cultural influence	Cultural-Linguistic Scaffolds	Developed Creative Identity & Confidence
‘I described creativity as adventurousness: the confidence to try and believe tasks can be done’	Adventurousness; confidence	Risk-taking	Personal & Environmental Contexts	Developed Creative Identity & Confidence

Source: Compiled by the author, based on the results of the study

### 3.1. Defining creativity as boundless and personal

Students commonly described creativity in terms like ‘*life*’, ‘*unique*’, ‘*innovation*’, ‘*fun*’, ‘*freedom*’. One student noted: ‘*Creativity is something for one ... painting ... for another... new technologies*’ (*Creativity is something that everyone finds different, and for everyone, it is unique. For one, it’s painting; for another, it’s thinking and developing new ideas and new technologies*) (Transcript 2, Student 7, 00:02:35.8).

### 3.2. Creativity as learnable yet shaped by the environment

Many expressed that creativity exists in everyone but needs nurturing. Student A (25, Pakistan) said, '*We need to do practices to make it shine.*' Another noted: '*It depends on environment, the teachings you receive*' (Student A: *Well, in my opinion, creativity is everywhere and in everyone. However, we need to know how creative we are, and later we can shine it and build it through different practices, as we did a lot of practices here in the class that helped us. How can we be more creative? So, I guess everyone has their own creativity, but all we need to do is some practice to just make it shine and build it more*) (Transcript 3, S2, 00:00:45).

Student A (23, Lithuania): '*I think you can learn creativity for sure, but how creative you are depends on your surroundings and on the teachings you receive. So it all depends. But all of us have some creativity, and you can learn it*' (Transcript 3, S4, 00:01:23).

### 3.3. Pedagogical scaffolding and assessment as enablers or barriers

One student from Italy reflected: '*It was not easy ... but this task helped me a lot ... the subject improved me in little things.*' German participants valued supportive professors, who reduced their fear of judgment. However, unclear criteria may discourage bold attempts.

### 3.4. Cultural and linguistic influences on creative expression

Language affected confidence, and several participants resorted to *multimodal expression*. In one session, students collaborated through sketches and gestures. A Pakistani student contrasted rote learning back home with Lithuania's more experiential style.

### 3.5. Personal growth and self-discovery

Students described creative tasks as transformative: '*Discover the best part of yourself... it became fun and easy.*' One Nigerian student recounted shifting from a 'right-answer mindset' to openness: '*When things happen, I just believe it can be done.*'

The codebook in Table 3 rigorously classifies the major themes, subthemes and definitions that emerged from an analysis of international students' perspectives on creativity. Each theme is followed by representative quote anchors to show how students described their experiences.

As is seen in Table 3 and Figure 4, this illustrates thematic relationships, showing how pedagogical, cultural-linguistic and personal-environmental domains converge to foster the development of creative identity and confidence among international students.

Table 3. Codebook of factors influencing learning creativity

Theme	Subthemes	Definition	Indicators / Illustrative Quote Anchors
Defining Creativity as Personal	Freedom, uniqueness	How creativity is personally conceptualised	“Creativity is... painting... new technologies.”
Learnability vs Environment	Practice, environment	How creativity develops in relation to context	“Practices make it shine”; “depends on environment.”
Pedagogical Scaffolding & Assessment	Structure, feedback, risk	How teaching and evaluation support or hinder creativity	“Task helped me... improved me”
Cultural & Linguistic Influences	Expression modes, norms	How background influences creative expression	Multimodal communication; rote-vs-experiential learning
Personal Growth & Self-Discovery	Confidence, mindset shift	How creative tasks reshape self-perception	“Discover the best part of yourself”; “can be done”

Source: Compiled by the author, based on the results of the study

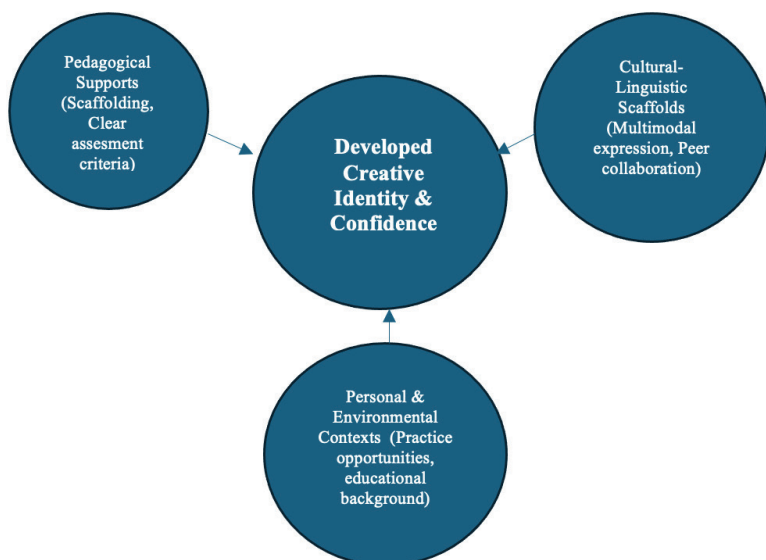


Figure 4. A thematic map of factors influencing learning creativity by international students

Source: Compiled by the author, based on the results of the study

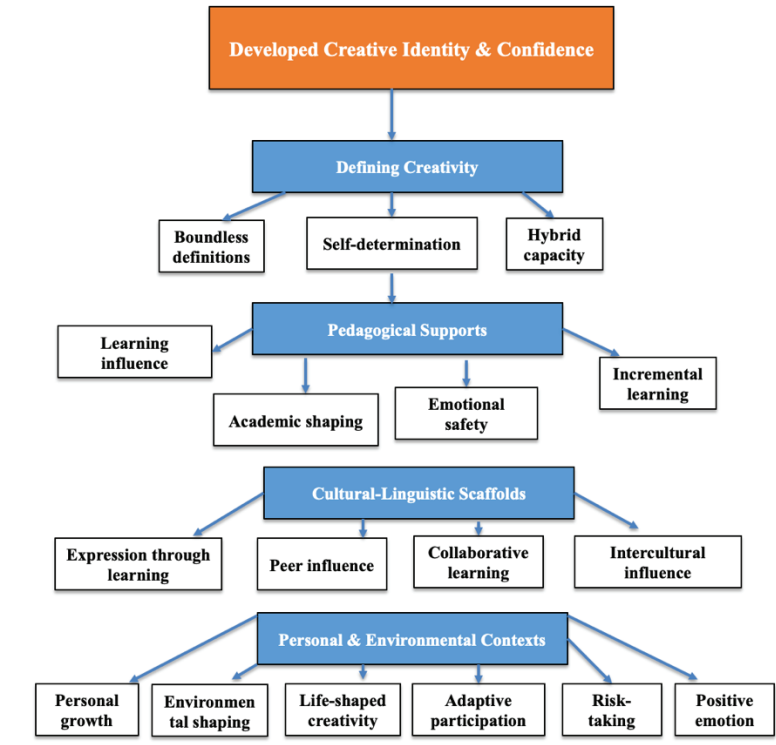


Figure 5. Themes and codes of international students' creativity

Source: Compiled by the author, based on the results of the study

Expanding upon this, Figure 5 is a systematic overview of the themes with corresponding codes. In this illustration, it is evident that the impact of creativity is framed as being conditioned by four interconnected domains: the nature of creativity, pedagogical guidance, cultural-linguistic support, and personal and contextual surroundings. These domains have corresponding dimensions, such as self-determination, emotional protection, intercultural conditions, and risk-taking, which cumulatively build creative identity and self-confidence.

#### 4. Discussion

This study addressed three main questions: *Can international students learn creativity at higher education institutions? What factors promote or hinder their creative development? How does the cultural and linguistic context shape their experience of creativity?* The results of our study confirmed that creativity can be learned, regardless of the culture from which the student comes. The study revea-

led that fostering creativity among international students is related to the diversity of their cultural context and language skills, and often to their families' attitudes towards their personal abilities or imposed attitudes. Pedagogical pillars such as tasks consisting of examples and formative feedback are particularly effective in encouraging experimentation, and echoing arguments for a process-oriented approach to creativity in education (Farid et al., 2025; Harada, 2023) was accepted as encouraging activities and assistance, despite the opinion that they often limit the possibilities for free creative thinking.

As it turns out, factors identified in the study that promote or hinder creative development are closely related to the teaching context. Although a supportive learning environment and clear expectations boosted students' self-confidence, frequent uncertainty about assessment limited their willingness to explore unconventional ideas and share them. These findings confirm that creativity thrives when freedom and structure are balanced.

Another important element of cultural and linguistic diversity is that it can be very beneficial to creative processes. In addition, the transition from a 'correct answer mindset' (Sternberg et al., 2024) to creative activity discovered during the study was associated with the development of personality and the identity (and sometimes with more conservative limitations originating from the family), emphasising creativity as a transformative element of intercultural learning.

Pedagogical implications emerge directly from these findings:

- Develop transparent rubrics that recognise both the process and the product in creative work.
- Incorporate scaffolded, multimodal tasks to accommodate linguistic diversity.
- Foster intercultural collaboration through structured roles and reflective activities.
- Balance open-ended exploration with clear guidance to nurture student confidence without creating an overload.

To conclude, creativity in higher education is understood as a dynamic, learnable process, shaped by pedagogical design in correlation with the cultural context. As has been found out, for international students in HE, creative growth arises not only from individual efforts but also from structured opportunities, families, and the ability to negotiate meaning, take risks, and integrate diverse perspectives.

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