INCLUSIVE

Student centred pedagogies

Edited by
Kallia Katsampoxaki-Hodgetts

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Kallia Katsampoxaki-Hodgetts

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Epilogue

Inclusive Student-Centred Pedagogies: Towards Reflexive and Transformative Higher Education

Kallia Katsampoxaki-Hodgetts

Inclusive Student-Centred Pedagogies (i-SCP) have emerged as a central framework for transforming higher education toward equity, participation, and shared responsibility in teaching and learning. Rooted in critical and sociocultural traditions (Freire, 1970; Vygotsky, 1978; hooks, 1994), this approach reframes inclusion not as a medical model for treating disabilities or an administrative requirement but as a social model of designing learning environments conducive to all students, and an ongoing pedagogical commitment to justice and epistemic diversity. In contrast to traditional, teacher-led paradigms, inclusive student-centred pedagogy positions students as active participants and co-designers of their educational experience (Cook-Sather, 2014; Bovill & Felten, 2016). It seeks to cultivate learning environments where difference becomes a generative resource for dialogue, reflection, and innovation rather than a challenge to be managed (Gay, 2018; Ladson-Billings, 1995).

The conceptual evolution of i-SCP within European higher education was substantially informed by the Erasmus+ **COALITION** project, which brought together institutions from Greece, Latvia, Romania, Spain, Sweden, and the Netherlands. Through peer observation, lesson redesign, and collaborative action research, faculty engaged in cycles of reflection that linked pedagogical theory to lived classroom practice (van der Rijst & Fernandez-Diaz, 2025; van der Rijst & de Jonge, 2025; Katsampoxaki-Hodgetts, 2025; Katsampoxaki-Hodgetts & Katsarou, 2025). The outcomes of this work demonstrated that sustainable change cannot arise from policy mandates or training packages alone but must grow from within institutional cultures through trust-building and shared inquiry (van der Rijst & de Jonge, 2025). In our Faculty Guide entitled Inclusive Student centred Pedagogies, the contextual flexibility that a process-based development approaches have to offer are apparent when each participating institution contributed contextually distinct yet methodologically aligned accounts of how inclusive pedagogical redesigns emerged and were sustained.

At the heart of the i-SCP model lies a commitment to accessible, reflective, participatory, multimodal, and process-based learning. Active learning strategies, such as problem-based tasks, collaborative projects, and experiential investigations, enable students to engage as meaning-makers and not merely recipients of knowledge

(Katsampoxaki-Hodgetts, 2023; Prince, 2004). Personalised learning recognises the diversity of pathways through which students construct understanding and encourages flexibility in content, pace, and mode of expression (Santangelo & Tomlinson, 2012). Similarly, culturally and linguistically responsive teaching validates the experiences and identities students bring to higher education, positioning these as central to knowledge creation (Gay, 2018; Ladson-Billings, 1995).

Assessment, long a barrier to inclusivity, is reconceptualised within this framework as *assessment for learning* rather than *of learning* (Boud & Soler, 2016; Carless & Boud, 2018). Drawing on the principles of Universal Design for Learning (CAST, 2018), inclusive assessment incorporates multimodal representation, formative feedback, and opportunities for self-reflection, allowing students to demonstrate learning in diverse ways. This model aligns closely with the notion of *sustainable assessment*, which cultivates learners' capacity to evaluate their own progress and to act autonomously in future contexts (Boud & Soler, 2016).

The broader benefits of i-SCP extend beyond academic performance. Empirical research underscores that inclusive environments foster belonging, engagement, and well-being, particularly among historically marginalised groups (Strayhorn, 2018; Thomas, 2012). When learners perceive that their voices matter, motivation and persistence increase, leading to higher achievement and retention (Freeman et al., 2014). Inclusive teaching also fosters psychological safety, empowering students to take intellectual risks and explore divergent perspectives (Edmondson & Lei, 2014). In this sense, inclusivity becomes a prerequisite for excellence: equitable participation generates richer discourse and more resilient academic communities.

However, achieving such transformation requires institutional commitment. As Hockings (2010) and Ryan and Tilbury (2013) note, inclusive pedagogy cannot be sustained without supportive policy, leadership vision, and adequate resources. Faculty development must be structured as a dialogic process that values educator agency and professional reflection (Gibbs & Coffey, 2004; Advance HE, 2019). Peer observation and collaborative inquiry, as demonstrated within COALITION, provide authentic contexts for critical self-study and collective growth. These collegial processes nurture a sense of professional belonging while anchoring inclusivity within the everyday fabric of university life (Brookfield & Preskill, 2012).

Technology also offers new affordances for inclusion when used thoughtfully. Digital and multimodal tools can extend participation, support differentiated instruction, and facilitate equitable access (Salmon, 2012; Reierstam, 2025; Katsampoxaki-Hodgetts et al., 2024). Yet, as Selwyn (2021) and Veletsianos and Houlden (2020) caution, the digital divide persists; thus, technological integration must always be guided by ethical awareness and universal accessibility principles.

Ultimately, inclusive student-centred pedagogy envisions higher education as a co-constructed enterprise that redefines the relationship between teacher, learner, and institution and disrupts educational systems. It challenges educators to reflect critically on their positionality, biases, and epistemological assumptions, while fostering environments where students can participate as equal partners in meaning-making and social transformation. In this view, i-SCP is not a static methodology but a living practice of collaboration, reflection and an ongoing negotiation between what teaching *is* and what it *ought to become* in democratic, just, and dialogic universities.

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Section I. Re-Framing Inclusive Education: Concepts, Histories and Policy Perspectives

This section establishes the theoretical and policy underpinnings of inclusion and its convergence with student-centred learning through cross-cultural, institutional, and democratic lenses.

Elena Marin; Kallia Katsampoxaki; Helena Reierstam; Mario de Jonge; Elia María Fernández-Díaz; Mārīte Kravale-Pauliņa; Meeri Hellstén; Eleni Katsarou; Liene Briede; Roeland van der Rijst *From Inclusive Framework to Democracy: An Evidence-Based Framework for Inclusive Student-Centred Pedagogies in Higher Education*

Brian Denman *Inclusive Education and Student-Centred Pedagogies: Defining and Demonstrating Intersections through Cross-Cultural Case Studies*

Penelope Engel-Hills *Students as Equal Partners: Integrating Service Learning into Community-Based Research*

Section I locates Inclusive Student-Centred Pedagogies within the wider intellectual and policy landscape of higher education reform. Marin et al. present *From Inclusive Framework to Democracy*, an evidence-based model that interlinks inclusion with democratic participation and institutional learning, demonstrating how faculty reflection across six European universities translates theory into sustainable practice. Brennan's *Inclusive Education and Student-Centred Pedagogies* extends this argument historically and cross-culturally, tracing how inclusion has evolved from a rights-based discourse to an epistemic stance that values diversity as a source of knowledge. Engel-Hills closes the section by situating students as civic collaborators in *Students as Equal Partners*, where service learning and community-based research become living enactments of equity. Together these chapters establish the philosophical and structural foundations of i-SCP: higher education as a participatory ecosystem grounded in justice, reciprocity, and democratic responsibility.

From Inclusive Framework to democracy:An evidence-based framework for inclusive student-centred pedagogies in higher education

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Abstract. Higher education programs should provide inclusive learning environments in which every student can academically thrive. But what are the key competences of university faculty to redesign the pedagogies in higher education? In this article we present the findings of an empirical study on university teachers' competences for inclusive student-centred pedagogies and on how it can play an important role in fostering professional growth and continuous improvement within the teaching role, ultimately enhancing the quality of higher education for a wide range of learners. In this study university faculty and students provided their understanding of what is needed for inclusive teaching at university level. The findings show five key dimensions of university faculty competences. These dimensions address the accessibility and resources provided by universities to support inclusion in both face-to-face and online learning environments. They also emphasize faculty commitment to adopting inclusive pedagogies and making curricular adjustments to support these approaches. In addition, the framework highlights the importance of promoting active learning and fostering student engagement, aiming to create an inclusive educational environment that accommodates diverse learning styles and needs. This IScP Competence Framework offers a structured and comprehensive guide to the knowledge, skills, and attributes of teaching faculty to effectively perform their teaching role in higher education. The framework contributes to the development of a more inclusive, flexible, and equitable educational system.

Keywords. Inclusive education; higher education; student-centred teaching practices; teaching competence; pedagogy.

I. INTRODUCTION

Inclusive student-centred pedagogies focus on creating learning environments where all students, regardless of their backgrounds, abilities, and learning preferences, have opportunities to succeed (Guberina, 2023). These pedagogies prioritize the active participation of students in the learning process and emphasize teaching approaches that respect and value the diversity in the student cohorts. In higher education, inclusive student-centred pedagogies are vital for fostering equitable and conducive academic environments, promoting diverse ways of learning and supporting the wide array of learners that institutions serve (Hoidn & Reusser, 2020; Mascolo, 2009). One of the key principles of inclusive student-centred pedagogy is the recognition that every student brings in a unique set of experiences, needs, and preferences to the classroom. This requires teaching faculty to adopt flexible teaching methods and provide diverse learning opportunities that cater to the strengths of each student (Wolfe et al., 2013; Marin, 2025). These methods may include collaborative group work, project-based learning, and interactive discussions, all designed to encourage active student engagement and critical thinking. Inclusive pedagogies also emphasize the importance of building an environment where students feel respected, supported, and valued (Jacobs & Renandya, 2019; Carrillo, 2024). This is achieved by fostering an inclusive classroom culture where students' diverse identities, including those related to culture, language literacies, gender, disability, and socio-economic background, are acknowledged and celebrated. University teaching faculty should actively work to eliminate barriers to participation, which could include addressing language challenges, mental health considerations, and the needs of students with disabilities (Le et al., 2018; Meyer & Land, 2005). As such, democratic curricula are not limited to the transmission of knowledge; they create spaces where students participate as co-authors of meaning, shaping the direction of their own learning through dialogue and collaboration.

Another aspect of inclusive student-centred pedagogy is the use of varied assessment methods (Otukile-Mongwaketse, 2018). These assessments should be flexible and designed to evaluate a wide range of student capabilities. By offering different types of assessments, such as written papers, oral presentations, group projects, and digital portfolios, students are given multiple ways to demonstrate their learning (Fung et al., 2022). This

flexibility helps to level the playing field for all students, particularly those who might struggle with traditional testing formats. Furthermore, inclusive pedagogies in higher education require continuous professional development for faculty members (Moriña, 2022). University teaching faculty must be equipped with the knowledge, tools, skills and attitudes to implement inclusive practices effectively (Fornauf & Erickson, 2020). This may involve attending workshops, engaging in peer learning, or participating in training programs that enhance their understanding of inclusive education principles and teaching strategies. Incorporating inclusive student-centred pedagogies into higher education not only enhances the learning experiences of individual students but also contributes to the overall academic success and well-being of diverse student populations. As such, inclusive education is not only a moral and ethical responsibility but also an important strategy for improving the quality and accessibility of higher education. But although the relevance for incorporating inclusive student-centred pedagogies in higher education is clear, many university teaching faculty still struggle to take steps to include all students in their teaching and that is why it is necessary to have a framework that can tackle all aspects of inclusivity (Marin & van der Rijst, 2025).

II. Benefits and challenges of inclusive student-centred pedagogy in higher education

The benefits of inclusive student-centred pedagogy are far-reaching and transformative. One of the most significant advantages is the creation of equitable learning opportunities. By addressing the varied needs of students, teaching faculty can ensure that all learners, regardless of their background or abilities, have the tools and support necessary to succeed. This approach helps to dismantle barriers often faced by marginalized groups in education, promoting fairness and inclusivity (Awang-Hashim & Valdez, 2019; Bakogiannis et al., 2024; Danowitz & Tuitt, 2011). Students who feel included, respected, and empowered in their learning environment are more likely to stay engaged, participate actively, and remain committed to their academic success then students who feel less or even not included. Inclusive student-centred pedagogies create opportunities for students to interact with the course content meaningfully and engage with peers from diverse backgrounds and identities (Keiler, 2018). This sense of belonging fosters high levels of motivation and retention, particularly among students who otherwise may feel alienated or underrepresented in the educational settings. In fact, embedding democracy in pedagogy means moving beyond tokenistic participation to authentic engagement, where diverse voices are not only heard but actively shape curricular decisions.

Among others, Florian (2015), Loreman (2017), and Dewsbury et al (2022) all demonstrated in their studies that inclusive pedagogies lead to improved students' learning outcomes. When faculty adapt their teaching methods to accommodate diverse learning preferences, abilities, and needs, students are more likely to grasp complex concepts, retain information, and apply their knowledge effectively. Active learning approaches, promoted by inclusive pedagogies, encourage deep understanding and critical thinking, both of which are essential skills in a rapidly changing world (Lucas & Spencer, 2017). Inclusive pedagogies also prepare students for success in a diverse workforce. By interacting with peers from various cultural, social, and academic backgrounds, students develop essential skills such as cross-cultural communication, empathy, and collaboration, skills highly valued in the global job market. Additionally, students with diverse learning needs are better equipped to navigate inclusive and flexible environments where they can contribute their unique strengths.

While the benefits of inclusive student-centred pedagogies are clear, their effective implementation requires overcoming several challenges (Zipf et al, 2025). These may include resistance to change from teaching faculty or institutions, insufficient resources for developing accessible teaching materials, and the need for ongoing faculty training. Moreover, creating truly inclusive learning environments requires careful attention to the intersections of students' identities and the potential barriers they may face (Capper & Frattura, 2008). For instance, students with disabilities may require specialized accommodations, while those from marginalized communities may need additional support to feel included, respected and part of the academic community. Institutions must be committed to addressing these challenges through policy changes, faculty development, and resource allocation.

Overall, inclusive student-centred pedagogies are crucial for fostering an educational environment that is equitable, engaging, and supportive for all learners. By embracing diversity, encouraging active participation, and providing flexible learning opportunities, teaching faculty can create inclusive classrooms where every student has the chance to succeed. To realize the potential of these pedagogies, higher education institutions should invest in faculty support and development, curriculum redesign, and the resources to support diverse student populations. Not least, inclusive student-centred pedagogies contribute to a more just, dynamic, and high-quality educational experience, preparing students for both academic success and responsible participation in a diverse global society. However, to develop and evaluate these faculty support we first need to understand which competences teaching faculty actually need to develop these inclusive student-centred pedagogies.

III. Study design & Methodology

A mixed-methods design was employed to investigate the competences faculty require for inclusive teaching in higher education, drawing on both the perspectives of teaching faculty and students across European universities in Greece, Latvia, the Netherlands, Romania, Spain, and Sweden. Mixed-methods approaches are particularly suited to the study of complex educational phenomena because they allow for the integration of breadth and depth, quantitative trends alongside qualitative insight (Creswell & Plano Clark, 2018; Tashakkori & Teddlie, 2010).

The study began with online questionnaire surveys administered to teaching faculty (n = 264) and students (n = 548). The survey instrument consisted of 46 statements rated on a five-point Likert scale, ranging from strongly agree (1) to strongly disagree (5). In line with established survey design principles (Cohen, Manion, & Morrison, 2018), items were grouped around four key domains considered central to inclusive teaching: (1) accessibility and resources, (2) teaching faculty's willingness, (3) curricular adjustments, including programme design, teaching methods, and assessment methods, and (4) faculty attitudes and concerns. The questionnaire was designed to capture both institutional contexts and individual perspectives, thereby identifying the expected competences of faculty engaged in inclusive student-centred pedagogies and highlighting areas for professional development.

To complement and extend the survey findings, semi-structured interviews were conducted with a sub-sample of faculty and students. Semi-structured interviews were selected as they enable a balance between comparability across participants and the flexibility to probe emerging

themes in depth (Kvale & Brinkmann, 2015). Interview data provided nuanced insights into faculty competences, expectations, and perceived challenges regarding inclusive teaching practices. Thematic coding was applied to the qualitative dataset, with categories developed inductively to reflect participants' accounts while being informed by the survey domains (Braun & Clarke, 2006).

Participation in all phases of the study was voluntary, informed consent was obtained, and anonymity was guaranteed. The research protocol received approval from the relevant institutional review boards, ensuring adherence to ethical principles of confidentiality, participant protection, and responsible data use (BERA, 2018).

By triangulating quantitative and qualitative data, five overarching dimensions of faculty competence were identified. The surveys mapped the distribution of views across contexts, while the interviews elaborated on sub-themes, providing concrete examples and reflections that enriched the interpretation of the findings. Such triangulation not only enhances the validity of the results but also provides a more holistic understanding of inclusive teaching competences in higher education (Denzin, 2012).

IV. Results

The triangulation of the data provided five interrelated dimensions of faculty competence in the IScP Competence Framework (see Figure 1). The dimensions address faculty commitment to adopting inclusive pedagogy and implementing curricular adjustments to support these approaches, the affordances faculty perceive for accessibility and resources offered to support inclusion in both face-to-face and online teaching, and the importance of promoting active learning and fostering student engagement through design of teaching and assessment methods, all aiming to create an inclusive educational environment that accommodates for diverse learners. The IScP Competence Framework offers a guide describing the knowledge, skills, and attitudes teaching faculty need to provide inclusive teaching. By aligning inclusive student-centred pedagogies with democratic principles, higher education can cultivate agency, criticality, and responsibility, preparing students to act as informed citizens within and beyond the university. This framework sets expectations for teaching staff, ensuring they are well-prepared to address the diverse needs of their students and provide quality academic instruction. Furthermore, the framework is a guide to develop professional development initiatives and support the continuous growth of teaching faculty, contributing to the overall enhancement of higher education quality. The five main categories are listed in Figure 1.

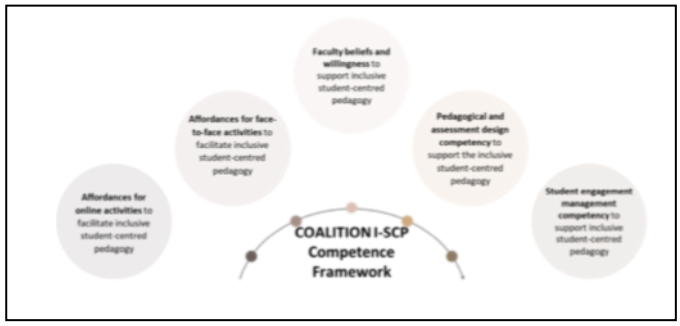

Figure 1. COALITION IScP Competence Framework

The IScP Competence Framework provides a multifaceted description designed to support and implement inclusive pedagogies in higher education. The framework includes several key components, starting with affordances teaching faculty perceive of the accessibility and resources universities provide in both face-to-face and online learning environments. These resources are crucial, but even more crucial is that faculty perceive them as useful for enabling equitable access to education and ensuring that all students, regardless of their backgrounds, identities, or abilities, can fully participate in academic activities.

The framework underscores the commitment of teaching faculty to adopt inclusive pedagogical approaches and assessment methods. This involves integrating teaching methods that recognize and value diversity, fostering a learning environment where every student feels acknowledged and supported. To facilitate this, the framework advocates for curricular adjustments that align with inclusive principles, ensuring that course content, assessment methods, and learning objectives are adaptable and relevant to a wide range of learner profiles. A final aspect of the framework is the focus on promoting active learning and student engagement. This encourages teaching faculty to employ strategies that empower all students to take an active role towards their learning, enhancing their motivation, participation, and overall academic experience. By addressing diverse learning needs, the framework aims to create an inclusive educational environment where every student can thrive.

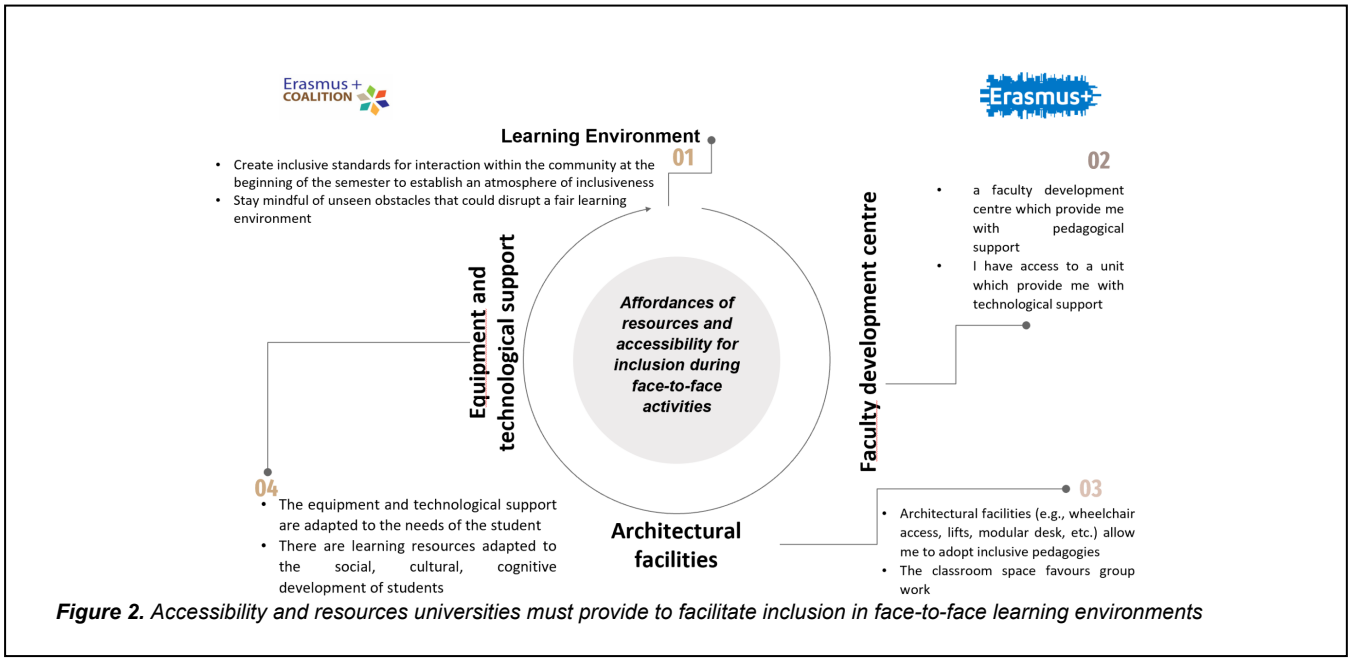

Figure 2. *Accessibility and resources universities must provide to facilitate inclusion in face-to-face learning environments*

The IScP Competence Framework is a guide to equip teaching faculty with the competences to deliver inclusive student-centred teaching. As teaching faculty need to continuously develop on the dimensions of the framework, it fosters a culture of continuous improvement and collaboration, ensuring that higher education institutions are well-positioned to meet the evolving needs of a diverse student population.

The first dimension of the IScP Competence Framework focuses on university teachers' affordances of resources and accessibility, emphasizing the critical role the resources play in fostering an inclusive educational environment during face-to-face activities. This dimension is divided into four main categories, each addressing distinct aspects of accessibility and resource provision. Together, they create a holistic approach to facilitating inclusion for all students, regardless of their abilities or backgrounds. The first category, the learning environment, is seen as foundational to promoting equity and a sense of belonging. This category highlights the importance of establishing inclusive standards for interaction within the university community from the beginning of the semester. Faculty and students should collaboratively define these standards to foster a welcoming and respectful atmosphere. Additionally, teaching faculty are encouraged to remain mindful of unseen obstacles, such as mental health challenges or socioeconomic barriers, that might disrupt the learning experience. By proactively addressing these challenges, university faculty can ensure a fair and supportive environment where all students can thrive. The second topic, the faculty development support targets the need for inclusive teaching. Establishing dedicated Teaching and Learning Centres or Faculty Development Centres is crucial because these centres should provide a wide range of support, including professional development workshops, resources for inclusive pedagogies, and access to units offering technological and educational research support. By fostering continuous professional growth, faculty members can stay updated on best practices in inclusive education and adapt to the evolving needs of their students. Also, the physical infrastructure of universities plays a pivotal role in enabling inclusion. This category emphasizes the importance of accessible architectural designs, such as wheelchair ramps, elevators, modular desks, and adjustable furniture, to accommodate students with physical disabilities.

Beyond accessibility, classroom spaces should be designed to support collaborative learning and group work, fostering a dynamic and interactive educational experience. Universities must prioritize the creation of flexible and inclusive physical spaces that align with the principles of universal design. Not least, accessibility relies on technology, making it essential for universities to provide equipment and technological support tailored to the diverse needs of their students. Learning resources should be culturally, socially, and cognitively relevant, ensuring that they meet students where they are in their educational journey. Adaptive technologies, such as screen readers, voice-to-text software, and other assistive tools, should be readily available to support students with disabilities.

The second dimension of the IScP Competence Framework focuses on the affordances of resources and accessibility to facilitate inclusion in online learning environments. While similar to the first dimension, which emphasizes inclusion in face-to-face activities, this dimension shifts the perspective to the digital realm. It identifies four key categories essential for fostering inclusivity in online education:

First, technological facilities and equipment play a foundational role. Universities need to ensure that their infrastructure supports inclusive pedagogical practices. This includes providing high-quality audio and video capabilities, robust connectivity, and user-friendly digital tools that enable group work and collaboration among diverse students. By addressing these technological aspects, teaching faculty can create a more equitable and effective online learning experience.

Second, eLearning resources must be thoughtfully designed to reflect the social, cultural, and cognitive diversity of the student body. These resources should enable all students to engage actively and collaborate as equal partners in the learning process. Adaptable and culturally responsive materials are vital for creating an inclusive digital learning space where everyone feels represented and supported.

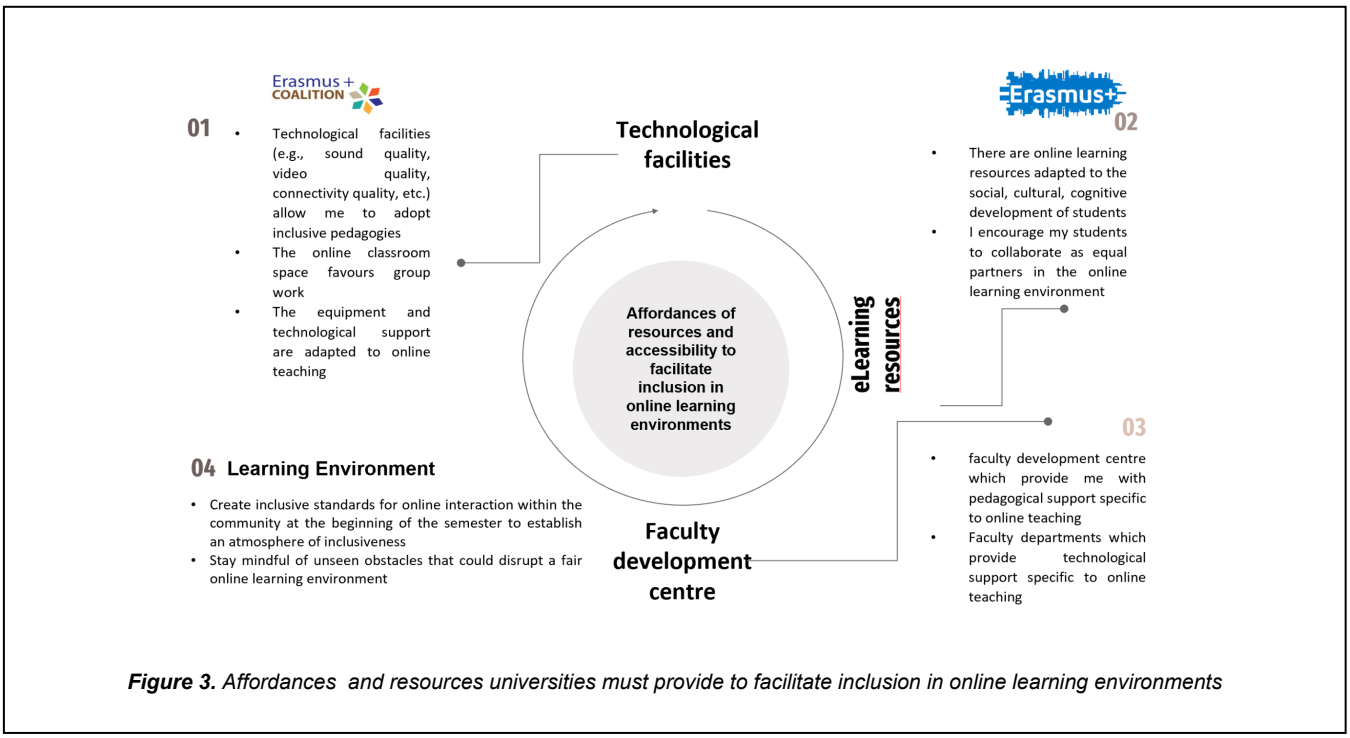

Figure 3. *Affordances and resources universities must provide to facilitate inclusion in online learning environments*

Third, the role of a faculty development center is pivotal in equipping teaching faculty with the pedagogical and technological expertise required for effective online teaching. Such centers should provide targeted training, workshops, and resources to help faculty members integrate inclusive teaching strategies into their digital classrooms. This support ensures that instructors are well-prepared to address the unique challenges of online education while fostering inclusivity.

Finally, the learning environment in online settings must be intentionally designed to uphold inclusive standards. At the beginning of each semester, clear guidelines for respectful and equitable interaction within the virtual community should be established. This proactive approach helps create an atmosphere of inclusion and addresses potential unseen barriers that may hinder fairness or accessibility in the online learning experience.

By addressing these four categories, the second dimension of the IScP Competence Framework aims to create a robust foundation for inclusive online education. It empowers universities to leverage access to technology and resources effectively, ensuring that all students, regardless of their backgrounds or abilities, can thrive in a digital learning environment.

A. Curricular adjustments to support inclusive student-centred pedagogies

When addressing the third dimension of the IScP framework - teaching faculty' willingness to support inclusive pedagogies - four main categories emerged, each emphasizing key values that teaching faculty must actively cultivate to foster an inclusive learning environment.

First, the framework highlights the importance of embracing students' diverse ways of learning. This requires teaching faculty to acknowledge and value the varied approaches students take to process information, solve problems, and engage with academic content. Teaching faculty are encouraged to adopt flexible teaching strategies that cater to different learning styles, such as visual, auditory, kinaesthetic, or experiential learning preferences, ensuring that every student has the opportunity to succeed.

Second, the framework emphasizes encouraging perspective-taking in the classroom. This involves creating a safe and respectful environment where students can openly discuss cultural, social, or other differences without fear of judgment. By fostering non-judgmental dialogue, teaching faculty help students develop empathy and a broader understanding of diverse viewpoints, ultimately promoting a more inclusive and harmonious classroom dynamic.

Third, the framework underscores the significance of accepting and embracing diversity within the classroom. This includes recognizing the unique identities, backgrounds, and experiences that each student brings to the learning environment. Teaching faculty are called to challenge biases and stereotypes while celebrating diversity as a strength that enriches the educational experience for all.

The fourth dimension of the IScP Competence Framework emphasizes the importance of making purposeful curricular adjustments to support inclusive pedagogies. This involves rethinking and reshaping various aspects of the curriculum to ensure that teaching accommodates the diverse needs of all students while fostering equitable participation and engagement. This dimension consists of two broader topics focusing on teaching methods or on assessment methods. Here in the text we describe them separately, but these methods and assessment should be closely aligned in the overall curriculum.

One relevant element of this dimension is designing learning activities that align with inclusive objectives. Teaching faculty are encouraged to adapt course learning goals and teaching methods to reflect the principles of inclusivity. This includes creating activities that promote active participation from all students, tailoring approaches to address varied learning styles and needs, and ensuring that every learner feels valued and supported.

Collaboration within the learning process is another essential focus. Developing group-based activities encourages students to work together as part of an inclusive learning community. These activities, such as peer feedback and discussions that challenge assumptions and biases, help cultivate a classroom environment built on mutual respect, understanding, and shared growth.

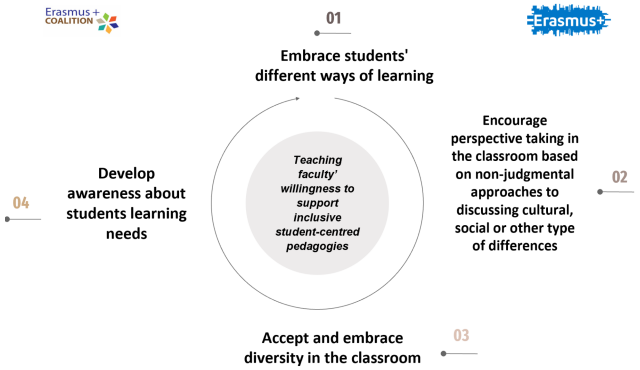

Figure 4. *Teaching faculty' willingness to support inclusive pedagogy*

Furthermore, the curriculum should integrate diverse modes of learning, including oral, written, online, and face-to-face methods, to ensure accessibility for all students. Empowering students to take ownership of their learning is also central to this dimension. By progressively fostering autonomy and student agency, teaching faculty enable students to plan, manage, and direct their academic work, helping them build confidence, independence, and a deeper sense of responsibility for their educational journey. Also, reflecting on democratic teaching practices highlights the ethical obligation of educators to dismantle structural inequalities that limit participation, ensuring that all learners, especially those from marginalised groups, can contribute on equal terms.

Finally, continuous professional development is a cornerstone of this dimension. Teaching faculty are encouraged to participate in ongoing training and reflective practices to expand their skills and strategies for inclusive teaching. This commitment to professional growth ensures that teaching practices remain responsive to the evolving needs of diverse student populations and aligned with the latest advancements in inclusive education.

B. Curricular adjustments to support inclusive pedagogy from an assessment perspective

Building upon the principles outlined in the earlier dimensions, the second element of the fourth dimension of the IScP Competence Framework emphasizes the role of assessment in fostering inclusive pedagogy. This dimension focuses exclusively on the ways in which assessments can be designed, implemented, and adapted to support diverse learners effectively. Teaching faculty are encouraged to develop a nuanced understanding of how inclusive assessments can empower students and reflect their unique strengths, learning styles, and needs.

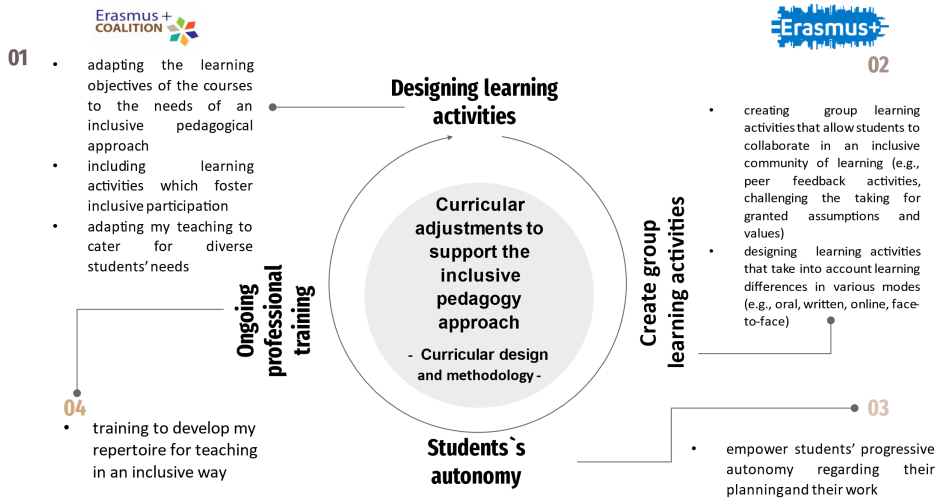

Figure 5. *Curricular adjustments to support the inclusive pedagogy approach*

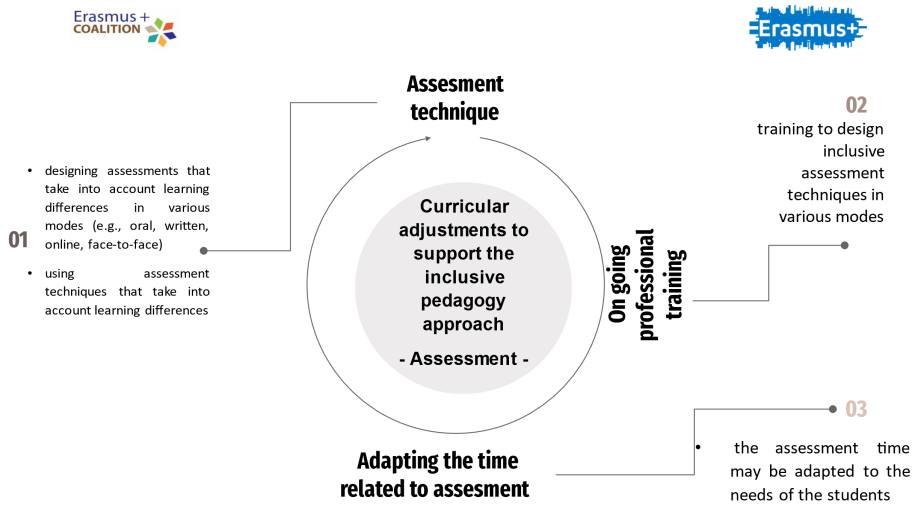

Figure 6. *Curricular adjustments to support the inclusive pedagogy approach from an assessment perspective*

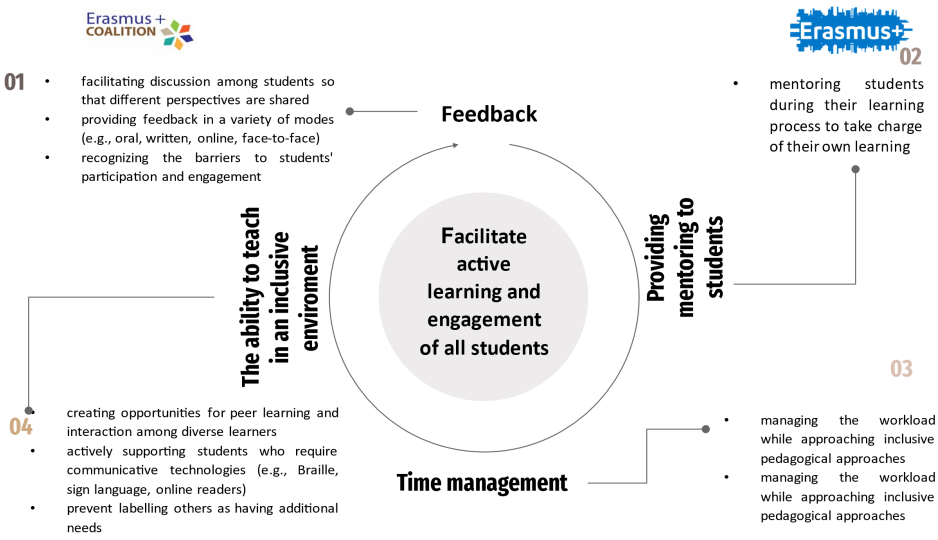

Figure 7. *Facilitation of active learning and engagement for all students*

Central to this dimension is the ability to employ diverse assessment techniques. Teaching faculty are expected to design assessments that accommodate a variety of learning differences, ensuring that all students have equitable opportunities to demonstrate their knowledge and skills. This involves offering assessments in multiple formats, oral, written, online, and face-to-face, and tailoring these methods to align with individual student needs. Such flexibility not only recognizes the varied ways in which students process and communicate information but also enhances their chances of success.

The final dimension of the IScP framework (Fig.7) emphasizes the engagement of all students, ensuring that every learner is provided with the tools and opportunities to participate meaningfully in the educational process. This involves fostering an inclusive environment where students can engage with the content, collaborate with peers, and receive the support they need to succeed.

A key aspect of this approach is the provision of constructive and timely feedback. University faculty are encouraged to create spaces for students to engage in discussions where various perspectives can be shared, enriching the learning experience. This feedback is not limited to one format but is offered in diverse ways, such as oral, written, online, and face-to-face, ensuring that it reaches all students in a manner that suits their learning preferences. At the same time, teaching faculty should be aware of and address the barriers that may prevent students from participating fully in discussions or activities, such as language difficulties or lack of confidence, thus creating a more inclusive space for dialogue and exchange.

Mentoring plays a central role in fostering active engagement. Teachers are encouraged to guide students throughout their learning journey, helping them take responsibility for their own progress. By fostering self-directed learning, teaching faculty support students in developing critical skills for lifelong learning, empowering them to set goals, seek solutions, and reflect on their own learning strategies.

Another important element is time management, which is crucial in supporting both students and teaching faculty in adopting inclusive pedagogical practices. Teachers must manage their workloads efficiently while ensuring that their approaches are flexible enough to accommodate diverse learning needs. This includes adapting their teaching methods and schedules to allow for the necessary time and resources to support all students, particularly those who require additional assistance.

Furthermore, the framework highlights the importance of creating an inclusive teaching environment where students can learn from and with each other. By facilitating peer learning opportunities and encouraging interaction among diverse learners, teaching faculty foster a sense of community and mutual support. This not only benefits students academically but also helps them build important social skills. Additionally, teachers are urged to actively support students who rely on specific communicative technologies, such as Braille, sign language, or online readers, ensuring that they have equal access to learning materials and activities. This approach helps eliminate the risk of labelling students as having "additional needs," promoting a mindset that views all students as valuable contributors to the learning environment.

By focusing on these areas, the IScP framework aims to create a dynamic and inclusive learning environment where every student, regardless of their background or abilities, can thrive.

Conclusions

The IScP Competence Framework offers a comprehensive and integrated approach to inclusive teaching in higher learning, addressing key aspects of accessibility, resources, pedagogical practices, assessment methods, and student engagement. By focusing on accessibility and resources, the framework ensures that both face-to-face and online learning environments are designed to accommodate the diverse needs of all students. It emphasizes the importance of university faculty to provide physical and technological infrastructures that promote inclusion, such as accessible classrooms and adaptive technologies, as well as offering resources that are culturally and cognitively relevant to students.

Furthermore, the framework highlights the significance of faculty members' commitment to inclusive pedagogy. Teaching faculty are encouraged to adopt flexible teaching strategies, recognize and value diversity, and create a supportive and respectful classroom environment that fosters open dialogue and empathy. This emphasis on inclusive pedagogy extends to the curriculum, where adjustments are recommended to ensure that learning activities, group work, and assessments reflect the diverse ways in which students engage with content. The framework also emphasizes the necessity of providing diverse and flexible assessment methods that allow all students to demonstrate their strengths and abilities equitably.

A critical aspect of the framework is its focus on active learning and student engagement. By promoting mentoring, time management, constructive feedback, and peer interaction, teaching faculty are equipped to create an inclusive learning environment that empowers students to take agency and ownership over their learning. This approach fosters a collaborative community where students are not only able to engage with academic content but also support one another in their educational journeys. Additionally, the framework advocates for the active inclusion of students who rely on specific communicative technologies, ensuring that all students have equal access to resources and opportunities for learning.

Ultimately, the IScP Competence Framework provides a holistic approach to inclusive teaching in higher education, equipping both teaching faculty and institutions with the tools and strategies needed to create an equitable and supportive learning environment. Democratic curricula reinforce the idea that education is a public good, fostering solidarity, equity, and shared responsibility for the collective pursuit of knowledge. By fostering inclusive pedagogical practices, adapting the curriculum, and ensuring that all students have the resources and opportunities they need, the framework aims to enhance the quality and accessibility of higher education for diverse learners, empowering them to succeed academically and personally.

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Students as equal partners: Integrating service learning into community-based research

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Abstract— **It is acknowledged that building social awareness is essential in health professions education to prepare students as socially conscious practitioners. Service-learning is an approach that can facilitate civic consciousness, with activities that provide relevant community engagement and promote social responsibility through inclusive, student-centered learning.**
Integrating service-learning into community-based research projects allows students to respond directly to community issues, fostering deep social understanding and practical application of their professional knowledge. This learning environment links community members, students, academics and researchers in collaborative partnerships that address community needs and promote transformative social change. In this way, students are key partners in environments where respect and shared responsibility are a natural component of decision-making and mutual learning.
A case study from the health sciences demonstrates the benefits for students, including the development of critical thinking, leadership and civic engagement when they participate in authentic learning as active contributors. Importantly they appreciate the benefits of meaningful skills transfer to the community partners while they in turn learn from the shared experience.
This pedagogical approach emphasizes learning in real contexts where advantages accrue to all partners. Students enhance their knowledge and gain deeper social awareness. This positions them to be practitioners who are better prepared to tackle complex global challenges as socially responsible professionals.

Keywords—social awareness, social consciousness, health professions education, collaborative partnership, mutual learning

I. Introduction

Health professions education (HPE) is increasingly called upon to prepare students not only with technical skills and clinical competencies but also with social awareness. This refers to the ability of students to recognize and critically reflect on the social, cultural and economic circumstances of communities and individuals to be able to navigate complex, diverse, and inequitable health systems. The authors, Hansen et al. (2023) made the important point, from a study conducted at six South African universities, that the development of social awareness and socially conscious health practitioners is essential to the challenge of addressing systemic inequalities and the social determinants of health. This understanding enables the promotion of equity in the delivery of healthcare, and it fosters empathy and responsiveness in professional practice.

Service-learning has emerged as a powerful pedagogical approach that has grown in use across all disciplines in higher education through a process that integrates meaningful community service with instruction and reflection (Eyler & Jyles, 1999). At South Africa universities, the role of engaged learning, including service-learning, was emphasized for the potential to address social inequalities and promote social transformation in higher education (Bawa, 2014). It is evident that service-learning enriches the student learning experience, teaches civic responsibility, and strengthens communities.

In the context of HPE, service-learning provides students with opportunities to engage with real-world health challenges in a way that enhances social awareness through student involvement in meaningful service to communities. This approach fosters empathy, critical thinking, and a commitment to social justice. The article by Seifer (1998) is foundational in linking service-learning with health professions education, emphasizing the role of community-campus partnerships for fostering socially responsive healthcare professionals.

For service-learning to address relevant challenges within any given community there is the need to identify appropriate activities for the students to engage in. At a University of Technology in Cape Town, South Africa, the opportunity was recognized to use findings from an existing community-based research (CBR) project as a way to identify suitable service-learning projects for health science students. This was possible because the methodology for this CBR was structured on the principles of community-based participatory research (CBPR) described by Israel et al. (2013) as involving equitable partnerships at all stages of the research process. Community partners in this study were the drivers of identifying the research problem/s and key contributors all the way through to the dissemination of the findings, making the research not only scientifically valid but also socially relevant (Israel et al., 2013). This aligned well with our thinking to structure CBR, with all the necessary ethical and professional principles and approvals in place (Campano et al., 2015) as well as appropriate community informed consent in place (Shore et al., 2008) into HPE programs. Of note, the incorporation of service-learning into the CBR process reinforced the collaborative and ethical foundations of the approach.

This paper sets out to present the integration of service-learning into the longitudinal design of the community-based research project as a means of building social awareness and civic consciousness among health professions students. Civic consciousness in this context is an individual's sense of responsibility to actively promote social justice and

community well-being. Within health professions education, civic consciousness includes the development of ethical agency, and a commitment to addressing societal needs through professional roles. The paper continues by highlighting the value of collaborative partnerships between students, community members, academics, and researchers, and presents a case study from the health sciences to illustrate the transformative potential of this approach.

II. Theoretical Foundations of Service Learning in HPE

Service-learning in HPE is well rooted in experiential learning theory, with particular links to the work of David Kolb. In Kolb's model a cyclical process of learning through concrete experience, reflective observation, abstract conceptualization, and active experimentation is emphasized (Kolb, 1984). This model aligns well with the goals of HPE, where students must integrate the theoretical knowledge of their discipline with practical, real-world applications. For example, students may learn the theoretical underpinnings of health disparities in the classroom and then through engagement with underserved communities they are able to apply this knowledge, reflect on their experiences and adapt their understanding as well as adjust future practices from the learning gained in this process.

Paulo Freire's critical pedagogy further enriches and informs the theoretical foundation of service-learning. Freire advocated for education as a practice of freedom, emphasizing dialogue, reflection, and action described by him through the term of "praxis" (Freire, 2000). In service-learning, praxis is realized when students engage with communities, not merely as learners but as co-creators of knowledge, critically reflecting on social structures and contributing to transformative change. Freire's concept of critical consciousness is particularly relevant in this conversation as it involves developing an awareness of social, political, and economic challenges and taking action against oppressive elements in the realities of the daily life of people in particular environments. In HPE, this translates into students becoming aware of health disparities, inequities and challenges and using their professional skills to address these issues collaboratively. Freire also stressed the importance of conversation and dialogue in education, such that learners and educators engage in mutual learning, describing a reciprocal process in which both students and community members contribute to and benefit from shared knowledge creation. There is an emphasis on co-learning, respect for local knowledge, and the disturbance of traditional hierarchies between academic and community expertise. This principle can be extended to service-learning environments where students and community members learn from each other through their experiences in a structured shared activity.

Together, Kolb's experiential learning and Freire's critical pedagogy provide an appropriate framework for service-learning in HPE. They support a pedagogical approach that is active, reflective, and socially engaged, preparing students to be not only competent professionals but also agents of social change.

III. Integrating Service-Learning into Community-Based Research

The integration of service-learning into community-based research (CBR) offers a platform for students to engage with local societal challenges identified through the research. This because a driver in CBR is that it is inherently participatory and seeks to uncover and address issues identified by the community itself. When service-learning is embedded within CBR, students are positioned to respond directly to community-defined needs, enhancing both the relevance and impact of their learning through service-learning projects identified by the research.

This approach fostered a deeper understanding of the social determinants of health and encouraged students to apply their academic knowledge in meaningful ways. It also promoted the development of civic responsibility and ethical engagement, as students learned to navigate complex social contexts and collaborate with diverse persons, groups and communities.

For example, students worked with a local non-Governmental organization (NGOs) to design an intervention for social workers to address a particular community health concern that arose because of the COVID-19 pandemic, thereby applying their classroom knowledge to an authentic community setting.

Importantly, service-learning within CBR is not a one-way transfer of knowledge. It is a reciprocal process where students learn from community members, and communities benefit from the skills and insights of students. This mutual exchange creates a rich educational experience while strengthening community capacity (Soska et al., 2010).

The common theme therefore is the existence of collaborative partnerships as central to both effective service-learning and CBR. These partnerships involve students, faculty, researchers, and community members working together towards shared goals (Engel-Hills et al., 2023). Such collaboration is grounded in mutual respect, shared decision-making, and a commitment to equity. Ethical considerations are paramount in CBR, including obtaining informed consent, respecting cultural norms, and ensuring that research outcomes are shared with the community in accessible formats. These practices reinforce the principles of equity and respect that underpin service-learning and CBR.

The recent research of Ozano and colleagues (2024) has identified seven core competencies essential for equitable partnerships in community-based participatory research (CBPR). These core competencies include the ability to establish an inclusive environment that allows for the exchange of knowledge, democratic and equitable leadership, being prepared and ready for action, and the ability to disseminate research findings in ways that promote community identity and ownership. These competencies were developed through an iterative, collaborative process by researchers, community partners and activists across a number of countries. In this way adhering to the core competences can ensure that all partners contribute fairly and that power dynamics are addressed and balanced.

Mutual learning is a key outcome of these partnerships and student are able to gain insights into community realities, while community members are able to access new knowledge and resources. Faculty and researchers benefit from the contextual expertise of community partners, leading to more relevant and impactful research and learning.

Compared to traditional research models, CBR emphasizes the co-creation of knowledge and shared leadership, which enhances trust and sustainability of the research interventions.

IV. Collaborative Partnerships and Mutual Learning

At the center of effective service-learning and CBR are collaborative partnerships. These partnerships involve students, faculty, researchers, and community members working together toward shared goals. The foundation os such collaboration is mutual respect, shared decision-making, and a commitment to equity. The research of Ozano et. al., (2024) introduced above, identified seven core competencies needed for collaborative equitable partnerships CBR. The application of these competencies ensures that all partners have the chance to contribute meaningfully because attention is given to addressing the power imbalance that can interfere with establishing equitable relationships in the partnership. Mutual learning is another key outcome of these partnerships alluded to above. Where collaborative partnerships are established according to the core principles the mutual learning spaces allow all partners, i.e. students, community members, faculty and researchers to benefit from the engagement over time. Such partnerships also support the decolonization of research and education by valuing local knowledge and promoting shared authority in the learning process. This aligns with the broader goals of HPE to produce practitioners who are socially aware, culturally competent, and committed to health equity (Hansen et. al., 2023).

V. Case study: community-based research in the South Peninsula, Western Cape

This case study draws from a CBR initiative conducted in a peri-urban coastal community in the South Peninsula of the Western Cape, South Africa which is a country marked by extreme inequalities. The community in this case faces multiple social challenges including high levels of unemployment, personal safety concerns, widespread substance abuse and daily experiences of hunger and violence in many households.

The study was informed by the findings of a qualitative inquiry into how educators in HPE at a University of Technology understand Paulo Freire's concept of critical consciousness (Hansen et al., 2023). Data was gathered from focus groups followed by more in-depth individual interviews with academics in a broad range of programs in the health sciences. The analysis of this data revealed that while no definitive single understanding emerged, educators consistently emphasized the importance of a socially responsive curriculum. They stressed the necessity of maintaining a focus on clinical competence but acknowledged that a socially responsive curriculum is the foundation for developing health care practitioners who are critically conscious and socially aware and who place the patient at the center of care.

The CBR project focused on investigating the social determinants of health using a co-creation of living knowledge approach (Engel-Hills & Ibsen, 2025). Participants in the study resided in the selected coastal community and recruitment was enabled through existing community structures and networks with the assistance of a research assistant appointed from the community. Purposive sampling was applied to identify adults who had been involved in one or more resistance efforts (Ibsen et al., 2023) and who were willing to share their personal lived experiences of structural violence. The process allowed everyone who wanted to participate to do so with a natural endpoint being reached during the life of the study.

The data collection methods included the use of microhistory to explore the lived experiences of participants and reflexive thematic analysis to interpret community narratives (Engel-Hills & Ibsen, 2025). Students participated in service-learning activities in the community that included such projects as offering emergency first aid responder training, school-based activities, work in a community garden and health education initiatives. Students were treated as equal partners in the service-learning projects arising from the research process and were recognized by the community members as experts who could learn from engagement with the community. Their reflections revealed significant personal and professional growth and one student noted, *'I played things over in my head to understand how it is for…*' illustrating the development of critical reflective thinking. Another shared that, '*It was unbelievable to me that I could organize this and take charge when necessary'* highlighting growth in their leadership and organizational skills. Students also expressed appreciation for the civic engagement saying things such as that it was, *'... so amazing to be part of teaching my professional skill to people in this community'* and *'I will be forever grateful to the participants in this community because I learnt so much from them'*. The authenticity of the experience was transformative and as stated by one student, '*I am much more ready to work in health care now'; 'I know it is about the team and doing this together for our people'*.

The key takeaway from this case study is that service learning in real-world community environments is beneficial to all parties in the partnership. Students gained deeper social awareness and enhanced professional readiness, while the community benefited from the meaningful engagement and knowledge exchange in the context of mutual respect. This pedagogical approach prepares students to address complex health and social challenges as socially responsible professionals. Further expansion of this model could include the longitudinal tracking of student outcomes and community health indicators to assess the existence of a sustained impact.

VI. Concluding Comments

Service-learning, when integrated into community-based research, offers a transformative educational experience for students studying in the health professions. Grounded in experiential and critical pedagogy, service-learning fosters civic consciousness, critical thinking, and leadership. The collaborative characteristics of service-learning ensure that students, educators, and community members engage in mutual learning and shared responsibility.

The case study from the South Peninsula of the Western Cape in South Africa, illustrates how service-learning can be authentically embedded in HPE to address needs identified through CBR. This brings the students, researchers and academics into a close collaborative partnership that includes the community at the time the service-learning project is initiated. Students emerge from these experiences not only with enhanced skills and competence but also with a profound understanding of the social determinants of health and the importance of equity in healthcare. This ultimately impacts on clinical competence and how students perceive and connect with the diverse patients they will meet while on clinical practice placements in the workplace.

As global health challenges become increasingly complex, the need for socially conscious practitioners is more urgent than ever. Service-learning provides a pathway to develop professionals who are equipped to lead with empathy, engage with communities, and advocate for transformative social change. Community-based research has been shown to be a suitable mechanism to identify authentic community needs that would benefit from a student-led service-learning intervention.

There are possible limitations of a case study approach for the integration of service-learning into community-based research. These include the potential for biases that may arise from the close involvement of the researchers, that the case study tells the story of a single community and transfer to other environments must be done with care and that measuring the impact of service-learning on both the students and community members can be challenging. Yet, this methodology is simultaneously a strength because it allows for deep exploration over an extended period. The incorporation of service-learning into the CBR process is considered worthy of further research to explore further examples where it would be appropriate and to find sustainable models for the integration of service-learning across diverse educational contexts. Further research could also ask pertinent questions about how to evaluate short, medium and long-term benefits for both students and communities.

V. Acknowledgment

The community partners, students, academics and researchers are all acknowledged for their collaborative contribution to activities related to community-based research and service-learning reported on in this paper.

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Inclusive Education and Student-Centred Pedagogies: Defining and demonstrating intersections through cross-cultural case studies

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Abstract. Historically, terms like exclusion, segregation, assimilation, and integration have undermined, if not hindered, the development of inclusive education. The widespread belief that inclusive education is solely about addressing the needs of marginalised communities is both misguided and limiting. Similarly, comparing inclusive education with mainstream education can be demeaning and reductive. There is a pressing need to redefine what inclusive education truly encompasses. This study aims to provide a broader, more inclusive definition of the concept by examining the evolution of inclusive education in various, though isolated, cultural contexts across the globe. Through a comparative lens, an attempt will be made to explore the intersections between inclusive education and student-centred pedagogies. The development of student-centred pedagogies has gained renewed attention among educators worldwide. With a growing emphasis on educational achievement as seen in large-scale studies, international comparisons have prompted educators to investigate why some educational systems outperform others. Drawing on primary and secondary data collected from diverse contexts, this study explores how inclusive education can be both method and outcome.The study will conclude by highlighting the critical importance of the instructor's role and the alignment between content, pedagogy, and assessment in supporting the unique needs of each student.

Key words: inclusive education, student-centred pedagogies, learner-centred instruction

I. Setting the Stage: Inclusivity and Inclusive Education

When exploring aspects of education such as inclusive education, the initial focus often turns to how inclusivity is represented in educational planning and policy, and how these inform practice. Typically, educational planning and policy are interdependent and mutually reinforcing. However, the line between them is not always easy to draw inferences. Both are future-oriented and serve as guides for action, yet they differ in terms of temporality and organisational function.

Policy tends to be continuous, evolving over time through regulations, directives, guidelines, and legislation. In contrast, planning is more periodic and strategic, often designed to meet specific aims within a defined timeframe. As Colebatch and Hoppe (2018) argue, educational policy should rest on a foundation of coherence, hierarchy, instrumentality, authority, expertise, and order.

When inclusive education is treated either as policy or practice at the national level, its implementation is often cited as one of its greatest challenges.

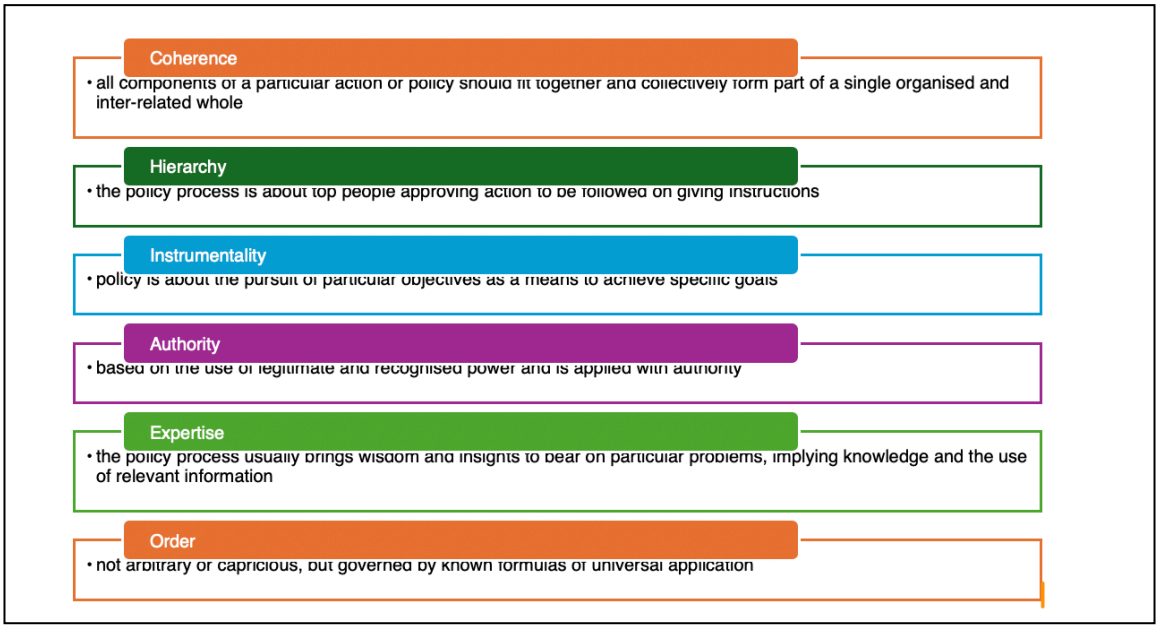

FIGURE 1 *COLEBATCH & HOPPE'S ASPECTS OF EDUCATIONAL POLICY EASE OF USE*. MODIFIED FROM COLEBATCH AND HOPPES 2018.

In many cases, policy plans are viewed as overly optimistic or insufficiently grounded in practical realities. Successful implementation requires coherence---engagement across all organisational levels with adequate expertise and sustained commitment. It also depends on hierarchy---clearly defined roles, responsibilities, and authorisation. Yet, implementation mechanisms are frequently criticised for being overly rigid, complex, or disconnected from practical contexts (instrumentality). At times, policy assumes a level of authority that governments cannot enforce, or expertise that implementers do not possess. Effective implementation also relies on order---cooperation between federal, state and local agencies, which is not always achieved.

As a result, evaluations of inclusive education policies often reveal a gap between intention and outcome. Judgments concerning the success or failure of such policies---measured in terms of goal attainment, needs addressed, or value-for money (including efficiency and effectiveness)---frequently fall short. Expectations are high, but results are often unexpected or misaligned, contributing to perceptions of policy failure or non-compliance.

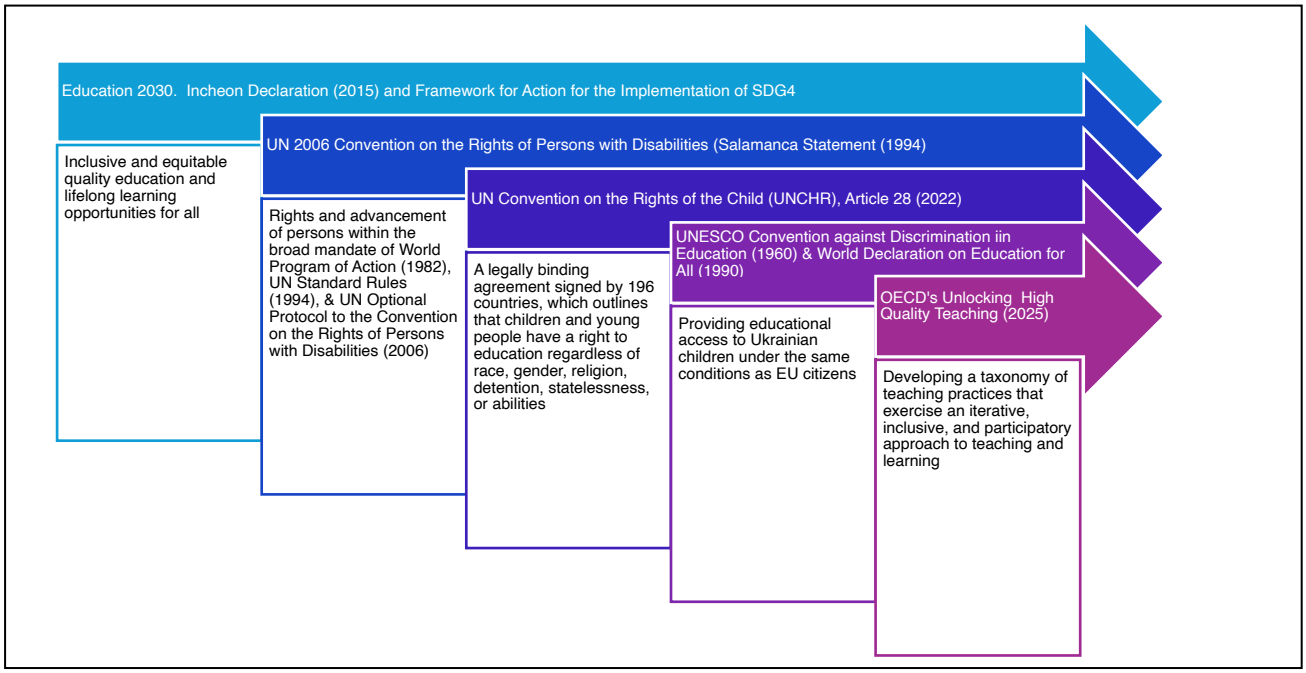

Figure 2: *Recent Multilateral Policies Treating Inclusive Education Worldwide*

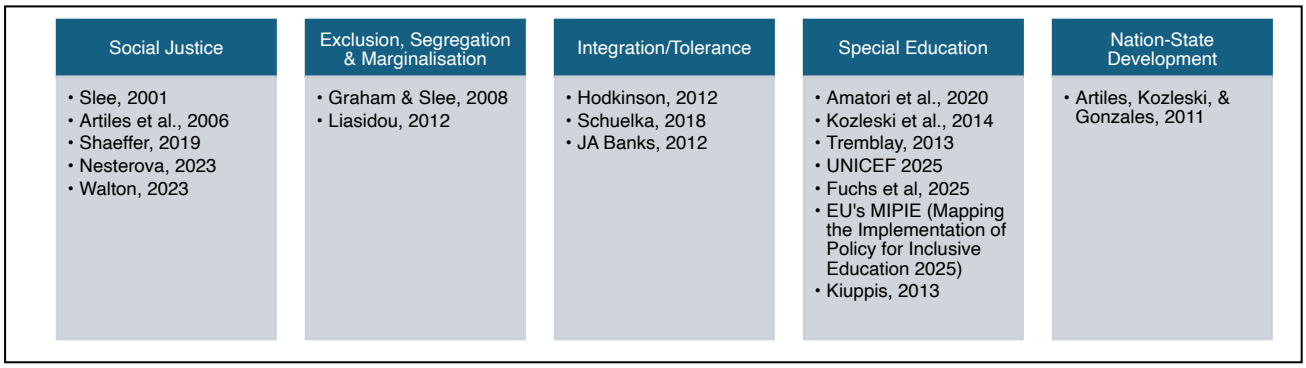

Figure 3: *Recent Definitions of Inclusive Education according to Scholars in the Field*

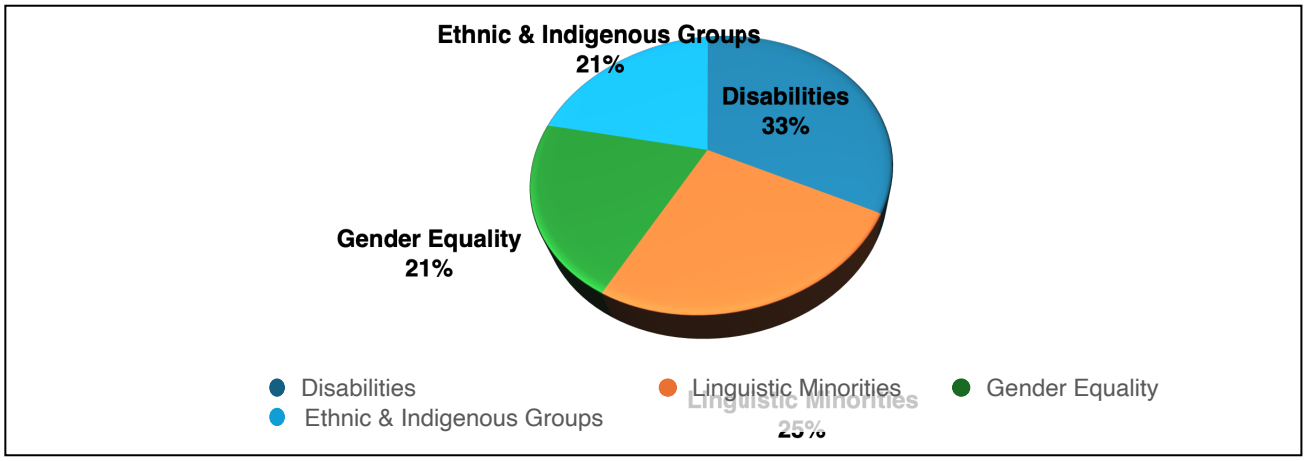

Figure 4: *UNESCO's SDG4 Disaggregation of Inclusive Education towards 2030. Modified UNESCO data for visualisation*

II. Deconstructing Inclusivity and Inclusive Education

The term "inclusive" has been part of the English language since at least the 15th Century, originally meaning "including everything or everyone." Etymologically, it derives from the Latin includere---to shut in or enclose---which itself comes from in- (in) and claudere (to shut). At first glance, claudere ("to shut") appears contradictory to the modern sense of "inclusivity," which connotes openness and acceptance.

This tension is only apparent. In Latin, the prefix shapes the direction of the action: include (in + claudere) means to shut in---to contain or embrace within a boundary---whereas exclude (ex + claudere) means to shut out. Thus, the concept of inclusivity originates not from a lack of boundaries, but from a deliberate act of drawing them broadly to encompass rather than exclude. To include is still to define what is "inside," and by implication, what lies "outside." The ethical challenge of inclusivity lies in expanding the boundary of the "inside" to affirm and integrate diverse experiences and identities.

Over time, the term "inclusive" acquired emotional and political dimensions, becoming associated with social justice, access, and equity, hence the evolutionary and contemporary meanings of the term. The derivative term "inclusivity" came to denote a conscious stance: welcoming difference, avoiding discrimination, and actively integrating varied perspectives, backgrounds and approaches.

However, inclusivity as a characteristic differs from inclusive education as a concept. Inclusivity implies an attitude or orientation; in other words, a value system. Inclusive education, by contrast, is a structured pedagogical and policy framework, historically rooted in educational theory, social movements, and the mainstreaming of students with disabilities, which started in the late 20th Century.

While both concepts share a philosophical lineage, inclusive education tends to refer specifically to the integration of students with diverse learning needs into mainstream classrooms. It now extends further to ensure equitable access to education for all learners, regardless of ability, language, ethnicity, or socioeconomic background.

A. Towards Equity: Policy, Planning, and Practice

Realising inclusive education requires the coordinated alignment of policy, planning, and pedagogy. According to UNESCO's Global Education Monitoring Report, approximately 244 million children and youth are currently out of school, with projections suggesting that 84 million will remain so by 2030. Compounding the issue, over 40% of students who begin primary education do not complete secondary school, and only two-thirds of the global population have access to the internet (World Bank, 2025).

In response, countries such as Finland and New Zealand have implemented inclusive education frameworks that proactively integrate marginalised learners (see Finland's Right to Learn Programme and Educational Inequities for Marginalized Students in New Zealand). Meanwhile, international multilateral organisations such as the OECD and World Bank have undertaken large-scale surveys and analyses to map the landscape of educational inclusion, generating data to inform global policy decisions.

Top-down policy approaches reflect binding multilateral legal instruments with non-binding declarations that have influenced nation-state laws and policies for implementation and strategy. National definitions continue to embrace a wider scope of included peoples (e.g. those with disabilities), but national definitions are more tightly defined within contexts (e.g, targeting specific groups), age and education levels (with particular reference to ECE), dropouts (out-of-school kids), and integrated services (technology, special needs teachers, learning materials, educational environment).

Curricular content can either promote or obstruct inclusive education and democracy within a nation-state or society. Using different curricula of differing standards for some groups hinders inclusion and creates stigma. Examples include different testing standards (Han versus Chinese ethnic minorities in China), internally displaced populations in Bosnia and Herzegovina, linguistic minorities, indigenous peoples, and gender. As in the USA, the current dismantling of DEI initiatives in 2025 is undermining affirmative action to the detriment of many marginalised groups.

Vast differences between curriculum objectives and learning outcomes reflect large gaps in educational disparities, particularly inequities between rural and urban, able and disabled, literate and non-literate, privileged and non-privileged. Curricular content and textbooks can perpetuate stereotypes, and quality assessments are fundamental to an inclusive education system. Large-scale, cross-national summative assessments tend to exclude students with disabilities and/or learning difficulties; fit for purpose is necessary to draw on low-stake formative assessments but testing continues to be essential for comprehension and competence-based learning.

Teaching in inclusive education reflects the normative idea to teach all willing and able. Teachers may not be immune to social biases or stereotypes, but do need training on class diversity, levels of ability (inability), and capability(ies). Teacher training in inclusive education requires how best to teach for all learners, use of instructional techniques, technology usage, and classroom management, and aligning curricular content with assessment.

B. Segregation, Integration, Inclusion

Most laws and policies differ on whether students with disabilities should be in mainstream schools or not. According to the GEM Report (2020), there were major disparities found in regions of the world (see figure below) and the caveat that educators and education systems still do not know how to identify (let alone test) learners with learning disabilities. The challenge to identify what constitutes student with disability remains mute.

Oceania appears to be the hallmark for inclusion but with emphasis placed on disability-inclusion, according to the GEM 2020 report.

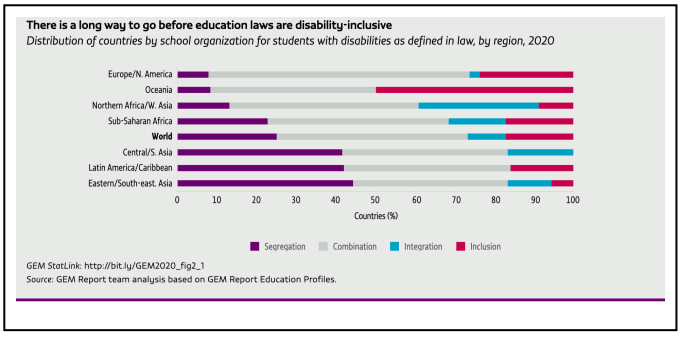

Figure 5: Segregation, Integration, and Inclusion of Students with Disabilities According to Region (2020)

C. *Champions of Inclusive Education*

There are notable scholars from the 20th Century who have set a benchmark in what we now understand as inclusive education. Maria Montessori (1870-1952) contributed to inclusive education, as she developed the Montessori Method, which emphasised individualised learning for all children regardless of ability or background. She was of the belief that by freeing a child's potential, one transforms the child into the world. Lev Vygotsky (1896-1934) developed Zones of Proximal Development (ZPH), which contributed to a sociocultural theory of learning, arguing that learning is inherently social and should be accessible to all children through scaffolding educational development and social interactions, regardless of ability. Vygotsky's work lay the groundwork for differentiated instruction. Paulo Freire (1921-1997) wrote Pedagogy of the Oppressed, which emphasised that education should be both liberating and dialogical. Freire advocated for the empowerment of those less fortunate (marginalised) and the value of both educational experience and knowledge as functions that bring about conformity or freedom. John Dewey (1859-1952) promoted experiential learning and democracy in education, seeing schools as communities as instrumental in reflecting democratic values such as collaboration, equity, and active participation for all. His contribution to inclusive education was what the best and wisest parent wants for his own child. That the community must mirror what the parent wants for all of its children.

In more contemporary times, Michael Fullan's contribution emphasised "deep learning" and system-wide coherence, stressing the importance in building six global competencies---citizenship, character, collaboration, communication, creativity, and critical thinking. From an inclusive education lens, Fullan sees pedagogy as the "driver of and for equity", shifting curricular content to pedagogical engagement, personalisation, and relevance. He supports Seely-Brown's notion of students as co-creators of knowledge with the instructor as the orchestrator of knowledge creation. Core "global" competencies tend to flourish in inclusive education settings only if systems are designed to value all learners with all abilities, and if systems do not reflect a deficit-model of teaching and learning (see Saleebey, Rapp, & Weick, 1997; Seligman, 1999). John Goodlad championed the idea of schools as moral and civic spaces. For Goodlad, education was not simply a matter of transmitting knowledge, but cultivating democratic values, social justice, and moral reasoning, linking Goodlad's work to that of Dewey. According to Goodlad, inclusive education is inherently democratic education; expanding participation and giving voice to all learners. Darling-Hammond's work reflected more on Vygosky in that she advocated for evidence-based practices (e.g. scaffolding, formative assessment, culturally-relevant pedagogy) to help diverse learners access content and knowledge more rigourously. Darling-Hammond saw teachers as equity agents, educators that were not only prepared to teach in their subject matter, but how to teach inclusively. Her contribution to inclusive education was how teachers should be seen as adaptive experts, and that systems should be sustained by strong leadership and equity values.

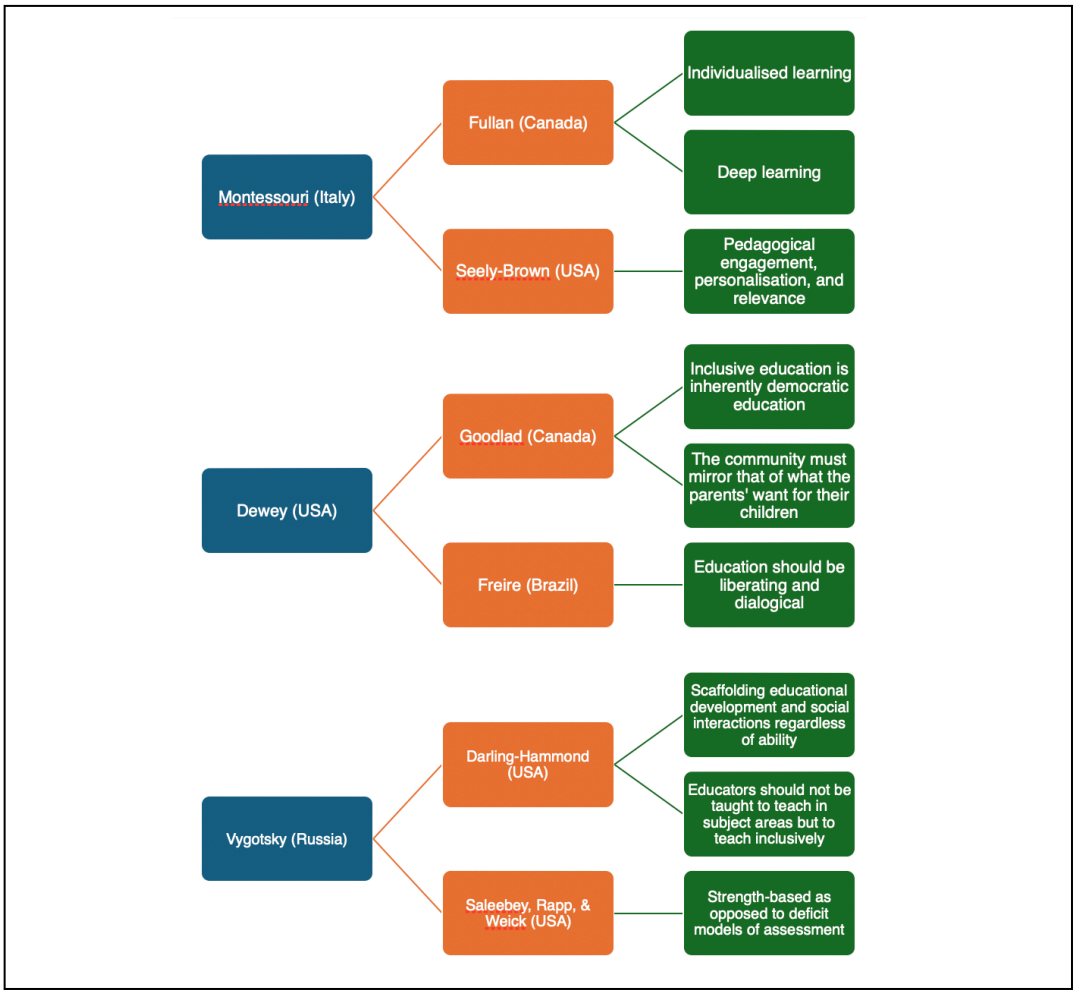

Figure 6: *Inclusive Education "Idea" Diffusions Across Philosophies and Cultures*

Educational planning and policy thus play a critical role in shaping inclusive education. Seminal scholars---Michael Fullan, John Goodlad, and Linda Darling-Hammond, among others----have demonstrated the power of strategic leadership and systemic reform in achieving equitable learning environments, but from the diffusion of ideas from 20th Century scholars. This suggests that there is a history of inclusive education that is ever-evolving. Their work underscores that inclusivity, when embedded in the core structures of education systems, is not merely an aspiration but a tangible outcome of deliberate and sustained commitment.

II. Competencies, Skills, and Literacies: A Clarification

In the discourse of 21st Century education, specifically applied to inclusive education, competencies, skills and literacies are often used interchangably, yet they represent distinct constructs. Skills are context-specific abilities, procedural or technical, but not always reducible to right/ wrong answers. In inclusive education, skills pertain to accessibility and participation---for example, creativity, communication, analytical thinking, problem solving, and/ or reflective thinking. Competencies are broader constructs. They integrate knowledge, attitudes, and values, enabling learners to navigate complex and evolving contexts. Competencies encompass multiple skills and require judgment, self-awareness, and adaptability. In inclusive education, competencies underpin the learner's ability to work across differences and engage in ethical action. Literacies, however, refer to socially-situated practices. In other words, meaning-making through symbols, media, and discourse. Although expansive and multimodal, the term "literacy" is sometimes critiqued for being too metaphorical or detached from structural change. In inclusive education, an overemphasis on literacy risks placing the onus on the learner to adapt, rather than on the system to transform.

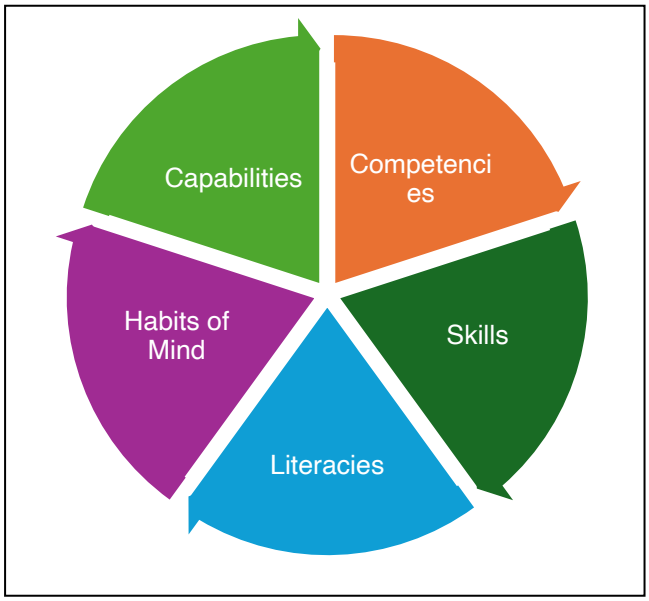

Figure 7: *A Disaggregation of Competencies, Skills, Literacies as Applied to Inclusive Education*

To bridge this gap, some educators have turned to concepts like "habits of mind" (e.g. Costa & Kallick, 2009) or "capabilities" (see Sen, 1999; Nussbaum, 2000), which capture both internal dispositions and external functioning, offering a more holistic lens for inclusive education.

III. The Study: Navigating Nordic Academic Culture

In a recent initiative funded by Nordpath (2020-2023), five Nordic universities collaboratively designed a MOOC titled "Intercultural Communicative Competencies." The course was divided into three micro-units: Navigating Academic Culture, The Role of Language in Intercultural Communication, and Reflecting on Culture(s). The aim was to internationalise (green internationalisation) the curriculum and assess whether specific academic skills were culturally, institutionally, or disciplinarily situated.

In the 2024 iteration of Navigating Academic Culture, approximately 30 students participated across the five institutions. Skills were assessed through student profiles, online discussion board particpation, and formative essays. These assessments revealed patterns in both conscious and subconscious skill development and demonstrated that culture, context, and pedagogy siginficantly influence how academic competencies are manifested.

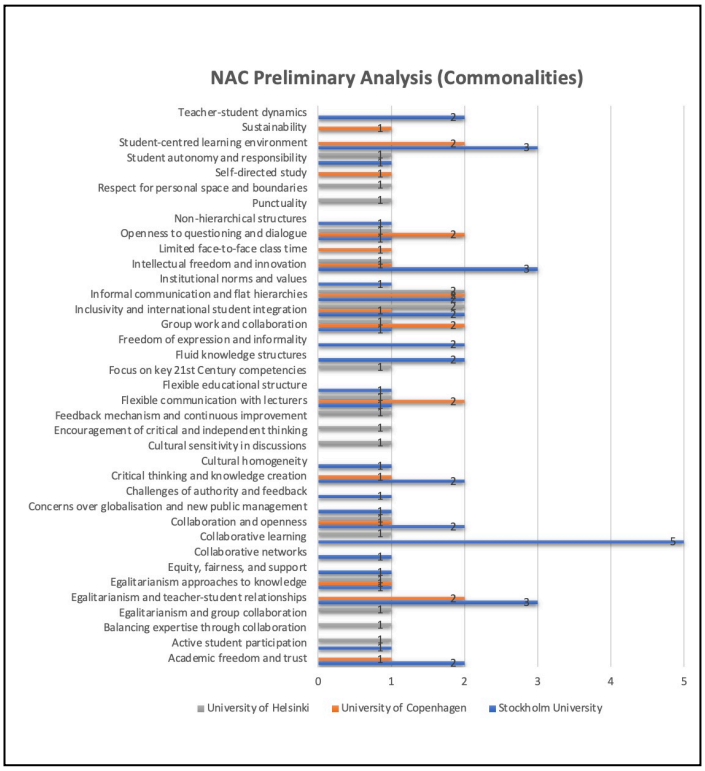

Figure 8: *NAC Preliminary Analysis of Skills Assessment and Development (2024)*

Crucially, the course employed student-centred pedagogy and feedback loops that invited learners to con-construct knowledge. The findings help to illustrate 1) a proof of concept in formative skill assessments and 2) a pedagogy emphasising responsiveness, reflection and relational learning can help identify skill and competency development in diverse educational contexts.

IV. Conclusion: Towards an Inclusive Future

Inclusive education, when examined through the interplay of policy, planning, curricular content, pedagogy, and assessment, emerges not merely as a static goal but as a dynamic process---one that is contingent on context, commitment, and capacity. As this exploration has shown, inclusve education cannot be reduced to awareness or aspiration alone. Rather, it requires a deliberate structuring of educational systems that align strategic planning with policy coherence, pedagogical inclusivity, and meaningful assessment.

Through a close reading of the term's etymology and its historical evolution, it becomes evident that inclusivity is not simply about welcoming difference, but about expanding the boundaries of belonging in conscious, systemic ways. From the foundational theories of Dewey, Montessori, Vygotsky, and Friere to contemporary thinkers like Fullan, Goodlad, and Darling-Hammond, inclusive education has been shaped by a lineage of thought that emphasises equity, social justice, and learner agency.

When implemented with proper staging and adequate resources, inclusive education transforms from a set of ideals into an achievable outcome, where all learners, regardless of background or ability, are afforded equitable opportunities to thrive. This transformation depends on inclusive planning that is strategic and context-sensitive, policy that is coherent and enforceable, pedagogy that is adaptive and student-centred, and assessment that is formative and reflective of diverse competencies and skills.

Ultimately, inclusive education is not simply a matter of who is included, but how systems are designed to support inclusion at every level. It is a recursive process that is ever-evolving, adapting, and deepening over time. Yet one with the potential to yield lasting, measurable outcomes when approached with intentionality, rigour, and ethical commitment.

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Section II.

Co-Creation and Partnership: Redesigning Teaching with Students

Case studies foregrounding partnership models, i.e. Students-as-Partners (SaP), co-creation, and participatory learning, as vehicles for inclusion and shared authority in higher education.

Alison Cook-Sather *Co-Creating Courses with Students: The Power of Partnership*

Rutger Kappe *Students as Partners (SaP) in Curriculum Development at the Inholland Teacher Education Programme (Pabo)*

Eirini (Irene) Spanaki
University of Crete Science students Perceptions regarding Inclusion in Higher Education

This section explores how inclusive pedagogy is enacted through partnership, shared agency, and mutual trust between educators and students. Alison Cook-Sather's Co-Creating Courses with Students: The Power of Partnership presents persuasive evidence that co-designing learning experiences rebalances traditional hierarchies and nurtures a culture of respect and dialogue. Rutger Kappe's contribution, Students as Partners (SaP) in Curriculum Development at the Inholland Teacher Education Programme (Pabo), translates this philosophy into a concrete institutional model, showing how collaborative curriculum development can build ownership, motivation, and accountability on both sides of the learning relationship.
Eirini (Irene) Spanaki extends this discussion from the classroom to the institutional sphere through her study University of Crete Science Students Perceptions Regarding Inclusion in Higher Education. Her research reveals how student voice and perception act as vital indicators of inclusivity and belonging within disciplinary and structural contexts.
Together, these chapters demonstrate that partnership is more than a pedagogical method, it is a transformative stance grounded in dialogue, reciprocity, and shared responsibility. Through these examples, co-creation emerges as a living practice that humanises academic relationships and redefines higher education as a collaborative community of learners.

Co-creating Courses with Students: Enacting and Fostering Inclusive Student-centered Pedagogies

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Abstract—Co-creation both enacts and fosters the enactment of inclusive student-centered pedagogies. Adapted from a keynote address delivered at the International Conference on Inclusive Student-Centred Pedagogies at the University of Crete, this article defines co-creation, summarizes the most common outcomes for students of this work, and shares examples of co-creation before, while, and after a course is taught. It reflects on how this work both enacts and supports the further development of inclusive student-centered pedagogies through positioning students as partners in the co-creation of entire courses, components of courses, classroom learning environments, course content, and assessment.

Keywords—co-creation; equity; inclusion; student-centered pedagogies

I. Introduction

Co-creation is defined as "shared decision-making, shared responsibility and negotiation of learning and teaching" (Bovill, 2020a, p. 2). As former undergraduate student and co-creator of an Education Studies course, Jiayi Loh, asserts, co-creation "disrupts the reductive teacher-student power hierarchy by granting agency and power to both sides to shape the classroom experience while also being cognisant of the different functional roles that each person inhabits" (Cook-Sather & Loh, 2023). These words are simple but the processes they describe are not. They go against our training and assumptions about teaching and learning in most contexts for the reason that Loh makes explicit. Important about these definitions and the practice they point to is the sharing of responsibility but also the preservation of the respective roles—and the respective experiences and perspectives—that teachers and students bring to the decision-making and negotiation processes of co-creation. This combination of challenge and preservation is important because co-creation is not simply about everyone doing the same thing or flipping standard hierarchies; it is about drawing on differences of experience and perspective to foster inclusive, student-centered pedagogies.

In this paper, I review the most common outcomes for students of co-creation. I then offer examples of three forms of co-creation: (1) co-design of a course before it is taught; (2) co-creation of components of a course while it is unfolding; and (3) redesign of a course after it is taught. I conclude with reflecting across these forms of co-creation and identifying key considerations regarding how this work both enacts and supports the further development of inclusive student-centered pedagogies through positioning students as partners in the co-creation of entire courses, components of courses, classroom learning environments, course content, and assessment.

II. Common Outcomes for Students of Co-Creation

Although there are other ways to position students as co-creators of courses, the forms of co-creation I discuss here position students in three particular ways, as represented in Table 1.

Table 1: Three Ways to Positions Students in Co-Creation

Form of Co-creation	Positioning of Students
Co-design of a course before it is taught	Positions one or more students who are not enrolled in the focal course as co-creators of some or all aspects of the course in which they are unlikely to enroll; students are compensated for this work through pay or separate academic credit
Co-creation of components of a course while it is unfolding	Positions all enrolled students as co-creators of some or all of the components of the course while they are enrolled in the course; students earn academic credit for the course but are not additionally compensated
Redesign of a course after it is taught	Positions a one or more students who completed the course as co-creators of some or all aspects of the course; students are compensated for this work through pay or separate academic credit

Bovill (2020b) has detailed the numerous outcomes of co-creation for both students and faculty. I focus here on the five outcomes for students I have seen most often across forms of co-creation in my own work as well as in my consulting for other colleges and universities around the world:

(1) deepening learning and academic engagement;
(2) building confidence and sense of belonging;
(3) fostering an understanding of teachers and teaching;
(4) contributing to a sense of their evolution as active agents in their own and others' development; and
(5) building job skills.

A. Deepening Learning and Academic Engagement

When students have the opportunity to analyze rather than only engage in learning, they gain a deeper understanding of themselves and others as learners as well as of what supports and hinders learning processes. One student who participated in co-design of a course before it was taught put it this way:

> You really don't understand the way you learn and how others learn until you can step back from it and are not in the class with the main aim to learn the material of the class but more to understand what is going on in the class and what is going through people's minds as they relate with that material. (Cook-Sather et al., 2014, p. 114)

Students who experience co-creation are more engaged in their immediate learning and carry that engagement beyond the co-creation experience. A student who participated in the co-creation of components of a course while it was unfolding asserted: "I became more involved on campus and more engaged in my classes and with professors. I began learning how to get what I needed out of college, rather than producing work that felt meaningless just for a grade" (Cates et al., 2018, p. 41).

B. Building Confidence and Sense of Belonging

The experience of co-creation builds confidence in students by "recognising their lived experiences and their knowledge and encouraging them to share those" (Cook-Sather & Cott, in press). As one student partner who participated in co-design of a course before it was taught notes, "affirming students' unique perspective" not only benefits faculty partners but also ensures that "students will have the confidence and the tools to share their insights" (Bahn, 2015, p. 4, p. 5).

Relatedly, when students develop those capacities through working in partnership with faculty, they increase their sense of belonging. As a student who participated in the co-creation of components of a course while it was unfolding reflected, "reading and contributing together to make a library of annotated bibliography made me feel like our class was united and felt like belonging."

C. Fostering an Understanding of Teachers and Teaching

Students rarely get to see "behind the curtain" into what it takes to plan, facilitate, and assess learning. Once they do see what it takes, and especially when they are active partners with faculty in co-creating learning experiences, they develop much deeper understanding and empathy for their teachers. One student who participated in co-design of a course before it was taught captured what may express:

> It made me a lot more compassionate towards my professors, more empathetic, because I saw how hard my faculty partners were working, it made me a lot less likely to disparage my own teachers and less willing to tolerate that from other people. (Cook-Sather, 2018, p. 926)

Like students' deepened learning and academic engagement, this understanding of teachers and teaching transfers into students own courses. One student who participated in the redesign of a course after it was taught explained: "Through this experience, I also gained a newfound appreciation for professors and the amount of work they put into teaching their courses" (Charkoudian et al., 2015, p. 8). They carry the empathy and insight they develop through co-creation into all their academic work.

D. Contributing to Students' Sense of their Evolution as Active Agents in their Own and Others' Development

The preceding three outcomes contribute to the fourth: the sense that students develop through co-creation work that they have agency in their learning, they can make choices and feel empowered, and they can also support other students in having those experiences. One student said: "It made me feel a sense of ownership of my experience both inside the classroom and outside the classroom" (Cook-Sather, 2018, p. 928), and another explained: "I started to think of myself more as an advocate within classroom spaces for my peers. I began to feel I had a lot more agency and could be an agent of change within my classroom spaces" (Cook-Sather, 2018, p. 929). A third student expanded on these ideas:

> [Co-creation of the curriculum] made me feel that my voice and experience are important to understanding and advocating diversity in higher education…[and]…gave me the space to actually reflect and process all the tools and methods that allowed me to feel like I was a part of the inclusive yet dynamically growing community. (Cook-Sather, Des-Ogugua, & Bahti, 2018, p. 383)

All four of the outcomes I have discussed so far contribute not only to a more student-centered experience. They also make students and teachers partners in the work of creating such experiences.

E. Building Job Skills

The capacities students develop through the various forms of co-creation approaches discussed here uniquely prepare them for the world of work. The competencies for a career-ready workforce identified by the National Association of Colleges and Employers (NACE 2021) include: critical thinking, communication, teamwork, professionalism, leadership, career & self-development, and equity & inclusion. Working as partners with faculty to co-create courses (and pedagogical approaches) foster in students all of these competencies (Cook-Sather et al., 2023). About career and self-development, for instance, one student partner explained that co-creating pedagogical approaches with faculty members was for him:

> an opportunity to develop my skills in…all-encompassing engagement, transcending information-transfer and activating a fundamental mental musculature of opening up, of leaning into discomfort and the unknown to discover and create common ground through mutual understanding. (Bernstein, 2019, p. 3)

Another student asserted that she "was able to gain so many transferable skills within leadership and communication" (Prasad, 2021).

III. Co-design of a Course Before It Is Taught

There are many examples of courses being co-designed before they are taught. I offer two here. The first was supported by a teaching and learning center and involved the participation of center staff as well as of faculty and students. In the context of an Applied Curriculum Design in Science course at McMaster University aimed at engaging students as co-creators of curriculum, upper-year students formed partnerships with faculty and educational developers and worked in groups to co-create learning modules that became key components of a foundational science course offered to first-year students (Goff & Knorr, 2018). The goal was to make this science course more inclusive and engaging. Each

member of the team brought a different perspective and different expertise to this co-creation process, linking back to Jiayi Loh's point about disrupting the reductive teacher-student power hierarchy by granting agency and power to both sides to shape the classroom experience while also being cognizant of the different functional roles that each person inhabits.

The second example is of a faculty member in religion who worked for a full semester with two studio-arts majors to plan a new course called "Everyday Contemplation." Specifically, they co-created approaches to integrating sketching into the course, which explored contemplative traditions (with trips to spaces such as churches) and experimented with ways of integrating contemplative practice into everyday life (e.g., walking). There were no other faculty or teaching and learning center staff involved, and, in contrast to the science example I shared above, in this case the two students drew on very different disciplinary perspectives to co-create the course. About this experience, the faculty member wrote:

> This was, without a doubt, my favorite teaching experience ever. Working with my two student partners opened incredible opportunities to students in the course that would not have been otherwise available. One of the students actually came to class a few times to lead the exercises we had co-created…. [The students in the course] described this aspect of the course as liberating, freeing them to express themselves through art in a way that was not connected to the quality of what they were doing, but rather on what artistic practice made possible for them in the context of contemplative practice more generally. (Personal Communication, 7 June 2024)

What I want to highlight here is how the co-creation work actually generated opportunities for inclusive and student-centered approaches that this faculty member would not have come up with on his own and how this practice liberated students and invited them to engage in ways they would not have otherwise.

IV. Co-Creation of a Course While It Is Unfolding

I share three examples from my own practice of co-creation while a course is unfolding. The first one I developed during the early years of the pandemic to ensure that students felt connected and supported. Called "Accountability Partners," this approach draws on Mingus' (2019) notion of accountability "as "rooted in our values, growth, transformation, healing, freedom, and liberation" (para. 9).

Before the term begins (or early in it), I pair enrolled students and ask them to spend approximately an hour outside of class doing the following (explained in detail in Cook-Sather, 2023): (1) introduce yourselves or reconnect; (2) identify supports and challenges you need and anticipate; (3) read (or reread) and reflect on Mingus' "Dreaming Accountability"; (4) discuss the support structure of "Accountability Partner"; (5) draw your thoughts together to guide your engagement throughout the term. About the experience of working in an accountability partnership, one student wrote: "…accountability partnerships center around relationship building, which is necessary to feel comfortable in learning environments and also highlights the value of learning from others."

This is a form of co-creation with students of the learning environment: I provide the structure and send it to students as the first invitation of the course, signaling that I am inviting co-creation of the learning environment, and I make time in class for these partnerships to continue to unfold. Assigning "Accountability Partners" is an inclusive, student-centered pedagogy in that it ensures that everyone is connected to someone and signals that their navigation of the course is supported. As colleagues and I argue in "Co-created Accountability: Supporting Faculty at All Stages through Student-Faculty-Staff Departmental Partnerships," this reconceptualization of accountability can be extended to supporting faculty as well (Williams et al., 2024).

A second form of co-creation I engage in while the course is unfolding, focuses on course content. This is called the co-created annotated bibliography (Cook-Sather, 2024). Each week, all students are required to complete a small number of the same readings. Also each week, each student also selects their own reading, viewing, or listening and writes a short annotation with a summary, a key quote, and full bibliographic information and posts this to a co-created, shared bibliography on our course management platform. During class, students meet in small groups to share what they read/watched/listened to and connect it to course themes and the focus of the class session. Some weeks, instead of contributing to the bibliography, I ask students to read across annotations for themes, insights, etc.

The student quoted in Section B: Building Confidence and Sense of Belonging, above was reflecting on this assignment. About the activities associated with this assignment, another student wrote:

> The annotated bibliography is a great example of the conceptual shift away from competition and towards collaboration. In the first week, it didn't really cross my mind to read through other students' annotations…. However, when we shared our insights from the bibliography during class, I began to understand the purpose of this assignment. Through this activity, I started to view my classmates as valuable resources for learning, growth, and co-creation.

This is an inclusive, student-centered pedagogy in that it ensures that all students' interests are valued, that the resources and knowledge they bring and offer are valued, that they are invited as individuals to contribute but also to benefits from others' contributions, as the student quote makes clear.

A third example from my practice of co-creation while a course is unfolding is in the realm of assessment, which is rarely conceptualized as a co-created space. It is called the Course Commitment Form (Cook-Sather, 2022), and we draw on it at multiple moments. At the beginning of course, each student chooses how they will meet the requirements of each assignment and what percentage each assignment will count (with a certain range). In the middle of course, students have option to revisit and revise their Course Commitment Forms. Finally, at the end of the course, students draw on Course Commitment Form to assess how they met course criteria. About this space of co-created assessment, one student explained: "[The Course Commitment Form gives] students the agency to align their personal commitments and goals with the overall course goals" (Cook-Sather et al., 2025).

This is an inclusive, student-centered pedagogy in that it respects students' own learning goals as those align with course goals, as the student quote suggests. In addition, it challenges students to think deeply about their own learning, where they want to take risks, where they feel strong, and leads to intentional, thoughtful engagement.

V. Redesign of a Course After It Is Taught

I offer two examples of co-creation through redesigning a course after it has been taught. One of the earliest examples of this work entailed a 10-person team (seven undergraduates, two faculty colleagues, and a member of the teaching and learning center) at Elon University, USA, who met a dozen times over two months to reinvent a course. (Delpish et al., 2010; Mihans et al., 2008). About this experience, a faculty participant explained: "We have learned the value of really listening to our students. We now teach all our courses somewhat differently because we are more attuned to student needs and expertise, and we have wholeheartedly embraced the concept of student collaboration in course design" (Mihans, Long, & Felten, 2008, p. 8).

A second example involved a faculty member in chemistry at Haverford College, USA, and three student partners who had taken her first-semester organic chemistry course. This team engaged in a semester-long redesign process through which they revised course content, assignments, and methods of assessment for greater inclusivity (Charkoudian et al., 2015). About this experience, one of the student partners wrote: "[The course re-design project] gave me a unique opportunity to think from different points of view: as a student and, during course revision, as a teacher…. Through this experience, I also gained a newfound appreciation for professors and the amount of work they put into teaching their courses…. Coming out of this experience, I feel like I have grown as both a student and a teacher.… Overall, this experience allowed me to not only share my input and perspective, but also deepened my understanding on the act of teaching" (Saadia Nawal in Charkoudian et al., 2015, p. 8).

This course redesign approach supports inclusive, student-centered pedagogies through shifting faculty and student mindsets to allow them to really learn from one another's experiences and perspectives.

VI. Conclusion

About the co-creation work in which she engaged through pedagogical partnership, one former student partner, Lauren Lattimore, wrote:

> Weeping trees grow flexible branches that flow with the wind, create openings and change with the seasons. Pedagogical partnerships require flow, flexibility and movement to inspire transformation in teaching and learning. The image of the weeping tree is meant to capture this and encourage us to look towards the wisdom of natural beings as we seek change in our approach to building more joyful and meaningful connections in educational spaces.

The insight and invitation Lauren extends challenge all of us in higher education to consider how to develop inclusive student-centered pedagogies. The examples included in this discussion of positioning students as partners in the co-creation of entire courses, components of courses, classroom learning environments, course content, and assessment detail how to create not only more engaging and equitable practices (Cook-Sather, 2022) but also more joyful and meaningful connections.

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Students as Partners (SaP) in curriculum development at the Inholland teacher educational program (pabo)

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***Abstract*—This paper presents a case study of the implementation of a *Students as Partners* (SaP) approach within the teacher education program (pabo) at Inholland University of Applied Sciences. Between September 2023 and June 2024, students were structurally involved in curriculum (re)design through active participation in five multidisciplinary development teams. The study evaluates the pilot using both quantitative and qualitative methods, including surveys, interviews, and observations, guided by established SaP dimensions such as ownership, equality, engagement, and reflexivity. Results show high levels of student satisfaction, increased sense of belonging, and a perceived positive influence on curriculum quality and team dynamics. Faculty and field practitioners also reported positive experiences, though with slightly more variation. Reflections highlight challenges in balancing roles and the need for structural support, supervision, and institutional commitment. Preliminary outcomes suggested a 50% reduction, and official data confirmed a substantial decrease in first-year dropout rates and increased student engagement, underscore the potential of SaP for sustainable educational innovation. This study illustrates how co-creation in curriculum development fosters deeper student learning, institutional change, and a more inclusive academic culture.**

Keywords— Students as Partners, teacher education, curriculum co-design, student engagement, inclusive pedagogy, higher education innovation.

I. Introduction

The "Students as Partners" (SaP) approach redefines the traditional student–teacher dynamic by positioning students as active collaborators in the educational process rather than passive recipients. This model has been associated with increased student engagement, enhanced learning outcomes, and improved institutional culture (Healey, Flint, & Harrington, 2014). SaP initiatives in curriculum design foster mutual respect and co-creation, strengthening students' sense of ownership and belonging.

Within the wider discourse on inclusive pedagogy, SaP emphasizes active student engagement and the redistribution of voice and agency. The approach seeks to create learning environments that are more equitable, participatory, and responsive. In this sense, SaP aligns with educational theories that seek to democratize higher education and challenge entrenched hierarchies (Bovill, Cook-Sather, & Felten, 2011). Rather than limiting students to feedback or consultation, SaP invites them into roles of co-design, change agency, and shared responsibility.

The literature identifies several conditions for meaningful partnerships. Matthews (2017) cautions against tokenistic involvement and stresses the need for reciprocity and trust as the foundation of genuine collaboration. Cook-Sather and Luz (2014) similarly highlight the importance of reconfiguring power relations so that students are positioned as knowledgeable contributors. Kay, Dunne, and Hutchinson (2010) point to the role of preparatory training and structured support in enabling students to participate effectively in curriculum design. Healey, Flint, and Harrington (2014) propose a values-based framework—respect, reciprocity, and shared responsibility—that has been widely adopted as a touchstone for SaP practice.

Systematic reviews also underscore the practical challenges of sustaining SaP initiatives. Mercer-Mapstone et al. (2017) found that clarity of roles, sufficient time and resources, and a shared language of partnership are critical to success. Without structural embedding, SaP often remains dependent on individual champions and vulnerable to discontinuity. More recent contributions suggest that SaP should be seen not only as curriculum co-design but also as a form of "change agency" that reshapes culture, practice, and institutional norms (Healey & Healey, 2024). Grant (2024) further argues that participatory design spaces - what she calls invitational spaces - can transform professional identities. They encourage both staff and students to re-examine their roles and assumptions.

This case study contributes to the SaP literature by documenting its implementation in a Dutch teacher education program. Embedding students as equal partners in curriculum (re)design demonstrated both opportunities and challenges of scaling SaP. The project offers a grounded example of SaP in practice and situates this work within broader debates on

inclusive pedagogy, participatory design, and democratic educational innovation.

Beyond the SaP literature itself, this approach can also be situated within broader educational theories and practices. The emphasis on active collaboration resonates with the student engagement framework (Kuh, 2009) and more recent extensions that explore the mechanisms linking engagement to student success (Kahu & Nelson, 2018). SaP also aligns with the concept of communities of practice, originally developed by Lave and Wenger (1991) and further elaborated in contemporary contexts (Wenger-Trayner & Wenger-Trayner, 2015), where learning emerges through participation in authentic, collaborative settings. In addition, the reflective and transformative aspects of partnership connect with theories of transformative learning (Mezirow, 1997; Illeris, 2014), in which shifts in perspective foster deeper growth. Framed within inclusive pedagogy (Florian & Spratt, 2013), SaP extends these traditions by redistributing voice and agency, creating learning environments that are more equitable, participatory, and responsive.

Background and objective(s) at the Inholland pabo.

The Inholland teacher education program (pabo) embarked on an ambitious mission to redesign its curriculum to be more relevant and connected to real-world challenges. From September 2023 to June 2024, students actively participated in the curriculum development of years 1 and 2 by joining one of five development teams, each composed of teachers, field practitioners, and one or two students.

Student partners were recruited using a combination of purposive and open sampling. A digital call for applications was disseminated via the student portal and newsletters, inviting interested students to apply. In parallel, teacher educators were asked to nominate students they considered motivated, reflective, and suitable for this role. This approach aimed to ensure diversity in terms of backgrounds, year groups, and perspectives, although the final sample of student partners (n=8) was not intended to be statistically representative of the wider student population. Rather, these students served as engaged co-developers in a qualitative, exploratory pilot context.

All members of the development teams - including teachers, field professionals, and student partners - were invited to complete short digital evaluations (via Qualtrics) after each development day. These evaluations captured immediate reflections on the collaboration and outcomes. In addition, qualitative data were collected through reflective check-outs with students after each session, individual interviews at the end of the pilot, and ethnographic observations within two of the five teams. This combination of data sources provided rich insights into experiences and perceptions, though generalizability was not the primary aim.

The primary objective was to create a thriving educational environment aimed at improving engagement, well-being, and academic performance for future students. The SaP pilot added a second layer to this ambition by positioning students as equal partners alongside staff and field professionals, thereby testing the potential of partnership as a driver of educational innovation.

Project implementation: methodology, main activities

The project integrated students as equal partners in five development teams, working alongside lecturers and representatives from the professional field to enhance the teacher education curriculum. A process team organized the development activities and maintained clear communication. Students were initially invited to participate in five design days. Following positive feedback, their involvement was extended, and they also contributed to planning tasks. After each development day, evaluations were conducted to assess experiences with involvement, collaboration, and team atmosphere. In addition, all student partners took part in brief reflective check-outs at the end of each development day to capture their experiences more directly and informally. To gain deeper insight into students' experiences, individual interviews were conducted with all student partners after the pilot phase. Due to time constraints and the intensive nature of ethnographic observation, only two of the five development teams were observed directly during their meetings. This selection was made to balance depth of insight with feasibility.

Throughout all instruments used in this study - including surveys, observations, check-outs, and interviews - the core dimensions of SaP, such as collaboration, influence, and engagement, served as guiding analytical principles.

II. RESULTS

The results are presented in two parts. The quantitative survey data provide an overview of patterns across the development days, while the qualitative findings draw on three complementary sources—student interviews, observations of team sessions, and reflections from SaP team members—to offer deeper insight into participants' experiences and perspectives.

Quantitative analysis

After each development day, participants received an online evaluation with questions about their experience of that day, structured around key SaP dimensions. These included Likert-scale items such as *"I felt treated as an equal partner today,"* which allowed for continuous monitoring of equity and engagement over time. In total, evaluations were completed 139 times by Inholland colleagues, 25 times by students, and 57 times by colleagues from the field. The quantitative data from these digital surveys were analyzed descriptively, using frequencies, means, and distributions to capture patterns in participants' perceptions across the development days. Given the small sample size, no inferential statistics were applied. The analyses provided a broad overview of trends rather than statistical generalization.

Collaboration: During the development days, 96% of students rated their collaboration experience as positive, 91% of practitioners shared this positive view, and 86% of faculty rated it as positive as well. This underscores the sense of teamwork across all participants.

Sense of belonging: A significant majority of participants reported feeling like full members of their teams. Specifically, 87% of students, 89% of faculty, and 85% of practitioners agreed with this statement.

Involvement in decision-making: Students felt the most involved in decision-making processes, with 87% indicating they felt engaged. This was followed by 82% of faculty and 79% of practitioners.

Perceived relationships: When asked about the equality of relationships within the teams, 95% of students and 93% of practitioners described these as equal, compared to 83% of faculty who shared this perception.

Influence on outcomes: Regarding their influence on the outcomes of the development days, 79% of students and faculty expressed satisfaction with their level of influence, while 72% of practitioners indicated that they were content with their contributions.

Overall, students had the most positive experience on several aspects of the development days, including collaboration, involvement in decisions, equality and impact. Inholland colleagues and practitioner colleagues also had predominantly positive experiences, sometimes varying slightly by SaP dimension.

Qualitative analysis: summary of student interviews

At the end of the pilot, all students were interviewed to capture their experiences. The interviews were transcribe and analyzed thematically. The two researchers independently coded the material, guided by both inductive reading and the predefined SaP dimensions. Codes were compared and refined through iterative discussions until consensus was reached. Themes were then synthesized across data sources to highlight recurring patterns and unique insights. Below is a condensed summary of the interviews using the SaP dimensions, including key quotes.

Student involvement varied initially: some began hesitantly, while others engaged with enthusiasm. In all teams, involvement grew as students better understood their role and the overall goal. One student reflected: *"I started with few expectations but soon discovered how valuable my role could be."* Students appreciated evolving from passive recipients to active designers: *"It felt good to not just give feedback but to help build the curriculum."* This boosted their sense of ownership and confidence.

Motivations ranged from a desire to improve education to discovering the intrinsic rewards of meaningful contributions. Preparation helped them fulfill their role with confidence: *"Because I was well-prepared, I was able to contribute confidently."* The support of team members fostered open communication and an inclusive atmosphere: *"From the beginning, I was treated as an equal. Everyone listened to my ideas."*

Participation also fostered professional growth. Students developed stronger communication skills and greater resilience. One student reflected: “I learned not only about education but about myself. I gained more self-confidence.” They also became more flexible in handling challenges and felt better prepared for their future careers.

Students also mentioned the difficulty of balancing their SaP role with study and personal commitments. In addition, group discussions could be intense, yet these moments strengthened their teamwork and problem-solving skills. As one student noted: “The discussions could be intense, but they taught me to communicate more clearly and effectively.”

The SaP experience extended beyond the project. Students became more aware of their role in shaping educational policy and felt empowered to continue participating in educational innovation. One remarked: *"This project showed me that student participation can make a real difference."*

Students reported that preparation and openness were essential for effective collaboration. They advised future participants to speak out and share their perspectives, and encouraged teachers to foster equality and inclusivity within the teams. In summary, the student interviews highlight that working as partners enhanced both academic and personal growth. Students described the environment as supportive, which helped them feel confident to contribute and to co-create meaningful educational change.

Qualitative evaluation: observations of development sessions

In this pilot, two development teams were observed to better understand interactions between students, teachers, and practitioners. SaP consortium members attended sessions, and findings were categorized and analyzed thematically by two researchers.

During the sessions, an atmosphere of equality was prevalent. Participants asked questions and listened attentively, fostering mutual respect. Students often took initiative in discussions and provided group feedback. While roles were naturally distributed, some teachers hesitated when unsure of topics, which could affect openness.

Students displayed high engagement, contributing actively in large and small groups. Their leadership in summarizing progress and checking with others added enthusiasm. Facilitators and teachers' supportive attitudes further encouraged contributions.

Participants shared a sense of responsibility and commitment. Students took ownership of their tasks, while teachers immersed themselves in collaboration to support team success.

The sessions encouraged mutual learning through open discussions and exchanges of knowledge. Moments of humor and informal interactions made the process enjoyable and strengthened connections. Participants described the collaboration as enriching.

Transparency was key, with clear expectations, goals, and decision-making processes shared from the start. However, occasional unclear instructions or limited platform access posed minor challenges. Despite this, transparency contributed to a collaborative climate where everyone knew their role.

The feedback culture was constructive and open. Participants shared both positive and critical feedback, creating room for co-creation and adjustments based on input. This approach ensured meaningful progress and made everyone feel valued.

Qualitative Evaluation: Reflections SaP Team Members

Reflections from SaP team members provided deeper insight into the processes and outcomes of the pilot. A

recurring theme was the diversity in student motivations and expectations. Some students entered the project with an intrinsic drive to improve education, while others became engaged only after they gained a clearer understanding of their role. For most, participation in curriculum design acted as a catalyst for stronger commitment.

Team members emphasized the value of addressing individual motivations at the start of such projects. They also raised the issue of financial compensation, noting that unpaid roles risk reinforcing unequal relationships within teams.

The SaP experience was widely seen as contributing to students' academic and professional growth. Participants reported stronger skills in critical thinking, communication, and teamwork. These reflections underline the potential of SaP to support student success through experiential learning.

Team dynamics played a central role in shaping these experiences. Perceived equality created a safe and collaborative climate, which boosted student confidence and encouraged active participation. The presence of a dedicated project lead or experienced SaP member was described as key in fostering cohesion and supporting the partnership process.

At the same time, students faced organizational challenges. Balancing project work with academic and personal responsibilities was difficult, and managing diverging interests within teams sometimes caused tension. These issues highlighted the need for strong support structures, clear planning, and flexible scheduling.

Cultural and institutional factors also shaped the development of the project. Participants acknowledged the substantial time investment and personal commitment required for meaningful collaboration. They stressed that sustainability and scalability depend on institutional recognition, structural support, and adequate financial resources.

The combined quantitative and qualitative findings highlight both the value and the challenges of student–staff partnerships. These insights also point to broader implications, which become more visible when considering the long-term impact of the initiative.

Long-term impact

Participation in the SaP project influenced students beyond the immediate pilot. Many became more aware of institutional dynamics and their role in shaping educational policy. Their contributions, such as improving curriculum components, strengthened their belief in the value of student participation and raised their professional aspirations.

The program has committed to continuing SaP. In the next academic year, students will join the curriculum development of years 3 and 4. This process will follow the same structure as the pilot, with design days evaluated through digital surveys. The number of student partners will grow from nine to eleven, supported by a dedicated budget.

A SaP team has also been established to embed partnership more structurally within the college. This group includes students, quality assurance staff, project managers, and members of the Study Success research group. It works on organizing student participation within the new curriculum and developing long-term objectives. A memorandum now outlines how to sustain, expand, and reward student participation.

Early outcomes of the redesigned first-year curriculum are promising. Definite figures show that dropout rates decreased from 41% to 24%, nearly halving attrition. Surveys also reveal a stronger sense of belonging among first-year students. Together, these findings support the long-term value of student–staff partnerships and provide a basis for continuation and scaling.

III. CONCLUSION

The key lessons from this pilot confirm that meaningful student–staff partnerships require preparation, sustained support, and institutional commitment. Clear role descriptions, structured recruitment, recognition of contributions, and flexibility in scheduling were crucial for success. Monitoring perceptions of participants helped to maintain engagement, while collaboration between students, faculty, and practitioners added clear value to the curriculum redesign.

These insights align with findings from the SaP literature, which stress reciprocity, trust, and shared responsibility as core principles (Bovill, 2020; Mercer-Mapstone et al., 2017). Our study extends this work by showing how SaP can be embedded systematically in teacher education. Beyond the SaP literature, the findings also resonate with wider educational theories of student engagement (Kahu & Nelson, 2018), communities of practice (Wenger-Trayner & Wenger-Trayner, 2015), transformative learning (Illeris, 2014), and inclusive pedagogy (Florian & Spratt, 2013). The pilot not only improved learning experiences but also yielded measurable results, such as reduced dropout rates and stronger student belonging.

Several recommendations follow. Preparatory training helps students enter projects with confidence. Combining open calls with staff nominations creates a motivated and diverse pool of partners. Institutional structures—such as a dedicated SaP team and budget—are essential for continuity and to avoid dependence on individual champions.

Taken together, these findings suggest that SaP is not only feasible but also a driver of sustainable educational innovation. When supported properly, it strengthens engagement, builds professional identity, and contributes to long-term improvements in quality and success. As the literature also highlights, partnership work reshapes power relations and fosters inclusive, democratic forms of curriculum design. This case shows how such changes can begin in practice.

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University of Crete Science students' Perceptions regarding Inclusion in Higher Education

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Abstract ***The purpose of the present study was to investigate students' attitudes towards inclusive education in higher education. 66 (46 girls and 20 boys) science and technology students at the University of Crete, studying for the Certificate of Pedagogical and Teaching Proficiency, participated. They were positioned on the effectiveness of inclusive education, the use of teamwork and the individual needs of each student and the emotions that the usual models of assessment generate. Participants completed a google form questionnaire with open-ended questions related to the meaning and content of inclusion. 7 illustrative interviews were followed. Thematic analysis indicated that participants perceived effective and inclusive teaching when lecturers were aware of students' interests and motivations. A high proportion of students agreed that learning is quite dependent on tailoring the curriculum and assessment methods to the individual needs of students. Overall they were positive about the use of student groups by the lecturer, as groups create positive emotions, socialization and increased interest. Overall, they argued that assessment in the way it is usually done is an emotionally charged process and often creates negative feelings. In an inclusive environment, students seem to feel safe through active participation and articulation of their individual difficulties, utilizing appropriate practices.***

Key words: inclusion, higher education, sciences' students, individual differences, teamwork

I. INTRODUCTION

Inclusion is frequently referred to higher education, focusing on an approach that aims to remove a variety of barriers in order to the effective achievement of students' goals. Inclusive education tends to provide appropriate practices and resources to ensure that students are engaged in the learning act [1], [2]. In addition, the lectures are encouraged to use teaching approaches that focused on highlighting the trend towards student-centered learning [3], [4]. Student-centered learning has been much discussed in recent years, because of students' active involvement in a way to understand deeply 'how they learn'. As a result, students are able to develop self-regulation and autonomy in their studies.

These skills are developed in accordance with their different learning backgrounds, interests, strengths and difficulties and experiences [4] and individual needs [5]. Autonomy and active participation in student activities are mentioned as motivating factors, as they focus on the students' desire and intention to engage in a process, resulting in meaningful changes in the environment. Motivation is related to the students' beliefs about self-efficacy, self-confidence and meeting needs such as autonomy, skills development and personal advancement [6]. In addition, a meaningful inclusive education tends to reduce "individual differences", replacing the individual categorizations and reaching out to all learners regardless of their background [1], [2], [7].

Researchers studied the perspectives of 13 students with disabilities from universities in Northern Ireland regarding their participation in higher education [7]. A systematic analysis of their interviews revealed that students described barriers they faced during their studies. The students provided comments on the barriers they had encountered and suggestions for improving services. The findings of the research highlighted the necessity for a communication network that encourages dialogue between all institutions and students, so that higher education can focus on student well-being. Furthermore, participants argued that the goal of institutions and lecturers should be to adapt programs and services to individual needs, in a reasonable manner, so that there is an inclusive education for all.

Moreover, in literature inclusive learning has been linked very positively with teamwork. Researchers emphasize the emerging need for differentiation in teaching in order to include all students in the educational process [8]. An important role in differentiating instruction is held by the teaching practice of flexible grouping [9], [12].. Past research has highlighted that active learning in higher education lacks a key and important factor, namely the use of flexible group techniques [9], [12]. The researchers highlight the differentiation of teaching by adapting groups to different levels of adult readiness in order to achieve the effectiveness of higher education. The importance of utilizing groups has been emphasized considerably in higher education in recent years [10], [11], [12]. It has been claimed that learning through teamwork aims to involve all students, regardless of their individual differences. Working in groups offers opportunities to the members to develop critical thinking or solving problems through cooperation [10].

In addition, another researcher [13] studies the pedagogical benefits of inclusion in universities and how they value diversity, focusing on racial and cultural diversity. She refers to organizational strategies and practices that create opportunities for meaningful social and academic interaction between students with different experiences, opinions, and characteristics. The researcher argues that an in-depth study of curricula is required, which should function without excluding any students, through many different methods of teaching and assessment in multiracially and socially diverse environments. Moreover, diversity - which tends to broaden the term inclusion- now refers to a number of political, social, economic, and cultural characteristics, even though diversity also refers to cultural heterogeneity [14]. It also emphasizes the need to use purposeful strategies that promote inclusion in order to

highlight its benefits. Researchers argue that the diversity of student characteristics promotes innovation, problem solving, and new ways of thinking, but what matters is the authenticity of the actions taken in these directions [13].

In addition, another study [15] highlighted the importance of differentiation of assessment in higher education. They argued that the assessment process, in which all students are treated as the same, is unfair, since they carry many differences. In their study, a group of six teachers and five students facilitated workshops for three weeks with 52 students from different backgrounds in order to understand their assessment experiences. Participants in workshops reported that assessment is an emotional experience. They emphasized the importance of adapting techniques and providing opportunities for students of different social backgrounds to participate equally in the assessment process through the use of more tools and broader strategies.

Despite the difficulties in equal treatment of all students in higher education, preventive support with appropriate information for university staff is particularly important, with the aim of authentic inclusion of all students [16], [17]. Based on the above observations, the basic purpose of the present study was to investigate students' attitudes towards inclusion in higher education.

II. METHODS

The present study is considered to be a case study. It focuses on the University of Crete science students' attitudes, who participated on the field of a pedagogical course titled "School Inclusion of Students with Special Educational Needs". Data analysis is supported by qualitative analysis [18]. A case study refers to a purposefully selected sample that is used for a specific purpose from a much more general sample group, taking into consideration that the participants are being involved in a way that facilitates learning by doing [19].

A limited sample of 66 students (46 girls and 20 boys) participated, studying in the fields of faculties of the University of Crete, Science & Engineering Department and enrolled in the Certificate of Pedagogical and Teaching Proficiency. Regarding their demographic characteristics a percentage of students (10,9%) studied at Biology department, 35,9% studied at Chemistry department, 31,3 at the Mathematics and 10,9% at Csd.

Aim, procedure and research tool

The aim of the present study was to investigate students' attitudes towards inclusion in higher education. The basic research questions were: a) which are students' perspectives about their individual differences in learning b) which are the important lectures' knowledge about their students' individual differences for effective learning c) Which is the importance of teamwork in higher education? d) what kind of feelings does the traditional way of assessment common for all students create?

The students participated in the first lecture of the 'school inclusion' courses and in a discussion with the lecturer and researcher on the content and meaning of inclusion in secondary education. Afterwards, they were requested to complete a google form regarding their thoughts on the application of inclusion in higher education. After a few days, 7 individual semi - structure interviews were conducted regarding the same issues of the google form. Then their interviews were returned to them and their answers were carefully studied. This is a process that increases the reliability and validity of research. After collecting the data, the research literature in accordance with the research data were carefully examined, followed by the development of coding. The responses were organized into groups and coding, followed by thematic analysis [20] through systematic recognition, understanding and then organization of repetitive patterns of meaning [21]. The results the qualitative analysis are presented in Tables below.

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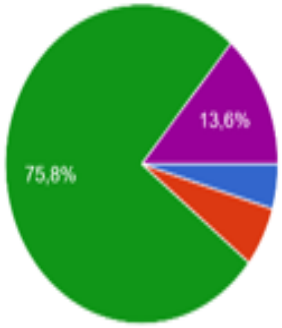
III. RESULTS

Thematic analysis indicated that participants perceived effective and inclusive teaching when lecturers were aware of students' interests, motivations and when they promote teamwork.

More specifically, the main data are presented in Graphs and Tables. In Graph 1, we see that 75, 8% inclusion applies to all pupils with or without special needs or other cultural differences, while 13,6% inclusion is concerned with the elimination of stereotypes, racism and prejudice



Graph 1: *Understanding the content of the concept of inclusion in higher education*

Table 1: Which are the basic students' individual differences?

Categories of answers	Number of answers	Selected answers
The pace of learning	40/ 66	I very strongly believe that students within the same classroom can have extensive individual differences, not only in knowledge levels, but also in preferences, interests, skills and pace of learning.
Social and economic differences	37/66	The differences that may exist in a classroom are racial, religious, social differences are the most important and affect their behavior and their perception of learning.
Character/ personality	35/66	I think, it concerns about the internal characteristics of the students and their learning profile. How easily or difficult they perceive and process information, how willing they are to ask questions, having active participation in their learning … Also, what tools they need to make the information more understandable to them…

Motivation	20/66	..... the ways they learn, ... their sociability , motivation'.
Goals	10/66	students differ in their sensitivity, their goals, their interests and concerns, the pressure they receive from their family environment

Table 2: Which are the important lecturers' knowledge about their students' individual differences for effective learning in higher education?

Categories of answers	**Number of answers in relation to records**	**Selected answers**
Interests	48/ 66	Speaking from personal experience, my fellow students who were not interested could not meet the requirements of the course and did not care about it at all.'
Motivation	34/66	learning becomes more effective when the lecturer try offer opportunities increasing students' motivation are taken directly and comprehensively into account... thus promoting an interesting, enjoyable and effective learning process'
Active participation	33/66	(The lectures) in order to have an influence on students must achieve their active participation in all areas, otherwise their learning is not as effective'
Identity of student	23/66	'Each of us is different which means that we learn in different ways. If education is one-sided it will not be able to fully meet the learning needs of most students'.

Table 3: Which is the importance of teamwork? Which is the stronger parameter?

Categories of answers	**Number of answers in relation to records**	**Selected answers**
Increasing interest / opportunities	37/ 66	I believe that through **teamwork students can focus on the subjects in which they are weak** but also focus on the ones they are interested in….so this way offers opportunities and facilitates learning process….
Entertainment/ play	31/66	Incorporating tangible activities as a medium of learning certainly makes this process more enjoyable, ... (This way) facilitates learning with practical ways of explaining them as part of an interactive teaching method, especially when compared to the traditional method of reading a book.
Socialization/ communication	28/66	The use of different activities provides variety and flexibility in learning, ... They are still divided into groups, which helps them to integrate, get to know each other and socialize….. Talk and solve problems …..exchange ideas with classmates and lecturers
Differentiation of teaching / different ways of learning	17/66	each group can do a different activity - Non-homogeneity of activities can lead to inequality in access to information and learning… a process that supports each different student in another way

Table 4: Which feelings does the traditional way of assessment common to all students create?

Categories of answers	**Number of answers**	***Selected* answers**
Pressure for high grades	66/ 66	A grading system has prevailed in educational institutions … due to the constant preoccupation with grades and because of several social stereotypes, which is reflected in the pressure students have to get a good grade.... 'In most educational systems, the only way of assessing students is through the written test score
Fear	26/66	The problem is that the student is afraid of what his friends will say about him, not that he did not do well in class. ..he is afraid of being stigmatized by a grade, as not only is he in danger of staying in the same class or dropping the average on their report card, but also because they will be the subject of commentary and ridicule
Impact on self-confidence/self-esteem	18/66	The most well-known problem leading to this positioning is a lack of self-confidence that stems from the faulty educational techniques….There is an authoritarian atmosphere in the classroom
Linked to failure	19/ 66	frequently they don't want to participate in assessments ….they think they won't pass .... and gradually they don't even participate in the study ... because they won't make it….
Effect on relationship with peers	18/66	students who don't get good grades have difficulties in joining the companionship of those who have high grades

IV. CONCLUSIONS

The findings of the present study highlight a high students' agreement with the position that learning is quite dependent on tailoring the curriculum and assessment methods to the individual needs of students. They believe that inclusion is concerned for all students, with or without special needs or other cultural differences and other different characteristics. According to the participants, students have many individual differences related to their learning pace, social and economic differences, personality traits, motivations, and goals. They support the importance

of lecturers' knowledge about students' individual differences, giving importance to their interests, their motivation, their active participation and their identity.

Overall, the participants are positive about the use of students' teamwork by the lecturer and they support that classmates can offer increasing interests and different choices or opportunities in active learning by offering differentiation of teaching and learning. The classmates support positive emotions, entertainment and play and create occasions for socialization and communication, too.

The participants in this study agree with other researchers [14], [13] that inclusion in higher education concerns all students, who have many individual differences. They emphasize the role of the social and economic differences, the pace of learning and the goals created by the social environment [14], [13]. In agreement with other researchers [4] sciences' students highlight the importance of individual students' interests and other differences [1], [2], [7] and they suggest that the lecturers should be aware of these for a meaningful inclusive education. The findings of the present study highlight the importance of the lecturers' knowledge of approaches that will motivate students to engage actively in their learning, in line with other studies [6]. From participants' perspectives, lecturers can communicate with their students when they offer opportunities for teamwork, in agreement with other studies regarding the students' necessity to explore barriers in their communication [7]. With regard to the evaluation of the use of teamwork, the results of the current study are in agreement with researchers who claim that teamwork is a strategy that helps to include all students in the learning process because it differentiates the teaching and learning methods [6], [9], [12].

The participants believe that students can focus on the subjects in which they are weak through teamwork, adapting the teamwork in different levels like researchers support [10], [11]. The participants are in agreement, also, with the researchers who support that teamwork offers opportunities to talk and solve problems when they are implicated in communication and socialization cases [10].

Finally, the participants support that the traditional way of assessment creates negative emotions like pressure, fear for grades and low self - confidence. Previous research has already highlighted the need for alternative assessment methods that take into account the different learning profiles of students in higher education, too [15]. They argued that the assessment process assessment is an emotional experience. Overall they argued that assessment in the way it is usually done is an emotionally charged process and often creates negative feelings, pressure for high grades, fear, low self-confidence, sense of failure and difficulties in joining the companionship [15].

The present study has limitations too, because of the fact that is a case study with a limited sample. Although a limited sample of sciences' students' responses is presented in the present study, this research highlights the value of lectures' knowledge regarding students' individual differences in order to offer an inclusive higher education, in Sciences' teaching. The sample of this research recognizes the importance of inclusive education and the necessity of teamwork for effective teaching and students' learning. In addition, the heterogeneity of academic disciplines offered a multidimensional perspective on the use of inclusive learning in Sciences' teaching and students' assessment.

Concluding, in an inclusive higher education, students feel safe through active participation and when their lectures have knowledge regarding their individual difficulties. They support that the lectures ought to take into account their individual needs in teaching and assessment, utilizing techniques based on appropriate practices [1], [2] that will eliminate negative feelings, such as fear of failure, and will not decrease self-confidence. In that direction, they support the use of teamwork in higher education teaching and assessing. In recent years, teamwork and co-education is concerned about equal opportunities for all students because the lecturers who utilize this process take into account the students' individual differences in higher education. Definitely, in the future, the knowledge of students' individual profiles and the utilization of teamwork should be investigated in depth from the perspective of lecturers.

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Section III. Assessment, Curriculum Redesign, and Disciplinary Inclusivity

Empirical contributions demonstrating how assessment, language teaching, and disciplinary-specific redesign foster equitable and accessible learning environments.

Kallia Katsampoxaki-Hodgetts & Effthymia (Effie) Penderi *Assessment-FOR-Learning: Why CRAM a 3-Stage Exam into Inclusive Student-Centred Curricula*

Maria Rontou & Maria-Eleftheria Galani *How Inclusive Is Our Teaching, Assessment and Practice in Higher Education? A Qualitative Case Study with Students with Learning Difficulties*

Aleksandra Łuczak *What Professors Expect but Students Don't Have – On Redesigning University Business English Courses*

In Section III, Assessment lies at the heart of educational equity, and the studies gathered here challenge its traditional gate-keeping role. Katsampoxaki-Hodgetts and Penderi's Assessment-FOR-Learning introduces a reflective three-stage model that aligns feedback, collaboration, and autonomy, repositioning assessment as an inclusive dialogue. Rontou and Galani's qualitative case study examines how students with learning difficulties experience teaching and evaluation, revealing the persistent gaps between inclusive rhetoric and classroom practice. Łuczak's contribution on Business English course redesign demonstrates how linguistic expectations and disciplinary norms can be re-examined to support heterogeneous cohorts. Across these examples, assessment becomes both a diagnostic and emancipatory tool—enabling educators to recognise diversity of expression while ensuring academic integrity and fairness.

Assessment-FOR-Learning; Why CRAM a 3-Stage Exam into Inclusive Student-Centered Curricula

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Abstract. **This study examines the Collaborative Reflective Assessment Model (CRAM), a three-stage exam approach that embeds the principles of inclusive student-centered pedagogies into both assessment and curriculum design. Similar to other collaborative two-stage exams, CRAM integrates individual effort, collaborative engagement, and formative feedback, providing students with a structured yet flexible framework that supports diverse learning needs and promotes equity. By allowing students to participate actively in their learning process through individual reflection and group consensus-building, CRAM creates opportunities for meaningful engagement, critical thinking, and skill development. The study involved 30 undergraduate Chemistry students and 66 Early Childhood Education students across two Greek universities. Final marks from the individual and collaborative stages were compared, and students' perceptions were analyzed through thematic analysis of responses to six open-ended questions. Key themes included enhanced comprehension of content, development of collaborative skills, and deeper reflection, alongside reduced exam anxiety and heightened engagement. These findings highlight how inclusive, student-centered approaches to assessment, such as CRAM, can address diverse learner needs while fostering social, academic and critical literacies. Implications for curriculum design emphasize that CRAM not only transforms exams into inclusive learning opportunities but also aligns assessment practices with broader goals of equity, participation, and lifelong learning.**

Keywords. Inclusive Pedagogy, Student-Centered Learning, Collaborative Assessment, Thematic Analysis, Formative Feedback, Assessment for Learning

I. INTRODUCTION

Assessment has long been dominated by practices that privilege individual performance over collective meaning-making. While such traditions offer a clear measure of student attainment, they often obscure the formative and developmental role that assessment can play in nurturing learners' agency, collaboration, and reflection. Over the past two decades, research on Assessment for Learning (A*f*L) has highlighted the importance of repositioning assessment as a process embedded within teaching and learning rather than as an isolated end-point (Black & Wiliam, 1998). In this paradigm, assessment does not merely certify achievement but also scaffolds the learner's ongoing development.

As recent scholarship has argued (Katsampoxaki-Hodgetts, 2025), assessment must be re-envisioned as a democratic and participatory act that aligns curriculum design with lived experiences, ensuring that equity and inclusivity are at the heart of future-driven education.

Yet, despite extensive scholarship on A*f*L, there remain gaps in how assessment practices can meaningfully combine individual accountability, peer dialogue, and structured reflection within a single model. Traditional exams rarely create space for such integration. Similarly, while collaborative or two-stage exams have demonstrated positive effects on student comprehension and confidence (Nicol & Selvaretnam, 2021; Kinnear, 2020), these designs often stop short of embedding reflexivity through systematic feedback cycles. This omission is especially significant in disciplines such as Early Childhood Education and the Sciences, where the cultivation of reflective practice, critical thinking, and collaborative problem-solving is integral to professional identity and lifelong learning.

The Collaborative Reflective Assessment Model (CRAM) responds to these challenges. By embedding three stages, individual effort, peer collaboration, and teacher feedback, CRAM repositions examinations as opportunities for inclusive learning rather than sites of evaluation alone. This model does more than adapt existing collaborative exams; it aligns assessment with the principles of reflexive pedagogy (Kalantzis & Cope, 2020), foregrounding inclusivity, equity, and participation. In doing so, it addresses a persistent gap in the A*f*L literature: the absence of assessment formats that systematically intertwine reflection, feedback, and collaboration while remaining adaptable to diverse disciplines. In this vein, the guiding research question of the present study is: How does the implementation of CRAM influence student learning, collaboration, and reflective engagement within higher education contexts?

II. LITERATURE REVIEW

Recent pedagogical trends emphasize inclusive, student-centered learning approaches (Katsampoxaki-Hodgetts, 2023; 2025), active learning (Katsampoxaki-Hodgetts in Gavriilidou, 2023), formative assessment and active engagement across education levels (Penderi in Gavriilidou, 2023; Dessie & Heeralal, 2016), and Assessment-FOR-learning (A*f*L) practices (Black & Wiliam, 1998. A*f*L is defined as "a process through which assessment information is used by teachers and students to modify teaching and learning activities in real-time, fostering student progress towards learning goals" (Black & Wiliam, 1998). These methods prioritize autonomy, inclusivity, and the recognition of diverse perspectives. Steen (2023) highlights the role of teacher learning communities in collaboratively designing formative assessments that improve outcomes through sustained problem-solving (Van Es, 2012). Such approaches resonate with broader educational reforms

promoting adaptable and participatory teaching practices. As Kennedy and Heineke (2014) argue, early childhood teacher education requires collaborative frameworks that connect universities, schools, and communities, ensuring that future educators are prepared to engage in participatory, partnership-driven approaches to learning.

Research has consistently shown the benefits of formative assessment in fostering deeper understanding and sustained engagement (Fitriani et al., 2021). In science education particularly, formative tasks cultivate iterative problem-solving and help students negotiate complex concepts (Heritage, 2011). Similarly, in Early Childhood Education, assessment practices grounded in socio-cultural contexts have been shown to enhance learner agency and inclusivity (Buzzelli, 2018). However, much of this research remains fragmented, focusing either on the role of formative assessment in classroom interaction or on collaborative approaches in testing environments, without integrating both.

A further strand of research has developed the notion of assessment as learning, which emphasises the active role of learners in monitoring and directing their own progress through self-assessment, peer dialogue, and reflexive engagement (Dann, 2014; Earl, 2013). This perspective shifts the function of assessment from simply informing teaching (assessment for learning) to empowering students as co-agents in constructing knowledge. Yet, despite its transformative potential, assessment as learning has not been systematically embedded into collaborative assessment models, leaving a gap that CRAM explicitly seeks to address.

Katsampoxaki-Hodgetts (2025) stresses that such fragmentation reflects a deeper systemic issue: assessment is too often treated as an external measure rather than a formative, reflexive process integrated into curriculum praxis.

Although the term “three-stage exam” has been used in earlier work, not all such models share the same pedagogical orientation. For example, Ilany and Shmueli’s (2021) “Three-Stage Alternative Assessment” in mathematics teacher education combines a group task, a class-wide discussion led by the instructor, and an individual test. Their design is valuable in surfacing misconceptions and consolidating disciplinary knowledge, particularly within geometry. However, its primary orientation remains towards subject-specific conceptual mastery, and the teacher’s central role is positioned in the intermediate discussion stage rather than in closing reflection. By contrast, CRAM begins with individual accountability, progresses through peer collaboration, and culminates in structured teacher feedback as a third stage. In this way, CRAM deliberately integrates reflection and feedback literacy into the assessment cycle, positioning assessment not only as a measure of understanding but as an opportunity for self-regulation and participatory learning across disciplines. This distinction is important because it highlights that while other three-stage frameworks have demonstrated the benefits of collaborative testing, CRAM extends these benefits by aligning explicitly with the principles of assessment as learning and by foregrounding inclusivity, reflexivity, and transferability beyond a single subject domain.

Unlike other collaborative exam designs that emphasize performance gains through group retesting (e.g., see Fengler & Ostafichuk, 2015), the focus of this paper is on CRAM’s unique integration of reflection and teacher-mediated feedback as a final stage, positioning assessment explicitly as a process of learning rather than solely as a measure of achievement. Two-stage exams represent a partial step towards that integration. Studies have documented that combining individual and collaborative phases can increase comprehension, retention, and motivation (Cao & Porter, 2017; Gilley & Clarkston, 2014; Zipp, 2007). Students benefit from immediate peer dialogue, which not only clarifies misunderstandings but also generates “internal feedback” that supports critical thinking (Nicol & Selvaretnam, 2020). Comparable collaborative approaches, such as TEAM-based learning, have been successfully applied from primary through to tertiary education, demonstrating their adaptability and positive impact on knowledge retention, critical thinking, and teamwork skills (Michaelsen & Sweet, 2008). However, these models typically conclude with peer collaboration and do not extend into a structured, instructor-mediated phase of reflection and feedback. What distinguishes CRAM, therefore, is its deliberate integration of this third stage, where teacher feedback not only resolves misconceptions but also cultivates feedback literacy and reflexive awareness, addressing a persistent blind spot in earlier collaborative designs. Yet, these models often lack a third dimension: structured instructor feedback that consolidates learning, addresses unresolved misconceptions, and encourages reflexive awareness.

In this respect, the call for more inclusive and future-oriented assessment frameworks (Katsampoxaki-Hodgetts, 2025) provides a strong rationale for CRAM, which deliberately positions reflection and participation as central dimensions of learning. Reflexive pedagogy, as defined by Kalantzis and Cope (2020), "emphasizes the reciprocal relationship between teaching and learning, where educators and students collaboratively examine and adapt their practices to ensure inclusivity, equity, and meaningful engagement." Drawing on ergative learning principles, the model emphasizes active student engagement and recognition of diverse socio-cultural backgrounds (Kalantzis & Cope, 2020).

III. Study Design & Methodology

3.1 *Participants.* The study involved 30 undergraduate Chemistry students and 66 Early Childhood Education students from two Greek universities. Participants engaged with the CRAM assessment model as part of their mid-term examinations.

3.2 *Data Collection.* Data were collected through a mixed-methods approach, focusing on a single open-ended question to capture students’ perceptions of CRAM’s pedagogical value. Participants provided detailed responses reflecting their experiences with the model, particularly its collaborative and reflective dimensions.

3.3 *Data Analysis*. Qualitative data were analyzed using thematic analysis (Braun and Clarke, 2006; Tuckett, 2005) to identify and report patterns within the open-ended responses. Braun and Clarke’s six-phase framework guided the analysis:

Familiarization with data through repeated reading.

Generation of initial codes, categorizing key ideas from responses.

Searching for themes by clustering similar codes.

Reviewing and refining themes to ensure alignment with the data.

Defining and naming themes for clarity.

Producing the final analysis and narrative.

Key themes were manually categorized for each cohort, with frequencies and illustrative examples presented in tables. This inductive approach ensured that the findings reflected participants' authentic experiences and insights into CRAM's value in fostering collaboration, critical thinking, and reflective learning.

3.4 Ethical Considerations. The study adhered to ethical research practices, ensuring confidentiality and anonymity for all participants. Informed consent was obtained, and students were assured that their participation was voluntary, and data would be used exclusively for research purposes. Participants could withdraw from the study at any time without repercussions.

IV. Findings & Discussion

Before presenting the statistical and thematic results, it is important to situate them within the purpose of CRAM. The model was designed not only to test knowledge acquisition but also to explore how assessment can foster collaboration, reflection, and inclusivity in practice. In this section, we therefore move from theoretical rationale to empirical evidence, showing how students engaged with the three-stage process and how their experiences illuminate both its pedagogical value and its challenges. These findings offer a window into the lived realities of assessment as learning, making visible the ways in which CRAM reshapes exams into opportunities for growth rather than judgement.

Statistical analysis using t-tests compared individual and collaborative test scores across both departments, revealing no significant differences in performance (Table 1). In Table 1 the mean scores for the individual (stage 1) and collaborative (stage 2) tasks for Chemistry and Early Childhood students are presented. A Mann-Whitney U test was conducted to examine whether scores differed by department across both task types, multiple-choice and open-ended, in individual and collaborative settings. The analysis revealed no statistically significant differences between Chemistry and Early Childhood students in the multiple-choice individual ($z = -1.68$, $p = 0.09$), open-ended individual ($z = -0.87$, $p = 0.38$), and open-ended collaborative ($z = -1.06$, $p = 0.31$) tasks. However, a statistically significant difference was observed in the multiple-choice collaborative task ($z = -3.51$, p < 0.001), with Chemistry students outperforming their Early Childhood counterparts. These results suggest comparable performance across most tasks, except for the collaborative multiple-choice activity, where Chemistry students demonstrated a clear advantage.

Table 1. Scores in individual and collaborative tasks for Chemistry and Early Childhood

Statistics

	Multiple choice: Individual	Multiple choice: Collaborative	Open-ended: Individual	Open-ended: Collaborative
Valid	155	155	155	154
Mean	5,87	7,06	5,62	6,961
SD	2,13	1,98	3,65	3,0317

To evaluate the impact of the collaborative task on students' performance, a Wilcoxon signed-rank test was conducted. The results revealed that students achieved significantly higher scores in the collaborative task compared to the individual activity across both disciplines (Table 2). In Chemistry, significant improvements were observed in students' performance in both multiple-choice ($z = -3.24$, $p = 0.001$) and open-ended questions ($z = -3.05$, $p = 0.002$). Similarly, in Early Childhood Education, students scored significantly higher in the collaborative task for both multiple-choice ($z = -5.93$, $p < 0.001$) and open-ended questions ($z = -4.72$, $p = 0.002$). These findings suggest that collaboration had a positive effect on student performance regardless of the question type or academic discipline. These results suggest that the collaborative aspect of the three-stage exam does not compromise individual learning outcomes but instead provides additional pedagogical benefits.

To further corroborate these insights, we conducted thematic analysis of student responses to the open-ended question regarding the pedagogical value of the three-stage exam revealed several key themes (Tables 2-8).

The most frequent theme in Table 2 was self-assessment, as students valued the opportunity to gauge their understanding and identify areas for improvement. Many responses highlighted the role of the mock test in fostering exam familiarity, which made the final exams feel less intimidating and helped students anticipate their structure and content. In line with Rempel et al (2021), students reported a significant reduction in anxiety, as mock tests provided a safe environment for practice without the high stakes of the final exam. The process also enhanced their understanding of the content, as repeated practice enabled them to internalize and apply concepts more effectively. Additionally, mock tests offered a valuable platform for clarification of misconceptions, helping students address knowledge gaps and refine their study approaches. While the majority of students viewed the individual test positively, a few noted challenges, such as the limited ability to fully address certain misconceptions without group or teacher input. Others mentioned time constraints as a limitation in allowing thorough process and reflection during the individual test phase. Some students expressed a preference for collaborative or group testing environments, highlighting the potential need for alternative methods to suit diverse learning styles.

Table 2. Student perceptions of the individual exam stage in a 3-stage exam.

Theme	Frequency	Direct Quotes
Self-assessment	18	"I realized where I am lacking." (S2), "It helps to understand what I know and what I don't." (S56)
Exam familiarity	15	"The mock test is similar to the final exam, so we understand the structure better." (S1), "It prepares us for exams." (S39)
Reduced anxiety	10	"Less stress because we know what to expect." (S48), "Mock tests reduce anxiety about final exams." (S38)

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Understanding content	9	"We understand the material better through practice." (S19), "Helps us process what we learned." (S64)
Clarification of misconceptions	6	"It allows us to clarify questions and mistakes on our own." (S6), "We correct misunderstandings." (S12)
Exam preparation	5	"Mock exams are good for revision and preparation." (S3), "Gives a realistic sense of the final exam process." (S49)
Process and reflection	4	"Gives us time to reflect on answers." (S12), "Time to understand questions on our own." (S7)

Table 3 summarizes the key themes identified during the second reading cycle of thematic analysis on peer feedback benefits, presenting the most frequent themes alongside two direct student quotes for illustration. The thematic analysis reveals that peer feedback contributes significantly to better understanding of exam content, criteria, and misconceptions, as indicated by most students. This theme was closely linked to perspective taking and dialogue, which allowed students to engage in meaningful discussions and critically reflect on diverse opinions.

Table 3. Peer feedback benefits, and sample student responses

Theme	Frequency	Direct Quotes
Better understanding	20	"Better understanding of exam criteria and content" (S16), "Clarification of concepts leads to better understanding" (S34)
Perspective taking and dialogue	18	"Perspective taking through sharing opinions with peers" (S2), "We exchange viewpoints to enhance understanding" (S37)
Self-assessment & regulation	14	"Self-regulation improves as we reflect on our mistakes" (S49), "Self-assessment helps us identify areas to focus on" (S30)
Socialisation and cooperation	10	"Socialisation enables better collaboration and peer learning" (S56), "Cooperation helps clarify misconceptions and build trust" (S28)
Open to other perspectives	7	"Openness to other perspectives enriches understanding" (S45), "We learn to respect differing views" (S46)
Reduced anxiety	4	"Peer discussions lower anxiety about the exam process" (S52), "Less anxiety when questions are clarified in groups" (S2)
Teacher feedback	3	"Teacher feedback complements peer discussions for better understanding" (S44), "Teacher communication improves with questionnaires" (S53)
Lack of trust and fairness issues	2	"Not all group members contribute equally, leading to fairness concerns" (S29), "Competition and lack of trust may hinder collaboration" (S29)

Self-assessment and self-regulation also emerged as major benefits, as students identified their weaknesses and adjusted their strategies accordingly. Students appreciated the opportunities for socialisation and cooperation, highlighting the importance of peer learning in clarifying concepts and improving collaboration skills (Table 3). Many students mentioned the value of being open to other perspectives, which enhanced their ability to respect differing viewpoints and broaden their understanding.

Despite these benefits, some students noted challenges, such as reduced anxiety being contingent on group dynamics. While teacher feedback was acknowledged as complementary, a minority raised concerns about fairness issues and a lack of trust within groups, which sometimes limited the effectiveness of peer feedback sessions (Table 3). These findings suggest that while peer feedback is valuable, it requires careful facilitation to address challenges and ensure equitable participation.

Table 4. Student Responses on the Pedagogical Value of the Three-Stage Exam

Theme	Frequency	Direct Quotes
Self-assessment & self-regulation	15	"In the first part students understand if they are prepared for the exams and recognize their weaknesses." (S1), "The student sees his level and can work in a group." (S50)
Cooperation & teamwork	12	"With the group part students learn how to cooperate and communicate." (S1), "It teaches students the value of teamwork and shows how a team can work better." (S24)
Teacher feedback	9	"With the third part of the mock test they can have accurate and reliable feedback from the professors." (S1), "It was very helpful to have the correct answers at the end." (S57)
Anxiety reduction	8	"It's not as stressful as a graded exam would be." (S2), "Exam familiarisation reduces anxiety." (S54)
Better understanding	7	"We understand our weaknesses and revise before the final." (S10), "Students recognize the value of learning." (S38)
Exam preparation	6	"The three-stage exam is a helpful experience that prepares you for examinations to come." (S11), "Exam preparation improves through feedback." (S40)
Active learning	5	"Students actively contribute to discussions, leading to better retention of content." (S7), "Active learning promotes engagement." (S30)
Social and collaboration skills	5	"It helps the students to learn how to work in a team with not so familiar people." (S29), "Social skills are developed through peer interaction." (S15)
Critical thinking	4	"The three-stage exam cultivates critical thinking." (S16), "Students critically reflect on different perspectives." (S23)
Time constraints	2	"Not enough time made it less beneficial." (S18), "Time limits cause stress." (S55)

As discernible in Table 4, the most frequently reported theme, self-assessment and self-regulation, highlighted how the exam structure enables students to identify their strengths and weaknesses, fostering independent learning. Cooperation and teamwork emerged as a significant trend, with students valuing the opportunity to collaborate, exchange perspectives, and learn from peers. Teacher feedback was another critical theme, with students emphasizing its role in clarifying concepts and enhancing understanding. Anxiety reduction was also noted, as students found the format less stressful compared to traditional exams, attributing this to familiarity with the structure and supportive feedback mechanisms. Improved understanding and exam preparation were frequently mentioned, with students recognizing the benefits of iterative learning and reflection in enhancing their readiness for final assessments. Active learning and the development of social and collaboration skills further underscored the model's effectiveness in promoting engagement and interpersonal competencies. However, challenges were identified, including time constraints that limited some students' ability to fully engage with the process. Concerns about fairness and unequal contribution in group settings were also raised, suggesting the need for clearer guidelines to ensure equitable participation.

Beyond its alignment with Assessment for Learning, the data also resonates strongly with the principles of Assessment as Learning. This perspective positions students as active agents who monitor their own progress, regulate strategies, and use peer and teacher feedback to refine understanding (Dann, 2014; Earl, 2013). Evidence from the CRAM implementation illustrates these dimensions vividly: students reported that the three-stage process helped them identify misconceptions, reflect critically on their responses, and adapt their approaches in subsequent tasks. The recursive nature of individual testing, collaborative dialogue, and instructor feedback created multiple points of self-assessment, making visible the metacognitive and reflexive practices that are at the core of assessment as learning. In this way, CRAM not only supports knowledge acquisition but also cultivates learner autonomy, feedback literacy, and reflective skills for lifelong learning (Katsampoxaki-Hodgetts, Cope & Kalantzis, 2024).

Implications for Assessment For Learning. The thematic analysis of individual tests, peer feedback, and three-stage exams provide evidence supporting their alignment with the principles of Assessment-for-Learning (A*f*L). These findings are consistent with existing literature on collaborative and reflective assessment methods, emphasizing the value of fostering active engagement, reflection, and cooperation. In highlighting these dynamics, CRAM demonstrates how assessment as learning can be operationalised in higher education, offering a practical design that integrates reflection and self-regulation directly into the fabric of assessment.

1. Enhancing Self-Assessment and Self-Regulation

Self-assessment and self-regulation emerged as predominant themes across all analyses, as students consistently valued opportunities to identify their strengths and weaknesses. This finding aligns with Sadler's (1989) principles of self-assessment, which underscore its role in fostering independent learning. The CRAM model's emphasis on metacognitive awareness resonates with Kinnear's (2020) work on assessment as learning, highlighting how students actively monitored their progress and iteratively improved their understanding. Going beyond performativity, we support that A*f*L practices should integrate self-assessment tasks, reflective prompts, and structured self-review opportunities to empower students to evaluate their learning and adapt strategies independently.

2. Facilitating Exam Familiarity and Reducing Anxiety

Students emphasized how formative assessments such as mock tests and group discussions familiarized them with exam structures and expectations, significantly reducing anxiety. This supports Zipp's (2007) findings that cooperative exams, combined with active learning, enhance preparedness and confidence. Familiarity with the content and procedures provided students with a clear roadmap for effective study strategies. As such, we posit that incorporating low-stakes, iterative assessments throughout the semester can reduce anxiety and increase familiarity with exam formats, fostering competence and resilience.

3. Promoting Collaboration and Perspective Taking

Collaboration and perspective taking were dominant themes, with students reporting that peer discussions enhanced problem-solving, clarified misconceptions, and fostered deeper understanding. These findings echo Johnson et al.'s (2015) observation that group exams encourage reciprocity, cooperation, and higher-order thinking. The CRAM model's collaborative stage also supports Nicol and Selvaretnam's (2020) assertion that internal feedback from peers enhances comprehension and critical thinking. Building on these insights, we advocate for embedding collaborative assessments, such as group discussions and peer evaluations, in AfL practices to develop teamwork and dialogue skills. Facilitators must guide these interactions to ensure equitable participation and constructive outcomes.

4. Leveraging Feedback for Deeper Learning

Students valued feedback-rich environments that combined peer and teacher input to reinforce learning and clarify misconceptions. Nicol and Selvaretnam's (2020) emphasis on feedback dialogue aligns with students' reflections, which highlighted how exchanging perspectives strengthened critical thinking and understanding. This also corroborates Carless & Boud (2018) findings on the role of feedback in fostering comprehension and metacognitive skills. Considering these findings, we recommend designing feedback mechanisms that balance peer and teacher contributions, with scaffolding strategies such as guided discussions, annotated feedback, and exemplars to maximize their impact.

5. Encouraging Critical Thinking and Active Learning

Structured assessments such as the three-stage exam fostered critical thinking by encouraging students to compare, critique, and synthesize diverse perspectives. Students noted that these assessments required active engagement with the material, reflecting Johnson et al.'s (2015) findings that group exams enhance higher-order cognitive skills. Therefore, it is essential to consider implementing assessment tasks that challenge students to analyze and evaluate content using problem-based tasks, case studies, and real-world applications to promote critical thinking and engagement.

6. Addressing Equity and Individual Needs

While group assessments were widely valued, some students raised concerns about inequities, such as unequal participation or competition, highlighting the need for well-structured group dynamics. The diversity of learning preferences also underscores the importance of designing inclusive assessments that accommodate different needs. Guided by this observation, we suggest incorporating clear guidelines for group work, with mechanisms to monitor

participation and address fairness. Offering diverse assessment formats ensures inclusivity and engagement for all learners.

V. Conclusions

This study provides evidence supporting the value of individual tests, peer feedback, and three-stage exams as effective tools for implementing Assessment-for-Learning (AfL) practices. Key findings highlight how these assessment methods promote self-assessment, collaboration, and critical thinking, while reducing student anxiety and enhancing understanding of exam content and processes. The alignment of these findings with existing literature, including works by Johnson et al. (2015), Nicol and Selvaretnam (2020), and Sadler (1989), reinforces the significance of feedback-rich and collaborative learning environments in fostering metacognitive awareness and deeper learning. In this study, designing assessments that balance individual reflection with collaborative dialogue has great pedagogical significance based on our analysis. For example, while self-assessment tasks empower students to independently monitor their progress, group discussions provide opportunities for perspective taking and shared problem-solving; thus, aligning with the CRAM model's emphasis on metacognitive learning and iterative improvement.

Several limitations were identified in this study. First, while the thematic analysis revealed rich insights into student perceptions, the self-reported nature of the data may introduce biases, such as overestimation of benefits or underreporting of challenges. Additionally, the findings are context-specific, focusing on the implementation of A*f*L practices within a particular institutional and disciplinary setting. This limits the generalizability of the results to broader educational contexts. Another limitation pertains to the varying dynamics of group work. While many students valued collaborative learning, some expressed concerns about inequities in participation and fairness.

Building on these findings, future research could explore the long-term impact of three-stage exams on retention and performance in high-stakes final exams. Investigating whether these benefits persist over time would provide valuable insights into the sustainability of A*f*L practices. Additionally, exploring group dynamics and peer interactions in more detail could deepen our understanding of how to refine collaborative assessments across disciplines. Research could examine factors such as group composition, facilitation strategies, and mechanisms for equitable participation to maximize the benefits of teamwork while mitigating potential challenges. Finally, longitudinal studies examining the interplay between self-assessment, feedback mechanisms, and metacognitive development could further elucidate how A*f*L practices influence long-term academic and professional skills. Integrating these findings into diverse educational settings would offer practical insights for scaling and optimizing assessment practices globally.

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How inclusive is our teaching, assessment and practice in Higher Education? A qualitative case study with students with learning difficulties

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***Abstract*— "Accommodations" for students with learning difficulties can include adjustments in timing, assignments, curriculum, materials, assessment, and special exam conditions (Nijakowska et al., 2016). Research in universities has highlighted support services during exams, such as extra time, using a separate room, using a computer for answers, reading questions aloud, and oral examinations (Olofsson et al., 2012; Mortimore and Crozier, 2006; Hadjikakou and Hartas, 2008). This research project identifies the support and accommodations students with learning difficulties need during lessons, exams, and assessment. It explores whether teaching practices, assessment and policies are inclusive and what improvements are needed. Seventeen students with learning difficulties at the University of the Peloponnese participated in audio-recorded, semi-structured interviews.**

Participants preferred individual oral exams and accommodations such as extra time for reading and answering multiple-choice questions. Many suggested collaborative assignments with extended deadlines and a mix of assignments, mid-terms, and final exams.

The study reveals gaps in professor awareness and implementation of university policies. Some professors were unaware of students' diagnoses or provided insufficient accommodations, such as individual oral exams or extra time for assignments. Many did not use appropriate presentations, visuals, or teaching aids. These findings highlight the need for improved training and policy enforcement to ensure inclusive practices.

Keywords—learning difficulties, policy, practice, Higher education, accommodations

I. INTRODUCTION

This paper aims to identify the support and accommodations provided to students with learning difficulties during lessons, exams and the assessment process at the University of Peloponnese. We will investigate whether our teaching practice, assessment and policy are inclusive enough and what we need to do to improve our policy and practice.

According to the 3699/2008, article 3 law in Greece learners with disabilities and Special Educational Needs include those who have sensory and visual disabilities, sensory hearing disabilities, mobility disabilities, speech disabilities, special learning disabilities or difficulties such as dyslexia, dysgraphia, dyscalculia, dysanagnosia, dysorthografia, attention deficit disorder with or without hyperactivity (ADHD), pervasive developmental disorders (autism spectrum), mental disorders and multiple disabilities. Specific Learning Disabilities (or Difficulties in the UK) refer to people with difficulty in one area, such as reading, writing or spelling (Antoniou and Alexiou, 2019).

Dyslexia, a subset of SLDs, is defined differently across disciplines, complicating diagnosis and understanding (Frith, 1999; Kormos and Smith, 2023). The International Dyslexia Association defined dyslexia as a specific learning disability, neurobiological in origin, characterized by "difficulties with accurate and fluent word recognition and by poor spelling and decoding abilities". These difficulties result from a deficit in phonological processing that is unexpected from the person's cognitive abilities (IDA, 2025).

Asperger's syndrome is associated with deficits in social and conversational skills, difficulties with changes in situations or environments and obsessive routines and was integrated into Autism Spectrum Disorder(ASD) in DSM–5 (American Psychological Association, 2013). Key features of ASD include deficits in social interaction and communication and restricted and repetitive patterns of behaviour, interests and activities (American Psychological Association, 2013).

ADHD is another neurodevelopmental disorder characterized by hyperactivity, impulsivity, and inattention (American Psychological Association, 2013). Its symptoms manifest in three forms:

1. Combined (inattention, hyperactivity-impulsivity).
2. Predominantly inattention.
3. Predominantly hyperactivity-impulsivity (American Psychological Association, 2013).

Anxiety disorder is any of a group of disorders that have as their central theme the emotional state of fear, worry, or excessive apprehension (American Psychological Association, 2013).

II. ACCOMMODATIONS

"Accommodations" refer to the arrangements and modifications for learners with dyslexia to meet their learning needs and achieve better performance. They may cover timing, assignments, curriculum, materials, assessment and special conditions during exams (Nijakowska et al, 2016). Differentiation" includes the adjustments the teacher makes to cater for learners' needs. Teachers can differentiate the material (content), the way learners access their material (process) and the way students demonstrate what they have learnt (product) (Tomlinson, 1999). Certain modifications that inhibit distractions, such as controlling classroom noise, avoiding bright lights, and controlling the temperature of the room,

need to be attended to even for adults at University, as adults with ADHD are highly sensitive to sensory over and underload (Gutman & Szczepanski, 2005 in Kormos and Smith, 2023; Van Hees et al, 2015). Most students with learning difficulties prefer to read material at 14 or 16 points and with large spaces between words, and the choice of font is crucial in creating materials (Kormos and Smith, 2023).

Research has shown that accommodations offered to students with dyslexia at Universities are handouts, recordings of books and lectures, the provision of lecture notes on the internet, copies of PowerPoint presentations, dyslexia-support tutors, help with structuring essays, extra time for assignments and ICT assistance like audiobooks (MacCullagh et al, 2016; Mortimore and Crozier, 2006; Olofsson et al, 2012; Hadjikakou and Hartas, 2008; Sarrett, 2017).

Teachers and Headteachers in Hadjikakou and Hartas's (2008) study in Cypriot Higher Education Institutions reported using teaching modifications such as visuals or the projector, and speaking clearly and slowly. Furthermore, students in Mortimore and Crozier's study (2006) in British Universities reported using resources such as open access to special computers with speech-to-text conversion facilities. Research in Universities has also shown support during exams: extra time, using a different room or a computer to write answers, reading the questions aloud and oral examination (Olofsson et al, 2012; Mortimore and Crozier, 2006; Hadjikakou and Hartas, 2008; Pitt and Soni, 2017; Van Hees et al, 2015; Sarrett, 2017).

Rath and Royer (2002), in their review article, as well as Hadjikakou and Hartas (2008), refer to services such as therapy, peer support groups and counselling offered by various colleges. Therapy or peer support groups involve students discussing their daily experiences with a therapist individually or in groups to help them deal with failure, lack of self-esteem, frustration and social problems. Counsellors help students identify their needs and choose the right course.

Research has shown that students with dyslexia do not always receive the accommodations they are entitled to. Some students with learning disabilities in Nieminen's (2023) study at a Finnish University reported having to inform teachers themselves, and that some teachers denied access to the accommodation they were entitled to. No flexibility in academic activities such as assignment submission time, examination, or teaching-learning methods was reported by students with autism in Higher Education (Sefotho & Onyishi, 2021; Marom & Hardwick, 2024).

Students with dyslexia in Mortimore and Crozier's (2006) and Marom and Hardwick's (2024) study also mentioned lecturers' lack of knowledge on dyslexia and Learning Difficulties. Students in Mortimore and Crozier's (2006) study suggested that more training and workshops are needed to support students with dyslexia. Similarly, Greek secondary and EFL teachers' lack of training in teaching students with SEN was found in Constantopoulou's (2000), Arapogianni's (2003) and Rontou's (2012) studies. Nijakowska's (2000) study with 38 Polish primary and secondary language teachers reported similar findings.

However, a tutor in Hadjikakou and Hartas' (2008) study reported giving postgraduate seminars on teaching methods for students with disabilities and training other colleagues. Kormos and Nijakowska's (2016) study also showed that EFL teachers feel unable to use inclusive practices without training, but after the training, teachers' attitudes were more positive towards inclusion. These findings suggest that educators need to be trained and informed about dyslexia issues at all levels of education to improve dyslexia support and provision.

III. OUR POLICY

The Internal Operating Regulation of the University of Peloponnese (2019) suggests that Faculty members are acquainted with students with disabilities/ specific learning difficulties and discuss the difficulties they face during their studies, with them and inform them about the material they need to study and the requirements of the module (University of Peloponnese 2019).

Students with learning disabilities at both undergraduate and postgraduate levels can also apply to be examined orally by providing the necessary documents. They must be given preparation time (10-15 minutes) before the exam to become familiar with the questions and extra time during the exam, either oral or written. They must be allowed to be examined with multiple-choice questions, if possible, and to take mid-term exams. It is also suggested that alternative examination methods are provided to these students, for example, written assignments and participation in research projects, where appropriate (University of Peloponnese, 2019).

IV. METHODOLOGY

A. Participants

The participants of this project were seventeen students with a diagnosis of learning difficulties at the University of Peloponnese School of Social Sciences. Sixteen students were undergraduates of different years of study, and one was a postgraduate.

B. Ethics

The research was advertised using posters on notice boards, via emails or e-class announcements. Before the data collection, the purpose of the study and ethical issues regarding anonymity and confidentiality were discussed with the participants. The students who were willing to participate signed a consent form agreeing to disclose their diagnosis to the researchers, to be audio-recorded and that their exam papers would be used.

C. Methods

Audio-recorded, semi-structured 30-60-minute interviews, recorded via Webex or face-to-face with students, were conducted. After recording interviews, the files were uploaded and transcribed using Office 365 Word. The researchers listened to the audio files to make corrections to the transcribed interview files.

D. Analysis

Data were analyzed following the principles of Grounded Theory (Bogdan and Biklen, 1998; Corbin and Strauss, 2008; Miles and Huberman, 1994). Codes were generated based on our research and interview questions and the students' answers. Colour coding was used for the analysis of the interview data.

E. Credibility, transferability and dependability

To increase the rigour of our research methods, we followed certain procedures (Corbin and Strauss 2008; Lincoln 1995). To address credibility, both researchers, who were experienced, conducted interviews and both read and corrected the transcripts produced by Office 365 Word and coded the data using triangulation between investigators (Delamont 2002). Transferability was achieved both by

including participants from different geographical areas of the country, e.g. the capital and smaller cities and by ensuring participants reflected a variety of characteristics (e.g., age, gender). To ensure dependability, the two researchers regularly discussed their findings in order to agree on themes and codes, as well as to eliminate biases in the personal interpretation of interview transcripts.

In this paper, we focus on five main themes regarding the support that students with LD receive and their suggestions: 1) examination accommodations, 2) assignment support, 3) teaching practice adjustments, 4) Professors' knowledge and 5) Counselling service.

F. Research questions

Examination accommodations:
Are they examined orally? Are they examined all together or individually?
Are they given extra time for exams?
Assignments and assessment support:
Are they given extra time for assignments?
Are they given support on writing assignments?
Are they given alternative examination methods, for example, written assignments and participation in research projects?
Teaching practice adjustments:
Do lecturers change their teaching methods to accommodate them?
Are PowerPoint presentations from lectures available before the lectures?
Are videos used in the lessons to teach some concepts?
Are maps and visuals used in the lectures?
Professors' knowledge:
Do lecturers know about their diagnosis?
Are lecturers aware of the nature of the difficulties they face?
Do the lecturers discuss with them the difficulties they face during their studies?
Do they inform them about the material they need to study and the requirements of the module?
Counselling service:
Does the counselling service support them? How?
Does it give them psychological support and advice on writing assignments and revision strategies?
Do they know about the counselling service of the University of Peloponnese?

VI. FINDINGS

A. Accommodations in exams

The students in our study reported that they are examined orally in exams by most professors when they ask for it, according to the University's regulations. However, some professors do not conduct oral examinations in a way that benefits the students with Learning Difficulties. For example, they do not give them the exam questions and time to prepare them as recommended by the diagnostic centre, but take them to another room and ask them questions orally:

> *Professor, I say, can I please write it down first and then express myself? And he says, "I can't give you a double exam", and he says, "Choose between written or oral and take it*." (interview with student 4).

Some professors examine students with learning difficulties orally, in a group, including other students without learning difficulties. Three students mentioned they would like to prepare their answers with written notes in the exam, and they prefer an individual oral examination rather than in a group, using their notes:

> *It's better to be alone because there can be, let's say, the anxiety that I might be saying something at this moment that's not right, and others hear it, so I may feel insecure at that moment.* (interview with student 5)

The same student mentioned that in the group oral examination, no time is given for preparation with written notes, which makes it difficult for some students with LD to cope, for example, for students with anxiety disorder, as one student said:

> *At least give me a few minutes to think about it, organize my thinking a little bit. I think that's what I should have. It was my right to have it.* (interview with student 5)

Seven students in our study stated that they would like the invigilator or lecturer to read the exam questions before they take written notes:

> *When we are in the exam room, and we are about to write the exam questions, there should be an option to ask an invigilator to read them to us* (interview with student 2).

Another student mentioned the option of asking for the exam questions to be reworded at the time of the oral examination for students with dyslexia/ADHD:

> *We have the right to ask again at the time of the oral examination to have the question rephrased* (interview with student 12).

Three students with dyslexia said they need extra time for exams with multiple choice questions because they need more time to read the questions than other students, and the time given is 10 to 20 minutes:

> *When the exams are multiple-choice, that's a problem for me personally and generally, because I read slowly compared to others, I usually need more time* (interview with student 6).

Midterms and especially multiple midterms during the term are useful for students with LD as they have to study less material and therefore, they can perform better**:**

> *The midterms are quite helpful because there is less material to read for midterms, so there is a greater chance that I will be able to familiarise myself with the material and perform better* (interview with student 2).

Two students mentioned they need specific instructions on what to study for the exams, as some professors do not specify what they need to study:

> *There are some professors who, if we ask them about the exam material, tell us "everything that was taught in class"* (interview with student 2).

Another one mentioned that he needs to have the examination material early enough to be able to study it, as students with LD need more time to study the material because of their concentration difficulties:

> *I complain so that [the exam material] is announced a little bit earlier, a week earlier, ... because it's harder when it's all bundled together to study it* (interview with student 11).

Four students suggested that the examination of students with learning difficulties be conducted in a different and quiet room because they have difficulty concentrating:

> *I want to have a quiet environment to be able to concentrate* (interview with student 2).

B. Support for assignments

Students with LD need extra time for assignments and no penalties for lateness, as four students mentioned**:**

> *Some professors even have a penalty if you submit the assignment a day later, and one point is deducted* (student 8)

Four students mentioned they need early information and guidance on the assignments' content and structure (e.g. beginning, middle, end) and not very general topics:

> *It's just a matter of letting you know early on about the assignment and the topic ..." you will be contacted by email", ... "this is the topic" or they haven't explained exactly how the assignment should be done and what should be done, this is a problem.* (interview with student 10)

Six students said they prefer group work to individual work for assignments. A student with autism said:

> *I am supported better in a team than working individually on assignments* (interview with S14)

One student mentioned that she would like to do group or individual work along with an oral presentation so that she can explain her thinking orally:

> *Regarding assignments, it would be helpful if the student chooses to tell them the assignment orally [by reading it],... or only orally using notes.* (interview with student 10)

C. Suggested teaching techniques

A student with dyslexia mentioned that the use of questions in lessons helps him and all the students in class:

> *There are professors who, when they deliver the lesson they ask the students, "What do you think it is? What do you think would happen if they d i d that…?" and believe me, the interactive lesson is much better..., but all the students like those who do that* (interview with student 8)

A student with autism in the first author's class mentioned in the interview that he likes to be asked questions so that the teacher knows what he can understand:

> *I'm glad you're asking me, because then you understand the questions I have about what you're asking me* (interview with S14).

The use of PowerPoint is helpful for all students with LD in the study**:**

> *PowerPoint is always helpful, even if I don't read it all, it helps to draw attention, read some key words on it to help you understand where we are* (interview with S11)

However, PowerPoint slides are not always appropriate for students with LD when there is too much information in one slide, as three students mentioned:

> *I have come across presentations with too much information on a slide, which makes you get lost or give up on the spot* (interview with student 11)

Sometimes PowerPoints are non-existent, which makes lessons difficult to follow for students with LD**:**

> *There are some Professors who don't use slides at all. The lesson may be nice, but I think something is missing* (interview with student 3).

The use of video is useful for all students with LD**:**

> *much easier I can watch a video, anything with picture and sound, than I can follow the lecture* (interview with Student 2)

Four students also mentioned that the use of the board is useful**:**

> *…keywords, outlines or notes on the board help* (interview with Student 11).

D. Instructors' information about students' diagnosis

A lack of information from faculty members about the diagnosis and the specific difficulties they face from the beginning of the semester, if they are not informed themselves, was reported by four students, as professors do not read every single diagnosis:

> *It is not obvious; my difficulty can only be understood by this professor, who will go to the secretary and ask for my diagnosis to read it, which ... I think should be done* (interview with student 5).

> *There are professors I have this year who don't know that I've taken oral exams, I don't think they know that I'm dyslexic* (student 10).

Two students also said they would like professors to be informed about diagnoses at the beginning of the semester, not before the exams, so that there is appropriate support for the assignments:

> *I think it would be useful at the beginning of each course, each semester, for the professor to have a clue whether there are students with some form of dyslexia* (interview with student 8).

E. Counselling

The Counselling and Psychological Support Unit of the University of Peloponnese provides free one-to-one or group counselling and psychological support to its undergraduate, postgraduate and doctoral students and addresses the needs of students with SEN (University of the Peloponnese n.d.).

The students with Learning Difficulties in our study consider it positive that there is such support, and some students said they would like to use it:

> *R1: We also have a counselling service, We Care, at the University. It operates via the internet. You log in, make an appointment, and they give you advice. Would you like to use it?*
>
> *S17: Sure, sure, that sounds really interesting* (Interview with Student 17).

However, the students with learning difficulties do not use this support as either they are not informed about this Unit, or the support is provided by distance, which some students do not like:

> *The truth is that it would be better, although I know it is difficult in practice, if there was a professor at the School, ... or at least an advisor who could discuss things with the students* (interview with student 3).

V.II Discussion

The students with LD in our study stated that they would like to have a variety of assessment modalities and more frequent assessment, which was also mentioned as helpful in MacCullagh et al's study (2017). Furthermore, extra time in exams, using a different quiet room, reading the

questions aloud to the student and oral examination were mentioned as useful in our study and other studies in HE (Olofsson et al, 2012; Mortimore and Crozier, 2006; Hadjikakou and Hartas, 2008; Pitt and Soni, 2017; Sefotho & Onyishi, 2021; Van Hees et al, 2015).

Regarding support for assignments, guidance and clear instructions for assignments were mentioned as useful by students in our study, as well as in Sefotho & Onyishi (2021).

Regarding professors' knowledge on LD, our study showed that there was a lack of professors' knowledge about LD, as in Mortimore and Crozier (2006), Van Hees and Marom and Hardwick (2024). Students with LD in our study also mentioned having to inform professors themselves and professors denying access to accommodations, as in Nieminen's (2023) and Marom and Harwick's studies (2024).

Regarding accommodations in lessons, students with LD in our study prefer watching videos to reading the material required and watching videos or seeing pictures in class rather than listening to the professor, as students in MacCullagh et al's study (2017). The use of PowerPoint Presentations was mentioned as useful by all students in our study and by students in Marom and Hardwick (2025). However, students in our study also mentioned that PowerPoint slides with less information are easier to read, confirming MacCullagh et al's (2017) finding.

V.III Limitations and Suggestions for Further Research

A limitation of the study is that it did not include the perspective of professors who taught the specific students. In future research, we are going to include interviews with professors to investigate their knowledge of the needs and difficulties that students with LD face and what support and accommodations they provide to them.

V.IV Conclusion

This study highlights the pressing need to embed inclusivity more systematically into teaching and assessment practices in Higher Education. By acknowledging the diverse backgrounds, abilities, and learning preferences of students, institutions can ensure that academic environments are not only accessible but also empowering. The findings indicate that inclusive pedagogy and fair assessment strategies contribute to stronger engagement, greater equity, and improved student outcomes. However, achieving genuine inclusivity requires more than policy declarations; it demands a continuous process of reflection, professional development, and institutional commitment. Universities must foster cultures where inclusivity is viewed as a shared responsibility, supported by evidence-based practices and meaningful dialogue between educators and students. In doing so, Higher Education can move closer to providing learning experiences that respect individuality while promoting collective academic success.

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What Professors Expect but Students Don't Have – On Redesigning University Business English Courses

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***Abstract* – The new generation of students, often called "Pandemials", Generation P (where P stands for pandemic) or "Generation C" (where C stands for Corona, COVID, computerized, connect, communication, change), those born between 2003 and 2009, experienced adolescence (13-17 years of age) during the COVID-19 pandemic. They faced isolation, disrupted education, and heavy reliance on digital tools. While now they excel in creativity, multitasking, and technological fluency, they struggle with verbal communication, interpersonal skills, and focus, alongside significant anxiety about careers and financial stability.**

To address these challenges in redesigning English for Specific Purposes (ESP) university courses, the Author conducted a target needs analysis among professors teaching courses in English in Bachelor of Business Administration (BBA) programs at a university in Poland. The survey identified critical linguistic and non-language competencies for student success.

The findings call for the redesign of Business English courses the Author teaches to better prepare students for both academic and professional environments. The paper discusses how activities – such as emergent collaborations, case studies, and action-oriented learning – develop key skills while fostering an inclusive, student-centered learning environment. Additionally, the design thinking approach will be recommended to help create innovative, engaging course materials tailored to students' needs, developing their language proficiency and transferable professional skills.

Keywords – ESP, Business English, Gen Z, course design, needs analysis, materials writing

I. Introduction

The onset of the COVID-19 pandemic created a profound disruption to education systems worldwide, with lasting effects on the cohorts who experienced their formative years during lockdowns. This generation – interchangeably referred to as Pandemials, Generation P (for pandemic) or Generation C (for Corona, Covid, connect, communication, change) – entered adolescence in a period marked by isolation, uncertainty, and a heavy dependence on digital technologies.

Their reality unfolded against the backdrop of what leadership scholars have long referred to as a VUCA world – one characterized by volatility, uncertainty, complexity, and ambiguity. Originally coined in 1987 by Warren Bennis and Burt Nanus, the VUCA concept has since been used to describe environments where the pace of change is rapid, predictability is low, systems are interdependent and opaque, and interpreting events is inherently difficult (Bennis & Nanus, 1987). In practice:

1) Volatility refers to the accelerating rate of change.
2) Uncertainty denotes the lack of predictability or reliable information.
3) Complexity points to systems with multiple interacting variables where cause and effect are unclear.
4) Ambiguity reflects the difficulty of accurately interpreting reality in such conditions.

In 2020, Jamais Cascio proposed the complementary BANI framework to reflect a world that had become not only volatile and uncertain, but also brittle, anxious, nonlinear, and incomprehensible. The BANI model expands VUCA by highlighting systemic fragility, rising anxiety, disrupted causal relationships, and the limits of understanding in a rapidly shifting environment (Cascio, 2020).

For Gen Z, these conditions amplify challenges: despite strengths in multitasking, creativity, and digital fluency, they show deficits in communication, focus, and resilience. Studies highlight compromised social development and rising anxiety over careers, finances, and future stability (Barczykowska & Pawełek, 2021; Co-op Media Report, 2021).

Gen Z struggles in VUCA academic and professional settings, requiring tailored education and leadership. Research indicates that empowering and entrepreneurial leadership fosters adaptability, innovation, and resilience (Ardi et al., 2024). At the same time, Gen Z faces mental health issues tied to digital overload, academic and career pressures, global uncertainty, and social isolation, which undermine performance and well-being (Matilda et al., 2025).

Educational systems are responding with psychological support strategies. Finland's model integrates emotional support, life skills training, and proactive curricula to build student resilience in VUCA and BANI contexts (Latipah, 2024). Such systemic support complements leadership approaches by equipping students with both academic and psychological resources to thrive in uncertainty.

In BBA programs, these challenges appear as a gap between student abilities and academic expectations. Faculty note that while students are confident digitally, they

often lack linguistic precision, intercultural competence, and critical thinking for international business (Bhatia & Bremner, 2012). ESP needs analyses highlight the importance of aligning course design with academic and professional demands through authentic materials, discipline-specific tasks, and experiential learning (Huhta et al., 2013; Brown, 2016).

For Gen C and Z students, redesigning Business English courses thus requires addressing both skill deficits and the altered psychosocial context in which they learn. Approaches that blend language development with professional skills and psychological support can better prepare students to meet academic standards and professional challenges in a rapidly evolving, uncertain, and fragile world.

II. TARGET NEEDS ANALYSIS

In the context of ESP, the concept of needs is central to the design of effective courses. Needs can encompass various interpretations, from the language skills students must acquire to perform effectively in their academic environment to the expectations of instructors and institutional stakeholders. Definitions vary, but common descriptors include desired proficiency, essential knowledge for functioning in the target situation, gaps in current ability, learner goals, wishes, and the next developmental step relative to their existing skills (Widdowson, 1981; Hutchinson & Waters, 2002).

Target needs analysis in a BBA program taught in English identifies the skills students at B2–C2 CEFR levels must develop: effective communication, academic writing, presentations, business texts, and professional simulations. Students are also encouraged to take the Cambridge Linguaskill Business test, with B2 proficiency as a minimum benchmark for both coursework and CV enhancement.

Target situation analysis examines the language used within a specific discourse community, such as for example a business-oriented academic program. It investigates how communication is structured, the conventions of discourse, and the rhetorical practices that mark membership in the community (Richards & Schmidt, 2010). In the BBA context, this involves understanding genres such as case studies, business reports, pitches, formal correspondence, academic books, presentations and negotiations.

The analysis also extends to the tasks students will perform while participating in seminars, synthesizing information from diverse sources, collaborating in international and culturally diverse teams, producing project documentation, and delivering oral briefings. These communicative activities define the target competencies, while means analysis considers the resources available, such as instructor expertise, course materials, assessment formats, and institutional expectations (Brown, 2016).

Finally, the supplementary present situation analysis may be conducted to evaluate learners' current competencies at the outset of the program. For students entering with B2–C2 General English proficiency, this helps instructors identify strengths and areas for improvement, shaping course design to bridge the gap between existing skills and target outcomes.

A. Research Method

The research project *Let Professors tALK*, where ALK is an acronym for the Polish name of the university where the Author is based, was conducted in October 2024 at Kozminski University, Warsaw. A total of 27 professors and lecturers teaching in the BBA program filled out an online questionnaire. All respondents delivered their courses, other than the Business English course, using English as the medium of instruction.

The survey aimed to identify academic expectations towards BBA students, assess key Business English skills (speaking, writing, reading, listening, mediation), explore non-linguistic competencies (soft skills, career readiness), and collect suggestions for course redesign. The ultimate goal was to map Business English teaching more closely with academic requirements and professional demands.

The questionnaire consisted of both closed and open-ended questions. Closed questions used rating scales to evaluate the importance of specific language skills (speaking, listening, reading, writing, mediation) and soft skills (teamwork, critical thinking, problem solving, analytical skills, motivation and perseverance). Respondents indicated their priorities on a percentage or ranking basis. Open-ended questions invited qualitative feedback on perceived gaps in students' academic performance, examples of communication challenges in the classroom, and suggestions for course improvements. This mixed design ensured that the survey collected both quantitative data for measurable comparisons and qualitative insights for richer interpretation.

Participants represented a balanced mix of positions: lecturers (approx. 33%), assistant professors (approx. 30%), and associate professors (approx. 37%). Their teaching experience in the BBA program ranged from 0–2 years (33%) to over 10 years (7%), with intermediate experience levels in between. Areas of expertise included business disciplines (Marketing, Finance, Management) and social sciences (Sociology, Economics, Human Capital Management).

B. Results

Survey results show a clear hierarchy of competencies, with 85% of faculty ranking speaking as the top priority. Professors stressed the need for students to engage confidently in discussions, present persuasively, work in teams, and adapt their communication to feedback in real time.

Listening followed closely at 80%, with faculty noting that comprehension skills are essential for active engagement in lectures, case discussions, and collaborative projects. Listening in professional contexts also includes the ability to grasp nuances, identify key points, and interpret tone or intent accurately.

Reading, ranked at 75%, was described as a cornerstone of academic success. Professors stressed that students must be able to engage with academic texts, business reports, and case studies critically, extracting relevant information and applying it in discussions or assignments.

Writing, recognized by 70% of respondents, remains crucial for producing clear, well-structured academic essays, professional reports, and project documentation. Faculty commented that strong writing skills reflect a student's analytical thinking, precision, and ability to adapt language to different audiences.

Mediating meaning, while rated lower at 45%, is seen as a growing area of importance. Professors highlighted that the ability to paraphrase, summarize, and clarify complex information is vital for teamwork, cross-cultural communication, and interdisciplinary collaboration.

Non-linguistic competencies were also strongly emphasized. Teamwork (78%) and critical thinking (70%) topped the list, as professors noted that these skills underpin almost all academic and professional activities. Problem-

solving (67%) and analytical skills (63%) were valued for their role in navigating complex projects and case-based assignments. Motivation and perseverance (52%) were regarded as essential traits for sustained academic effort and career resilience.

Faculty suggestions for course redesign focused on integrating case studies, project-based learning, and authentic business communication tasks. They also encouraged cross-disciplinary collaboration to mirror the challenges students will encounter in professional environments. In professors' opinions, Business English must prioritize communication skills but also develop an array of soft skills needed in both academic and professional realities.

III. REDESIGNING A BUSINESS ENGLISH COURSE

A. Rationale for Redesign

Findings from the *Let Professors t*ALK survey show the need to rethink Business English course design. Faculty feedback and the Author's ESP team observations point to strengths but also gaps, with growing concern over classroom practices that fail to address changing student profiles and behaviors.

The redesign builds on the Target Needs Analysis from the Boosting Students' Employability project (Łuczak, 2024), which showed employers value graduates' English proficiency, especially speaking and writing, alongside soft skills. Practical communicative abilities in meetings, calls, presentations, negotiations, and correspondence were prioritized over certificates.

Specific skills identified by employers provide a clear direction for course innovation. These include:

1) Confident oral communication in professional settings (meetings, video calls, interviews, negotiations).
2) Written proficiency in professional formats (emails, reports, proposals, summaries).
3) Listening comprehension for presentations, webinars, and client meetings.
4) Reading for information extraction from reports, contracts, and case materials.
5) Soft skills such as teamwork, adaptability, problem-solving, and the ability to work under pressure.

A. Strategic Directions for Innovation

While syllabus content aligns with program objectives, the methodology and delivery need innovation. The redesign focuses on how outcomes are achieved – through updated instruction modes, task design, and engagement strategies that match students' learning habits and motivation.

The redesign requires changes in teaching methods, integration of language and professional competences, and use of practice-oriented materials. By embedding workplace values and applying interactive strategies, the course can better align academic goals with industry demands and strengthen the bridge to professional readiness.

Insights from recent research, including the StudentSurvey.ie (studentsurvey.ie) reports and the national study by O'Neill & Short (2025), underline that Gen Z students engage most when learning is relevant, practical, and connected to real-world applications. Students express a clear preference for projects, case studies, and group activities that mirror workplace scenarios. They value opportunities to work on authentic tasks, where theoretical knowledge is applied in contexts resembling business practice.

Course redesign should include collaborative projects, industry-linked tasks, and business simulations. Although students sometimes critique group work, it can be strengthened through clear guidance, dual assessment, and structured reflection, helping them build employability skills seen as essential.

Ultimately, the redesign aims to make the course more dynamic, experiential, and career-oriented while maintaining academic rigor. It will require innovative teaching strategies, cutting-edge materials, and learning experiences that connect language skills with professional competencies, preparing students to transition confidently from university to the workplace.

IV. INNOVATIVE METHODS FOR BUSINESS ENGLISH COURSE REDESIGN

Innovation in the Business English course is vital to bridge academic preparation with workplace needs. Drawing on faculty, employer, and student research, the author piloted methods in 2024/2025 to boost interactivity, creativity, and competence development, making learning more applied and aligned with real-world communication.

A. Design Thinking

Design thinking, adapted from product development and innovation practices, provides a human-centered framework for problem-solving that meets the needs of Business English learners. It operates through five iterative stages:

1) *Empathize*: Understand students' perspectives through tools like student personas and empathy maps.
2) *Define*: Identify the key communication or professional challenges students face in their academic and professional lives.
3) *Ideate*: Brainstorm potential solutions in collaborative groups, encouraging creativity and multiple perspectives.
4) *Prototype*: Create early versions of communication solutions (presentations, written tasks, role-plays) to test ideas.
5) *Test*: Present and refine prototypes based on peer and teacher feedback.

Practical application included student personas and empathy maps to identify learning needs, enabling co-designed lessons. Students then engaged in collaborative ideation, prototyping, and feedback cycles through role-play and writing, fostering creativity, adaptability, and ownership of outcomes.

The Author and her team of language teachers tried and tested the following activities, incorporating the Design Thinking method:

1) *Teach with Infographics*: Students design infographics to visualize business trends or market data, summarizing research findings or brainstorming sessions in a concise, visually compelling way. This activity takes advantage of Generation C's strong visual literacy and preference for concise, impactful communication.
2) *Silent Video Tasks*: Students watch videos without sound, hypothesizing the content, identifying business themes, and later confirming their

predictions upon hearing the audio. This approach responds to Generation C's shorter attention spans and reflects their preference for curiosity-driven, interactive activities.

3) *Escape Room Quizzes*: Using tools like Genially or Canva teachers create puzzles and students work in teams to solve business-themed escape rooms that reinforce vocabulary, reading, and problem-solving skills. AI tools can be used to generate original scenarios, clues, and challenges, ensuring tasks remain relevant and up-to-date. This method caters to Generation C's enthusiasm for gamified and collaborative learning experiences, while strengthening critical thinking, communication, and teamwork. The winning team may receive an award, e.g. extra points added to the next test result.

4) *Management Tip of the Day Projects*: Based on daily management insights (e.g., from Harvard Business Review), students read the tips and create comprehension and vocabulary tasks for their peers. They design quizzes, gap-fill exercises, or discussion questions using real-world leadership and management tips. The activity builds critical thinking, vocabulary, and application skills while connecting content directly to workplace contexts. This project resonates with Generation C's preference for bite-sized, practical, and context-rich learning, while encouraging peer-to-peer engagement and creativity.

5) *Creating AI-Assisted Open Gap Task*: Students use AI tools (e.g., ChatGPT) to create gap-fill exercises on current business topics, drawing vocabulary from curated Quizlet lists. This reinforces key terms, develops exam-style question design, and promotes critical thinking, while encouraging Gen C to shift from passive AI use to active, personalized content creation.

6) *Writing Relevant Case Studies*: Teachers create tailored case studies from latest academic articles, news reports, or social media stories. AI can assist in developing these materials, or a custom GPT can be built to act as a professional figure in the case, allowing students to interact, role-play, and problem-solve. AI can also generate model answers, teacher's notes, and role-based materials adapted to different learner levels. This activity responds well to Generation C's preference for authentic, up-to-date materials, interactive problem-solving, and opportunities to engage with realistic, tech-supported simulations.

B. Emergent Collaborations

In today's digital academic environment, traditional top-down group work often fails to engage Generation C. Emergent collaboration provides an alternative, with students co-creating knowledge and outputs in real time, adapting roles and directions through digital tools.

This approach shifts the teacher into a facilitator role while students take ownership, mirroring modern workplaces. Shared documents, boards, and live tools support co-construction, reflection, and peer feedback.

The focus is on producing shareable outputs for social media, professional networks, or learning platforms, building digital literacy, teamwork, communication, and Business English skills.

Examples of emergent collaboration tasks tested in class include:

1) Co-creating a presentation on a current business topic.
2) Designing a digital leaflet or booklet for a fictional company project.
3) Producing infographics summarizing market trends or key concepts.
4) Creating a business-themed poster for a campaign or event.
5) Building a tailored vocabulary set for Quizlet to support exam preparation.
6) Designing a revision worksheet formatted for direct upload to a testing app.

All students contribute to a shared file on the same topic, ensuring collective ownership. The final grade is awarded equally to all members, fostering mutual accountability and may involve a peer or self-evaluation component. This model reflects Generation C's preference for participatory, tech-driven projects and prepares them for the collaborative demands of their professional futures.

C. Simulated Leadership Meetings (SLMs)

Academic tasks are structured and individual, but real business requires anticipating challenges, adapting ideas, and building consensus in fast-moving contexts. Simulated Leadership Meetings (SLMs) address this gap by immersing students in high-stakes decision-making that tests both communication and leadership.

In SLMs, students move beyond static presentations to lead interactive meetings modelled on product councils or strategy sessions. They must persuade, negotiate, and adapt in real time as peers role-play stakeholders from marketing, operations, finance, or HR who actively challenge and shape decisions.

Key features of SLMs include:

1) *Role allocation*: Students rotate through leadership positions to gain exposure to different perspectives and communication registers.
2) *Scenario-driven discussion*: Strategic decisions such as crisis management, product launches, or market entry serve as the focus of meetings.
3) *Interactive process*: Participants work dynamically, responding to stakeholder concerns, defending decisions, and seeking consensus.
4) *Professional communication*: Students refine skills in formal meeting language, agenda setting, summarizing outcomes, and managing time.

To implement SLMs into their practice, ESP teachers need to embrace the following:

1) *Pre-meeting memo*: Teams distribute concise summaries outlining objectives, roles, and proposed solutions, allowing stakeholders to prepare.
2) *Meeting management*: Student leaders facilitate discussion, manage time, and ensure balanced participation.
3) *Role rotation*: Students take on different executive roles across sessions to broaden experience.

4) *Assessment*: Evaluation criteria typically balance meeting content, i.e. analysis and recommendations (60%), meeting facilitation (20%), and pre-meeting preparation (20%).

The educational benefits of SLMs enhance students' fluency and adaptability in interactive contexts, strengthen their leadership, problem-solving, and strategic thinking skills. They prepare learners for the fast-paced, collaborative communication expected in modern business environments.

D. AI Tutors

AI-powered tutors are transforming how Business English can be taught and practiced. Tools like the Author's custom GPT tutor Woo Chuck (bit.ly/Woo_Chuck), whose name imitates the pronunciation of the Author's surname "Łuczak" in Polish, provide students with personalized, on-demand practice in vocabulary, grammar, and communication tasks. These tutors are accessible anytime, supporting continuous learning during and beyond classroom hours.

For Generation C learners – often confident with technology but initially hesitant about public speaking – AI tutors offer a low-pressure way to rehearse presentations, such as start-up pitches, receive immediate feedback, and refine delivery before performing in front of peers. This reduces anxiety and builds fluency.

Creating a Business English AI tutor requires no coding skills. Using platforms such as ChatGPT's Custom GPTs, teachers can upload course materials, glossaries, and sample assignments, then set clear instructions for interaction. The tutor can then support students with tasks such as:

1) Practicing speaking assignments (e.g., start-up pitches, meeting role-plays) and receiving structured feedback.
2) Revising vocabulary sets designed to match current course topics.
3) Generating customized exercises or quizzes for targeted exam preparation.
4) Assisting during class by providing quick explanations of complex business terms and concepts.
5) Proofreading and editing written texts, including adjusting tone and register for professional contexts.

Integrated thoughtfully, AI tutors provide individualized learning support. These tools supplement classroom instruction, build confidence, reinforce learning, and give students a safe space to practice professional communication.

E. Action-Oriented Approach

The Action-Oriented Approach (AOA), outlined in the CEFR (https://www.coe.int/en/web/common-european-framework-reference-languages/the-action-oriented-approach) and CEFR Companion Volume (Council of Europe, 2022), views learners as active participants using language for real outcomes. In Business English, it shifts focus from isolated exercises to purposeful tasks reflecting professional demands.

Instead of passively acquiring language, students act as social agents, engaging in scenario-based activities that require them to mobilise linguistic, intercultural, and problem-solving skills. The emphasis is on practical application – simulating authentic workplace tasks where communication is integral to achieving a goal.

Examples of AOA for Business English may include:

1) *Product Launch Simulation*: Teams plan and present a product launch strategy, adapting their pitch to different audiences such as investors, clients, and internal stakeholders.
2) *Crisis Management Scenario*: Students respond to a fictional corporate crisis, drafting statements, holding press briefings, and managing stakeholder communications.
3) *Market Entry Planning*: Groups prepare and present a plan for entering a new international market, including cultural adaptation and risk assessment.
4) *Negotiation Role-Plays*: Students simulate business negotiations, practicing persuasion, compromise, and agreement drafting.
5) *Policy Redesign for Clarity*: Teams rewrite company policies or internal communications into plain, accessible language suitable for a diverse workforce.
6) *Client Proposal Development*: Students prepare tailored proposals and deliver them in a simulated client meeting, adjusting tone and content to client expectations.
7) *Cross-Department Collaboration Projects*: Groups act as different company departments collaborating on a shared strategic objective, producing joint reports and recommendations.
8) *Speed-Job Interviewing Project*: Students take part in a fast-paced recruitment simulation by advertising a post, submitting CVs, shortlisting candidates, preparing interview questions, conducting interviews, selecting the best candidate(s), writing an HR report, and discussing strengths, weaknesses, and the toughest questions. The process may also include simulating interviews with an AI tutor for practice.

By engaging in these activities, learners experience language as a tool for accomplishing real-world objectives. This approach builds not only communicative competence but also confidence, adaptability, and teamwork.

V. CONCLUSIONS

The redesign of Business English courses outlined in this paper directly addresses the evolving needs of Generation C students. The innovative methods – Design Thinking, Emergent Collaborations, Simulated Leadership Meetings, AI Tutors, and Action-Oriented Approach – place the learner at the center of teaching, encouraging adaptability, creativity, and real-world application of knowledge.

These methods foster creativity through scenarios and problem-solving, build leadership through group projects and simulations, and strengthen analytical skills via data tasks and critical discussions. With AI tutors and digital tools, courses also boost confidence in professional technologies, while action-oriented projects like Speed-Job Interviewing develop resilience and workplace readiness.

Based on these findings, the following recommendations are proposed:

1) Embed authentic business communication tasks – such as case analyses, reports, pitches, and negotiations – into course activities.

2) Strengthen oral communication by incorporating sustained practice in presentations, discussions, and feedback sessions.

3) Integrate soft skills development into course tasks, focusing on teamwork, critical thinking, adaptability and problem solving.

4) Enhance interdisciplinary collaboration by designing projects that combine English learning objectives with core business modules.

5) Use project-based learning and simulations to create realistic, high-engagement contexts that prepare students for professional interaction.

For these methods to succeed, ESP teachers must remain at the forefront of innovation – experimenting, adapting, and continuously developing their professional skills, especially technological ones and knowledge of up-to-date business developments. The process of teaching itself increasingly mirrors the design thinking model: empathising with learners, defining needs, ideating solutions, prototyping tasks, and refining methods through feedback.

Much of the responsibility for sustaining excellence lies with universities. Institutions committed to high-quality education must provide structured support and professional development for teaching staff, equipping them with training, tools, and resources to implement these approaches effectively. In doing so, they not only support teacher growth but also ensure that Business English courses remain relevant and dynamic but also tailored to the needs of students and the demands of the professional world.

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Section IV. Digital and Multimodal Pedagogies for Inclusion

Studies integrating technology, gamification, multiliteracies, and AI literacy as pathways to participation, accessibility, and transformative learning.

David Smith; Dami Sokoya; Skye Moore; Chinenye Okonkwo; Charlotte Boyd; Melissa M. Lacey; Nigel J. Francis *Embedding Generative AI as a Digital Capability: From Principles to Practice*

Maria-Eleftheria Galani *Asynchronous eLearning as a Tool of Learning and Assessment in Higher Education: The Case of OUC in Cyprus*

Anne-Marie Barrault-Méthy *LUDIBRILANG: Operationalising Inclusive Student-Centred Pedagogies through Gamified Legal English*

Maria Kefalaki *Enhancing Multiliteracies through Drama-Based Teaching*

In Section IV, Digital transformation, when ethically framed, can amplify inclusion rather than exacerbate inequality. Smith et al.'s Embedding Generative AI as a Digital Capability illustrates how AI literacy and ethical awareness can coexist, turning technological disruption into an opportunity for critical reflection. Galani's analysis of asynchronous e-learning at the Open University of Cyprus demonstrates how flexible digital design widens access for adult and distance learners. Barrault-Méthy's LUDIBRILANG integrates gamified legal-English learning within Universal Design for Learning principles, while Kefalaki's Enhancing Multiliteracies through Drama-Based Teaching shows that multimodality can also be embodied, artistic, and communal. Together, these authors re-envision technology as a cultural and creative medium through which inclusion, participation, and critical literacies can flourish in both online and physical spaces.

Embedding Generative AI as a Digital Capability: From Principles to Practice

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Generative Artificial Intelligence (GenAI) promises personalised support and efficiency gains for students while raising complex questions for academic integrity, assessment authenticity, and data protection. Here we report a practical model for embedding GenAI as a digital capability within a year-long MSc skills programme for an international cohort. Over three semesters, we scaffolded GenAI literacy through experience mapping and just-in-time teaching, and re-designed assessment around process rather than product. Mixed-methods evaluation (baseline questionnaire, two skills audits, and semi-structured interviews) indicates significant gains in students' confidence in core GenAI competencies (understanding how GenAI works, prompt writing, ethical use, and data protection). Qualitative analysis shows a cyclical relationship between GenAI use, experience, and ethical awareness, alongside tensions arising from institutional clarity and student trust. We offer six practice-based recommendations for designing inclusive, ethical, and competency-oriented GenAI curricula that prioritise reflective practice and authentic assessment.

Keywords Generative AI; assessment; process-based assessment; curriculum design; digital capability; academic integrity

I. Introduction

GenAI systems capable of producing text, images, and code have altered how learners engage with content, feedback, and research. Reported benefits include language support, workflow acceleration, and tailored guidance, while risks include hallucinations, bias, over-reliance, privacy concerns, and cognitive offloading (Bobula, 2024; Chan & Colloton, 2024). Across higher education, policy and guidance increasingly emphasise assessment redesign and AI literacy; yet, practice-based models that embed GenAI in day-to-day teaching while building students' digital capabilities remain scarce (Moorhouse, Yeo, & Wan, 2023; Smith & Francis, 2024).

Here, we report an action-learning design that integrates GenAI across three linked skills modules in a postgraduate biosciences curriculum. Our approach treats GenAI as a learnable, assessable capability rather than an external threat, combining structured teaching (ethics, data protection, and prompting) with process-based assessment that requires documentation, critique, and reflection on AI use (Smith & Francis, 2024). Our model is situated within recent synthesis work on balancing innovation and integrity in HE (Francis, Jones, & Smith, 2025) and evaluated and further discussed in Smith et al. (2025).

Fundamentally, we address two research questions:

(RQ1) How can GenAI be effectively embedded into a skills-based postgraduate curriculum to enhance digital capability?

(RQ2) What strategies mitigate academic integrity and data privacy challenges?

II. Curriculum Design

Stage 1 – Process and Principles

Ethical implications and academic integrity

Our starting point was to address both the "power and peril" of GenAI. Students examined how large language models generate output, why hallucinations occur, and how bias and style can be embedded through training data and prompts (Challen et al., 2019; Lee, Resnick, & Barton, 2019). We aligned expectations with institutional policy, distinguishing supportive uses (e.g., idea generation, language support, code explanation) from unacceptable uses which bypassed individual authorship. We highlighted to academics the unreliability and inequity of AI-detectors, particularly for non-native English writers (Liang et al., 2023), and introduced transparent practices to record use with prompt and model logging (Moorhouse et al., 2023; Smith & Francis, 2024).

GenAI systems can inadvertently amplify historical and cultural biases embedded in their training data, shaping tone, examples, and even what is treated as "typical" or credible (Challen et al., 2019; Chan & Colloton, 2024). These effects are not evenly distributed: non-native English writers face higher false-positive rates from AI-detectors

and may experience "correction" towards dominant linguistic norms. Our curriculum, therefore, couples access with critique: students use bias-spotting checklists, compare AI outputs with authoritative sources, and practice counter-prompting to surface missing perspectives before deciding what (if anything) to retain (Francis, Jones, & Smith, 2025). To support inclusion, we allowed AI for language scaffolding while requiring transparent recording of use and reflective commentary. We also address the digital divide, unequal broadband, and paywalled tool access by providing institutionally approved options.

Data integrity and privacy

Finally, we address data-protection literacy, and regulatory safeguards. Activities covered platform terms of use, retention/training policies, GDPR considerations, and university guidance. Students were instructed not to upload personal or assessed data to external tools without compliance and were provided safer alternatives (e.g., institutionally-approved tools, redaction strategies). We also encouraged attention to environmental and infrastructural implications of GenAI to support informed choice (Strubell, Ganesh, & McCallum, 2019; Nordgren, 2023). This creates a shared baseline for ethical and secure practice.

Stage 2 – Embedding in Practice

Experience mapping and just-in-time teaching

We used experience mapping to plan when and how GenAI concepts would be introduced across the academic year (Beard, 2022). Semester 1 established foundations: how GenAI works, ethical use, data protection, and institutional expectations. Semester 2 provided practical support: prompt design, tool demonstrations, and targeted uses (reading research papers, reflective practice, employability planning). Semester 3 consolidated use through authentic assessment tasks and oral defences. Just-in-time mini-inputs ("tip of the week") were paired with worked prompt examples and simple checklists (Novak, 2011). Short self-help videos and exemplar prompt libraries were made available. This design provided timely support without encouraging over-reliance.

Skills audits and support infrastructure

We adapted an existing skills audit to include GenAI capability areas: (i) understanding how GenAI works; (ii) effective prompt writing; (iii) ethical use; and (iv) data protection. Audits ran mid-Semester 1 and at the end of Semester 2. Alongside, we created a support infrastructure: seminars, tutorials, Q&A forums, and exemplars illustrating acceptable practice. These support sessions were mindful of diverse language and cultural backgrounds and emphasised student agency and critical judgement (Vo & Nguyen, 2024; Pang, Kootsookos, & Cheng, 2024; Wu & Yu, 2024).

Stage 3 – Facing the Problem of Assessment – Facing the Problem of Assessment

Process-based assessment

To address GenAI use we shifted assessment emphasis from product to process (Smith & Francis, 2024). Students were required to: (1) document AI interactions (prompts, iterations, and tool choice) using a provided template; (2) justify and critique AI contributions what was retained, revised, rejected, and why; (3) checking claims against primary sources or authoritative texts; and (4) reflect on limitations, bias, and how their approach changed across drafts. Written assessments were structured such that they AI could be used for brainstorming, structuring, and improving clarity but prohibited AI-generated new content in the final submission without human intervention (Rudolph, Tan, & Tan, 2023). Students submitted a templated portfolio evidencing their process (prompt logs, drafts, and notes). Where appropriate, in-person presentations or vivas are used to probed understanding and decision-making (Moorhouse et al., 2023).

Authentic assessment and competency orientation

Assessments were also aligned with competencies observable in practice: research skills (e.g., question formulation, information literacy), understanding of subject matter (integration and synthesis), critical thinking (argumentation and evaluation), and writing (clarity, structure, and academic style). These were then framed as authentic tasks (e.g., preparing a research proposal or delivering an oral presentation) where GenAI can assist the learning process but not replace students' intellectual work (Darling-Hammond & Snyder, 2000; Meir et al., 2024; QAA, 2023).

Exemplars and accountability

Rubrics rewarded transparent, critical, and ethical engagement with GenAI. Prompts and outputs were checked against claims in the main text; students who used AI were expected to explain how and why, and to identify limitations or errors encountered. Oral components (presentations or mini-vivas) supported validity judgements about authorship and understanding (Moorhouse et al., 2023).

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III. Evaluation

Participants and context

The integrated approach outlined above was applied to an MSc biosciences portfolio with a large, international cohort, comprising students from analytical chemistry, biotechnology, biomolecular science, molecular microbiology, and cancer biology. Core skills modules spanned three semesters with weekly seminars, tutorials, lectures, and laboratory sessions. This context provided consistent touchpoints for iterative development of GenAI capability and assessment literacy.

Ethics

Institutional ethical approval was obtained. Participation in evaluation components was voluntary. No sensitive personal data were collected, and instruments were designed to minimise risk. Interview participants gave written informed consent.

Evaluation instruments and analysis

We used three instruments: (1) a baseline in-class questionnaire following the Semester 1 introductory seminar (n=110); (2) two skills audits (Semester 1 mid-point; Semester 2 end) (n=92); and (3) semi-structured interviews in Semester 3 (n=20). Likert data were coded (1–5) and analysed using non-parametric tests (e.g., Mann–Whitney U) appropriate for ordinal, independent observations.

Transcripts from interviews were analysed thematically following a six-phase framework (Braun & Clarke, 2019), with reflexive checks to support trustworthiness.

Results

Initial attitudes and acceptable use

At baseline, nearly half of respondents reported using GenAI "always" or "often". Students expressed a nuanced stance on acceptable use. Strong majorities agreed GenAI helps with comprehension of subject content and with understanding research articles. By contrast, students were split on editing written work, and most rejected the idea that GenAI should write assessments a distinction aligning with broader surveys reporting trust in GenAI for comprehension but preference for human feedback on assessment (Palmer et al., 2023).

Confidence growth in GenAI-related skills

Across two audits we observed increases in self-reported confidence in all four capability areas. Confidence in understanding how GenAI operates moved from a minority reporting "quite confident" at baseline to a clear majority post-intervention. Prompt-writing confidence increased substantially; reports of limited confidence decreased. Gains were also evident in ethical use and in data protection awareness, with reductions in the proportion reporting no or limited confidence. These shifts, paired with stable perceptions of the importance of these skills, suggest the curriculum helped students translate perceived importance into practical confidence (Vo & Nguyen, 2024).

Student voice: literacy, transfer, and ethical hesitation

Interview analysis produced three interrelated themes: (1) GenAI literacy and competence, including strategic prompting and language support benefits for non-native English speakers; (2) transferable skills and strategic application, such as structuring literature reviews and planning job applications; and (3) ethical hesitation and uncertainty, including concerns about reliability, originality, plagiarism, and data privacy (Francis, Jones, & Smith, 2025). We observed three trust profiles: students who trust GenAI and processes; trust GenAI but not processes; or distrust both, consistent with emerging sector reports (Jisc, 2024).

Collectively, these findings demonstrate a cyclical pathway: increased use and structured practice led to greater competence, which prompted more discerning use and raised ethical questions; clarity of institutional guidance mediated trust and sustained engagement.

IV. Discussion

Our results indicate that embedding GenAI as a digital capability through scaffolded teaching and process-based assessment can improve students' confidence and promote reflective, ethical practice (Smith & Francis, 2024). The design addressed two often competing imperatives: support (e.g., language and feedback for international students) and safeguards (e.g., data protection, authorship integrity). This balance was made visible through logging, justification, triangulation, and oral components that test understanding rather than reward surface-level understanding (Rudolph et al., 2023; QAA, 2023).

The observed trust issues highlighted the importance of institutional clarity. When expectations and boundaries are explicit and consistently communicated, students are more willing to use GenAI in a transparent and critical manner (Moorhouse et al., 2023; Francis et al., 2025). Conversely, uncertainty or mixed messages can suppress constructive use or drive it underground. Designing for transparency by default (documentation, attribution, and reflective commentary) allows staff to see how students are learning with GenAI and to assess higher-order thinking (Meir et al., 2024).

While we emphasise the benefits of supportive tools especially for students with additional language needs we caution against over-reliance. Pattern-matching models can accelerate low-level tasks but risk flattening originality if their outputs are adopted uncritically (Bobula, 2024; Chan & Colloton, 2024). Curriculum designs should therefore require comparison, critique, and revision of AI outputs, making metacognitive reasoning assessable.

Practical recommendations

1. **Treat GenAI as a core digital capability.** Integrate foundational AI literacy (mechanisms, limitations, ethics, and data protection) into core skills modules (Chan, 2023; Francis et al., 2025).
2. **Map the learning journey.** Use experience mapping and just-in-time teaching to phase foundational knowledge, practical applications, and assessment integration across the year (Beard, 2022; Novak, 2011).
3. **Assess the process, not just the product.** Require prompt logs, iterative drafts, and critical commentary; permit AI for ideation and structure while making students' reasoning visible and assessable (Smith & Francis, 2024; QAA, 2023).
4. **Provide a support infrastructure.** Offer prompt libraries, short video exemplars, and clinics; encourage community sharing of effective strategies and cautionary tales (Jisc, 2024; Palmer et al., 2023).
5. **Codify boundaries and expectations.** Embed clear guidance in module briefs and rubrics; align with institutional policy; require explicit attribution of AI assistance (Moorhouse et al., 2023; Perkins, Furze, Roe, & MacVaugh, 2024).
6. **Protect data and promote equity.** Direct students to compliant tools and redaction practices; position GenAI as a language and access support while actively addressing bias and inclusion (European Parliament, 2020; Liang et al., 2023; Challen et al., 2019).

Limitations and implications

Findings arise from a single institutional context and rely primarily on self-reported confidence and perception measures, complemented by thematic analysis of interviews. Future work should examine the longitudinal effects on higher-order learning, compare undergraduate and postgraduate contexts, and explore how GenAI capability development interacts with students' linguistic and cultural backgrounds (Francis et al., 2025). Nevertheless, the approach offers a pragmatic and adaptable model for inclusive, student-centred AI integration at programme scale.

V. Conclusion

Embedding GenAI as a digital capability within a year-long skills curriculum can enhance students' confidence, make academic processes more transparent, and support inclusive, student-centred learning, provided that assessment designs prioritise process, reflection, and ethical literacy. By aligning pedagogy, policy, and data protection, institutions can enable students to use GenAI critically and responsibly while maintaining academic integrity. The model presented here demonstrates how structured, scaffolded practice paired with authentic assessment can turn GenAI from a perceived threat into a catalyst for deeper learning and equitable participation.

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Enhancing engagement in asynchronous eLearning: A Gamified Pedagogical Framework

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***Abstract*—The Erasmus+ project *Improving VET Distance Learning through a Gamified Asynchronous eLearning Methodology (d-ICT)* addresses the persistent challenges of learner disengagement, isolation, and dropout in asynchronous Vocational Education and Training (VET). Grounded in andragogy, experiential learning, and gamification theory, the project developed and evaluated a pedagogical framework designed to enhance motivation, autonomy, and interactivity in digital training environments. Using a mixed-methods approach, the consortium conducted a comprehensive needs analysis across seven European countries, followed by the design of three core outputs: a theoretical eBook, a gamified e-Curriculum, and a SCORM-based Serious Game. The pilot testing phase engaged VET educators and learners in authentic contexts, supported by pre- and post-intervention surveys, focus groups, and reflective journals. Findings indicate significant improvements in digital literacy, learner engagement, and self-regulation, alongside psychosocial benefits such as reduced anxiety and stronger community connections. Educators reported increased confidence in applying gamified strategies and designing learner-centered curricula, though challenges such as time investment and technical support requirements were noted. Evaluation through the Kirkpatrick model confirmed positive learner reactions, measurable learning outcomes, behavioral changes, and institutional impact, demonstrating the scalability and adaptability of the framework. This study highlights gamification's potential to transform asynchronous VET into an engaging and empowering experience that supports lifelong learning and employability. By providing practical tools and evidence-based strategies, the d-ICT project offers a replicable model for enhancing the quality and inclusivity of distance education across diverse European contexts.**

Keywords—gamification, asynchronous learning, vocational education and training, learner engagement, digital pedagogy

I. INTRODUCTION

The rapid digital transformation of education over the past decade has been accelerated by the COVID-19 pandemic, which forced educational institutions worldwide to shift to online learning almost overnight. While this transition ensured continuity, it also revealed systemic weaknesses, particularly in Vocational Education and Training (VET), where practical application, interaction, and learner engagement are central to successful outcomes (CEDEFOP, 2020; Glushko et al., 2020). Asynchronous eLearning, although flexible and accessible, has often been associated with high dropout rates, learner isolation, and limited opportunities for active participation (Muntean, 2011). These challenges underscore the urgent need for innovative pedagogical models that make online learning environments more engaging, interactive, and learner-centered.

Adult learning theory provides valuable insights into addressing these issues. Knowles' andragogical model positions adults as self-directed, experience-rich learners who require relevance, autonomy, and active participation to remain engaged (Knowles et al., 2015). Research further demonstrates that engagement—defined as the emotional and cognitive investment in the learning process—is a decisive factor for sustained motivation and deep learning (Zepke & Leach, 2010). Learner autonomy, meanwhile, involves the capacity for self-regulation, goal-setting, and reflective practice, all of which are indispensable in digital and blended contexts (Little, 1991; Benson, 2011). For these reasons, any effort to redesign VET distance learning must explicitly integrate strategies that support motivation, autonomy, and meaningful learner involvement.

Gamification has emerged as one of the most promising approaches to meeting these pedagogical needs. By embedding game-design elements such as points, levels, badges, feedback, and competition into learning environments, gamification has been shown to increase motivation, engagement, and persistence across educational settings (Gee, 2007; Toda et al., 2019). Empirical studies further confirm that gamification can transform routine tasks into interactive experiences that foster collaboration, enjoyment, and resilience, while also cultivating self-regulation and lifelong learning competencies (Dörnyei, 2001; Ibad et al., 2023). When combined with formative assessment tools—such as interactive quizzes, polls, and low-stakes practice activities—gamified environments also provide learners with opportunities for reflection, self-assessment, and the reduction of pre-exam anxiety (Reinders & White, 2016).

Despite these documented benefits, there remains a lack of large-scale empirical evidence regarding the impact of gamification in asynchronous VET contexts across Europe. Most existing research has focused on higher education or blended learning models, leaving unanswered questions about how gamified interventions can specifically address the structural challenges of VET distance education. Against this backdrop, the Erasmus+ project *Improving VET Distance Learning through a Gamified Asynchronous eLearning Methodology (d-ICT)* was designed and implemented between 2022 and 2024 by a consortium of seven organizations from Greece, Italy, Spain, Cyprus, Belgium, France, and Portugal. The project aimed to develop, test, and evaluate a gamified asynchronous learning experience tailored to the needs of VET educators and learners, with the ultimate goal of improving engagement, autonomy, and learning outcomes in digital vocational training.

II. METHODOLOGY

The methodological design of the *d-ICT* project was based on a mixed-methods approach, combining qualitative and quantitative data collection to ensure both depth and breadth of insights. The project unfolded in three main phases: needs analysis, design and development, and pilot testing and evaluation. Each phase was informed by principles of adult learning, gamification theory, and experiential learning, ensuring that the resulting methodology was pedagogically sound, contextually relevant, and adaptable across diverse VET environments in Europe.

A. Needs Analysis

The first phase focused on identifying the distance learning challenges faced by VET educators and learners in the aftermath of the COVID-19 pandemic. A bottom-up needs assessment was conducted across the eight participating organizations in Greece, Italy, Spain, Cyprus, Belgium, France, and Portugal.

The research employed a *mixed-methods methodology* to ensure a comprehensive and multi-dimensional understanding of the needs, challenges, and professional development trajectories of VET educators in the context of distance and asynchronous learning. By combining quantitative and qualitative methods, the study was able to capture both measurable competencies and in-depth narratives, providing a solid evidence base for the design of gamification-driven interventions. The methodology comprised three complementary components: questionnaires, focus groups, and digital storytelling interviews.

The selection of participants for the questionnaires, focus groups, and digital storytelling interviews was guided by a purposive sampling strategy to ensure diversity, representativeness, and relevance to the objectives of the study. Priority was given to active VET educators and trainers with recent, first-hand experience in delivering vocational training in digital or blended learning environments, particularly during and after the COVID-19 pandemic. This focus was critical for capturing authentic perspectives on the challenges, practices, and innovations developed in response to the rapid shift to online education (CEDEFOP, 2020; Glushko et al., 2020).

The *questionnaire survey* served as the primary tool for collecting quantitative data, targeting a sample of 20 VET educators per project partner. Administered online between October and November 2022, the instrument consisted of 15 structured, multiple-choice questions assessing educators' self-perceived digital competencies, pedagogical practices, and adaptability to distance learning, both prior to and following the COVID-19 pandemic. Areas of inquiry included digital literacy, familiarity with educational technologies, strategies for learner assessment, and the integration of innovative tools into virtual classrooms. The standardized structure of the questionnaire allowed for cross-national comparison, statistical aggregation, and the identification of recurring trends and priority areas for intervention.

In parallel, *focus groups* were conducted to provide qualitative depth and foster a participatory approach. Bringing together 8 educators per partner organization, these guided discussions lasted approximately two hours and focused on educators' lived experiences during the transition to distance learning. Participants were encouraged to share both challenges and successful practices, reflecting on learner engagement, motivational strategies, and digital innovation. The group dynamic promoted peer learning and collaborative reflection, offering nuanced insights into systemic barriers and opportunities for pedagogical enhancement.

To capture individual perspectives in greater depth, *digital storytelling interviews* were conducted with 5 educators from each partner. These semi-structured, video-recorded interviews provided rich, narrative-driven accounts of professional growth, adaptation, and resilience. Storytelling as a methodological tool emphasized the emotional and experiential dimensions of teaching during a period of rapid digital transformation, shedding light on personal strategies, perceptions of gamification, and visions for sustainable online training.

Together, these three data collection methods created a robust triangulation framework, enhancing the validity and reliability of findings. The integration of quantitative metrics with qualitative narratives not only illuminated educators' skill levels but also contextualized these within broader institutional and cultural realities. This methodological design ensured that the project outputs, including the gamified pedagogical framework, were informed by empirical evidence and grounded in the authentic experiences of educators, thereby increasing their relevance, scalability, and impact in vocational education and training.

The results of this phase revealed three interrelated and critical needs for improving the quality, inclusivity, and effectiveness of vocational distance learning. First, there is a clear need to strengthen learner autonomy and self-regulation, as many learners demonstrated difficulties in managing their study schedules, sustaining motivation, and independently monitoring their progress in asynchronous environments. Research emphasizes that adult learners require structured opportunities for self-directed learning, goal-setting, and reflective practice to thrive in digital settings (Knowles et al., 2015; Little, 1991). Consequently, pedagogical frameworks and digital tools that intentionally cultivate these skills are crucial for empowering learners to assume ownership of their educational trajectories and engage in lifelong learning.

Second, the findings underscored the urgent importance of enhancing interactivity and learner motivation in asynchronous training contexts. Traditional e-learning approaches often lack opportunities for engagement, contributing to learner isolation and increased dropout rates (Muntean, 2011; CEDEFOP, 2020). This highlights the necessity of integrating innovative instructional strategies —such as gamification, scenario-based activities, and collaborative elements—into digital curricula to foster a sense of progression, enjoyment, and achievement (Toda et al., 2020; Gee, 2007). By embedding interactivity and feedback mechanisms, asynchronous learning can become more dynamic, motivating, and inclusive, encouraging learners to remain engaged over time.

Third, the research pointed to the need for stronger support structures for educators to design and deliver engaging and learner-centered digital experiences. Teachers reported gaps in access to high-quality resources,

professional development, and institutional backing, which limited their ability to create innovative content (Laurillard, 2013; Ryan & Deci, 2000). Addressing these challenges requires systematic training programs, collaborative instructional design opportunities, and evidence-based digital toolkits that empower educators to move beyond static content delivery and towards transformative, learner-focused pedagogy.

Taken together, these findings affirm that effective distance education in VET cannot be achieved solely through technology but requires a holistic strategy that equally prioritizes learner agency, engagement, and educator capacity-building. The integration of gamification, experiential learning, and andragogical principles (Kolb, 1984; Knowles et al., 2015) offers a pathway to designing scalable, inclusive, and motivating digital learning experiences that respond directly to the needs of both learners and educators.

B. Design and Development

Building on the findings of the needs analysis, the consortium moved into the design and development phase, where the central objective was to translate the identified challenges into a coherent and practical pedagogical response. At the heart of this effort was the creation of a gamified pedagogical framework specifically tailored to the realities of VET distance learning. This framework was not conceived as a generic model but rather as a dynamic synthesis of theory and practice, carefully aligned with the needs of both educators and learners across different European contexts.

The framework was grounded in three interrelated theoretical pillars. The first was *Andragogy,* as articulated by Knowles et al. (2015), which emphasizes the distinctive characteristics of adult learners. Adults bring with them a wealth of prior knowledge and experience, and they are typically motivated by goals that are relevant to their personal and professional lives. The framework, therefore, positioned learners as self-directed agents, capable of exercising autonomy and responsibility in their educational journey, while simultaneously recognizing the importance of scaffolding and support in maintaining motivation and engagement.

The second pillar was *Gamification theory*, drawing on the insights of Gee (2007) and Toda et al. (2019). Gamification has been widely acknowledged for its potential to transform learning environments by embedding game-like elements into non-game contexts. Within the d-ICT framework, this translated into the incorporation of specific mechanics such as points, levels, badges, leaderboards, and feedback loops. These elements were not included merely for entertainment; rather, they served the pedagogical purpose of rewarding progress, sustaining learner interest, and creating a sense of achievement. In this way, gamification functioned as both a motivational catalyst and a structural mechanism for encouraging persistence in asynchronous learning environments, where dropout rates are typically high.

The third pillar was *Experiential learning*, based on the influential model developed by Kolb (1984). Experiential learning highlights the cyclical process of concrete experience, reflective observation, abstract conceptualization, and active experimentation. By embedding these principles into the framework, the project sought to ensure that learners were not only absorbing information passively but were also engaging in meaningful activities that required them to apply, reflect on, and adapt their knowledge in practice. For VET learners in particular, this experiential orientation was crucial, as it bridged the gap between theoretical instruction and the hands-on competencies required in real professional contexts.

By weaving together these three theoretical strands, the consortium succeeded in constructing a framework that was both academically robust and practically adaptable. It respected the autonomy and experience of adult learners, harnessed the motivational power of gamification, and anchored learning in cycles of reflection and practice. This holistic design provided the conceptual foundation for the project's intellectual outputs and ensured that the subsequent development of digital tools and resources was firmly guided by established pedagogical principles.

Within this framework, three intellectual outputs were produced:
1) An *eBook* providing theoretical insights and practical guidelines for educators on implementing gamification in asynchronous contexts.
2) A comprehensive *e-Curriculum* designed to support VET educators in integrating gamified strategies into their teaching.
3) A *Gamified Asynchronous Learning Experience (Serious Game)*, developed in SCORM format, tested in real VET environments (d-ICT, 2024). The Serious Game incorporated gamified elements such as points, badges, immediate feedback, and opportunities for safe failure. It is also accompanied by embedded supporting materials that present the underlying theoretical framework and recommended practices for distance teaching and learning. These resources are fully integrated into the game environment, allowing participants to access them at any time to reflect, revisit key concepts, and retry activities as needed (Toda et al., 2020).

C. *Pilot Testing and Evaluation*

The gamified learning experience developed within the framework of the d-ICT project was piloted in authentic VET environments across the participating partner countries, allowing for a robust and context-sensitive evaluation of its effectiveness. The evaluation strategy combined quantitative and qualitative methods, adopting a quasi-experimental design to capture measurable learning outcomes, while also integrating learner perception surveys and educator reflections to better understand the lived experiences of participants.

The Learning, Teaching, and Training Activity (LTTA – C-Activity) was conducted in Lisbon, Portugal, from 29 August to 1 September 2023, and hosted by ISQe. This intensive 24-hour program (six hours per day) engaged VET educators and trainers in practical exploration of e-learning tools and the implementation of targeted exercises aligned with the project's pedagogical framework. The training addressed three core thematic areas: (a) the integration and application of the d-ICT e-Toolkit and the Gamified Asynchronous e-Learning Experience, (b) peer-to-peer training and collaborative content review, and (c) systematic evaluation of the training materials. Feedback collected through surveys and discussions indicated that participants not only found the training highly effective and relevant but also reported increased confidence in applying

gamified strategies, improved digital teaching skills, and a deeper understanding of learner engagement in asynchronous contexts. These findings provided valuable evidence to refine project resources and contributed to a robust evaluation of the d-ICT methodology's pedagogical impact during the pilot testing phase.

The data collection process was multifaceted. Pre- and post-intervention surveys were administered to assess changes in learner motivation, engagement, digital literacy, and autonomy. These surveys provided valuable comparative data, highlighting shifts in learner attitudes and competencies resulting from exposure to the gamified methodology.

Beyond the quantitative indicators, rich qualitative insights were collected through focus groups and reflective journals completed by both learners and educators. These narratives illuminated the psychosocial dimensions of the intervention, shedding light on how gamification influenced learner confidence, reduced anxiety, and fostered a greater sense of belonging in online learning environments. Educators' reflections also offered practical perspectives on the challenges of integrating gamified tools into existing curricula, as well as strategies for maximizing their pedagogical value.

The evaluation framework was structured around the *Kirkpatrick model* (2006), a widely recognized approach to educational evaluation that examines four levels of impact: (a) learner reaction—how participants felt about the gamified learning experience, (b) learning outcomes—the knowledge, skills, and attitudes developed, (c) behavioral change—the extent to which learners applied new skills and strategies in their ongoing studies or professional contexts, and (d) broader educational impact—how the intervention contributed to institutional practices, collaborative teaching, and long-term approaches to digital pedagogy in VET.

Through this comprehensive evaluation, the project was able to generate a nuanced understanding of the benefits and limitations of gamified asynchronous learning in vocational education. The combination of quantitative data and qualitative evidence ensured that the findings were both rigorous and human-centered, providing strong validation for the project's approach while also pointing toward areas for future refinement and scaling.

III. FINDINGS

The findings of the d-ICT project emerged from a mixed-methods evaluation that combined quantitative performance data with qualitative insights from learners and educators. The analysis revealed not only measurable improvements in learner outcomes but also significant psychosocial and pedagogical benefits. The results presented below integrate survey data, performance indicators, and reflective feedback, offering a holistic picture of how gamification enhanced motivation, engagement, and autonomy in VET distance learning contexts.

The evaluation of the d-ICT gamified asynchronous learning experience yielded significant and multi-dimensional results that demonstrate both its pedagogical effectiveness and its added value for VET distance education.

From a quantitative perspective, the pre- and post-intervention surveys revealed notable improvements in key learner competencies. Motivation levels increased consistently across partner countries and learners also demonstrated measurable gains in digital literacy, particularly in using digital tools to organize and monitor their progress.

Equally important were the qualitative findings, which provided insights into the psychosocial dimensions of the learning experience. Learners described the gamified platform as more interactive, rewarding, and supportive compared to conventional asynchronous courses. Many highlighted that features such as points, levels, badges, and feedback loops provided a sense of accomplishment and progression that motivated them to stay engaged over longer periods of time. Focus group discussions further revealed that the intervention reduced feelings of isolation, a recurring problem in distance VET learning, by fostering a greater sense of connection and community among participants.

Educators also reported positive outcomes. They observed that learners were more willing to participate actively, revisit course materials, and self-assess their progress. Importantly, teachers emphasized that the framework helped them design more learner-centered curricula, offering practical tools and strategies to maintain student engagement even in asynchronous settings. At the same time, some challenges were acknowledged, including the initial time investment required to integrate gamified elements and the need for ongoing technical support for both educators and learners.

When analyzed through the lens of the *Kirkpatrick model* (2006), the results were equally compelling:

- At the *reaction level*, learners expressed high satisfaction with the gamified methodology, often describing the experience as "enjoyable," "motivating," and "different from traditional eLearning."
- At the *learning level,* the measurable improvements in test scores, combined with enhanced digital skills, reflected significant educational gains.
- At the *behavioral level,* learners reported applying self-regulation strategies—such as setting personal goals, monitoring progress, and revisiting learning materials independently—that extended beyond the pilot context.
- Finally, at the *results level*, educators and institutions recognized the broader value of gamification in enhancing the quality and inclusivity of distance VET provision, with several partners expressing intentions to adopt or adapt the framework in future courses.

In sum, the findings confirm that the d-ICT project not only addressed urgent challenges in VET distance education but also demonstrated a scalable and transferable model of how gamified asynchronous learning can foster engagement, autonomy, and achievement in diverse vocational contexts across Europe.

IV. DISCUSSION

The findings of the d-ICT project provide important insights into how gamification can reshape asynchronous distance learning in VET contexts. The significant improvement in learner motivation, engagement, and performance suggests that game-based strategies can effectively counteract challenges such as isolation, low interactivity, and high dropout rates, which often characterize online vocational training (CEDEFOP, 2020; Muntean, 2011). By embedding points, levels, and feedback loops into structured course design, the project demonstrated how gamification fosters a sense of

progression and achievement, enhancing learners' emotional investment in the process.

From a practical perspective, the results offer clear implications for VET educators. First, integrating gamified micro-activities—such as quizzes with instant feedback or scenario-based simulations—can keep learners engaged between synchronous sessions and encourage continuous practice. Second, the incorporation of leaderboards and collaborative challenges can strengthen the sense of community in online classes, countering the isolation often reported in virtual environments. Third, simple tools like Wordwall or Quizlet can be strategically used not only for revision but also for formative assessment, helping educators track learner progress and adjust instruction accordingly.

Nevertheless, certain limitations should be acknowledged. The evaluation was conducted within a limited timeframe and within selected institutions, which constrains the generalizability of the findings. Furthermore, while short-term improvements in engagement were evident, additional longitudinal research is required to determine whether such benefits are sustainable and transferable to employability outcomes.

V. Conclusion

The d-ICT project has demonstrated that gamification can play a decisive role in enhancing engagement, motivation, and learner autonomy in asynchronous VET distance education. By integrating principles of andragogy, experiential learning, and gamification theory, the project developed and validated a pedagogical framework that effectively addresses the challenges of low learner motivation, dropout risk, and limited interactivity in digital training environments. The pilot implementation across multiple European contexts confirmed not only measurable improvements in digital skills and self-regulation but also positive psychosocial outcomes, such as reduced anxiety and a stronger sense of motivation.

Although further longitudinal research is needed to examine the sustainability and transferability of these results, the findings highlight the scalability and adaptability of gamified asynchronous learning as a strategic response to current and future challenges in vocational education. For educators and institutions, the framework offers practical, evidence-based tools to design more inclusive, interactive, and learner-centered curricula. Ultimately, the project contributes to reimagining distance learning in VET as a dynamic, engaging, and empowering process that supports lifelong learning and employability in the digital era.

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LUDIBRILANG: Operationalising Inclusive Student-Centred Pedagogies to Enhance First-Year Legal English through Gamified Learning

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***Abstract*— This paper reports on the design, implementation, and evaluation of LUDIBRILANG, a hybridisation English for Specific Purposes (ESP) project in a French law faculty that remodels a legal English course and integrates serious games. The course was conceived in response to structural constraints—large cohorts, minimal contact hours, and absence of tutorials—that often limit the development of pragmatic and interactive competencies. It builds on principles of universal design for learning (UDL), transparent alignment between weekly objectives and assessment, and the use of digital games as inclusive pedagogical artefacts. Two games were developed: *Magna Carta*, which immerses learners in the negotiations of 1215 England, and *Supreme Court*, which places them on the bench of a contemporary climate-justice case in the United States. A 2023 evaluation of *Magna Carta* with first-year law students in Bordeaux and at partner institutions indicated high levels of engagement, positive perceptions of rhythm and attractiveness, and strong endorsement of the game's pedagogical value. Moodle analytics and technical challenges are also considered. The paper argues that, far from being an add-on, game-based elements can reinforce hybrid course design in ESP at scale, providing replicable models for other faculties of law.**

Keywords*— *English for Specific Purposes, legal English, serious games, hybrid learning, universal design for learning

I. INTRODUCTION

Teaching English for Specific Purposes (ESP) in law faculties often involves a structural paradox. Institutions expect first-year students to acquire disciplinary language awareness and argumentation skills, yet programmes are constrained by large cohorts, limited face-to-face time, and scarce opportunities for interaction.

Teaching English for Specific Purposes (ESP) in law faculties often involves a structural paradox. Institutions expect first-year students to acquire disciplinary language awareness and argumentation skills, yet programmes are constrained by large cohorts, limited face-to-face time, and scarce opportunities for interaction.

At the University of Bordeaux, this paradox is acute. The first-year Legal English course is divided between two formats. In the first semester, it takes the form of a ten-week online module consisting of texts, reading-comprehension questions, and grammar exercises. In the second semester, when students benefit from contact hours, the course is delivered as a twelve-week lecture to two groups totalling more than 1,200 students in 2024–2025. No tutorials are scheduled. For the past four years, however, students have been able to volunteer for small-group conversation workshops, capped at eight participants. With twenty workshops available weekly over ten weeks each term across the Law and Economics faculties, approximately one hundred first-year Law students take part.

In such conditions, traditional lecturing risks marginalising active competencies—particularly written production, interaction, and pragmatic awareness—precisely when foundational habits are being formed. LUDIBRILANG was launched under the university's STEP programme (Supporting Transformation and Pedagogical Experimentation), funded by the French national Initiative of Excellence framework (Idex). The project seeks to hybridise delivery, diversify activities, and make interaction sustainable at scale.

Three operational goals were set. First, hybridisation would redistribute learning tasks across synchronous and asynchronous formats, multiplying opportunities for interaction without multiplying contact hours. Second, inclusive pedagogical practices would be built in from the start, so that heterogeneity of profiles and abilities was treated as a resource rather than a constraint. Third, serious games would be introduced not as peripheral add-ons but as core activities aligned with course objectives.

A key innovation lies in transparency. Weekly outcomes and objectives are now clearly defined, allowing learners to follow the syllabus without confusion and freeing class time from constant reminders of structure. Assessment is aligned with guiding questions, ensuring coherence between preparation, practice, and evaluation. This transparency also enhances inclusivity: weaker students gain reassurance from knowing exactly what is expected, while stronger students can plan their own extensions.

Each weekly unit tightly couples a downloadable set of guiding questions with the corresponding lecture, videos, exercises and at times, follow-up activities. In-class segments use a questioning platform (Wooclap) to make participation visible, while out-of-class components create opportunities for repetition and spaced practice, reducing cognitive load for weaker students and enabling stronger students to deepen their learning.

Two serious games—*Magna Carta*[1] and *Supreme Court*[2]—provide narrative contexts in which legal lexical and conceptual knowledge can be rehearsed and transferred. They are explicitly optional and function as reinforcement rather than coverage. This choice respects the heterogeneity of the cohort: students who are sceptical about games can still succeed through the core pathway, while those who value interactive narrative and decision-making can deepen their disciplinary engagement.

The present article details the course architecture, game mechanics, evaluation design, and results, before discussing implications for large-cohort ESP in law faculties.

II. Theoretical Background and Related Work

The LUDIBRILANG design builds on three strands of research.

The first concerns game-based learning. A substantial strand of LSP/LAP research shows that digital and serious games sustain motivation by activating multiple learner drives—achievement, exploration, narrative curiosity, and optimization—while offering low-consequence spaces to try options and witness outcomes, which supports deeper processing and retention. In higher-education language contexts, video-game use can raise motivation and align well with action-oriented pedagogy when integration is carefully designed (Schmoll, 2017). Brougère (2017) emphasises that play involves decision making, rule governed activity, and minimise real world consequences, conditions that allow students to rehearse choices safely and learn from error. Empirical implementations report domain-specific vocabulary gains via board-game repetition with feedback (Ferreira, 2017) and sustained engagement when online game design foregrounds agency and interaction (Zampa, Yassine-Diab, & Loiseau, 2017). Work on virtual worlds highlights immersion and embodied practice as levers for strengthening language and general competencies (Privas-Bréauté, 2017). Alvarez & Chaumette (2017) stress that evaluation frameworks should couple context, pedagogy, learners, and game mechanics, rather than a purely techno-centric view.

The second strand concerns inclusive pedagogy, notably Universal Design for Learning (UDL). UDL calls for multiple means of representation, engagement, and expression so that learners with different profiles can all find entry points into the material. Within ESP, this translates into varied formats (text, audio, video, interactive), differentiated opportunities for participation, and scaffolds that help weaker learners keep pace while allowing stronger ones to extend themselves.

The third strand is ESP task design. Decades of ESP scholarship underscore the value of task authenticity, where learners engage in tasks mirroring real professional language use (Chaovanapricha, 2024). Equally crucial is the principle of constructive alignment, which ensures coherence between learning outcomes, instructional activities, and assessment criteria (Biggs et al., 2022)—a concept widely applied in ESP curriculum development. Transparent evaluation, where assessment criteria are explicit and aligned with practice, fosters fairness and clarity (Smith, 2008). ESP courses grounded in discipline-relevant tasks, transparent objectives, and aligned assessments are more likely to enable students to develop both language awareness and the capacity to act as professionals (Paltridge & Starfield, 2013; Hyland & Shaw, 2016).

LUDIBRILANG operationalises these insights by structuring learning around transparent weekly units, embedding optional yet meaningful game-based tasks, and aligning exam assessment directly with the preparatory materials.

III. Course Architecture and Design Rationale

The guiding principle was pragmatic: if interaction could not be multiplied by increasing contact hours, it had to be multiplied by design. Each week became the key grain size of learning. A unit includes a downloadable set of guiding questions, the associated lecture, supplementary videos, and practice activities. The guiding questions also structure the end-semester exam, so that what students rehearse is directly what they will be assessed on.

Hybridisation was conceived not merely as a change of medium but as a redistribution of cognitive work. Synchronous time is devoted to clarifying threshold concepts and orchestrating retrieval practice through live polling. Asynchronous time is dedicated to repetition, elaboration, and rehearsal of language forms in context. The invariant weekly rhythm reduces cognitive load, stabilises expectations, and makes the design predictable both for students and for staff.

Design decisions were guided by UDL principles. Representation is diversified through written documents, audio-visual materials, and interactive artefacts. Engagement is supported by choice—games are optional, for instance—and by relevance, with legal themes chosen for societal salience such as climate litigation. Action and expression are varied through polling, oral interaction, and decision logs inside the games.

The design also accounts for heterogeneity in both digital and gaming fluency. Some students arrive with limited ease in navigating platforms, while others have little prior gaming experience. To accommodate this diversity, instructions and navigation cues are kept simple. In addition, the games themselves include scaffolding features: the most difficult vocabulary is glossed, and civilisation notes are provided to clarify historical and institutional references. These supports ensure that weaker students can follow the scenarios without being overwhelmed, while stronger students can focus on strategic choices and disciplinary content.

Moodle analytics offer data on exercise completion and time-on-task, but technical challenges complicate their exploitation. A platform migration in September 2023 caused malfunctions in the H5P "interactive book" module, making it difficult to remove outdated videos or add new ones. This illustrates the dependence of hybrid designs on technical infrastructure. Nevertheless, the structure has stabilised expectations and improved transparency, as learners are clear about what to do each week and how it connects to assessment.

[1] Download at: https://ikigai.games/games/gameDetails/magnacarta

[2] Download at: https://ikigai.games/games/gameDetails/scotus

IV. Gamer profile – Informed Inclusivity

Heterogeneity is not a drawback to be minimised but a resource to be designed for. Prior gamer-type research carried out at Bordeaux with the same population and by the LUDIBRILANG team with additional researchers (Vera-Cruz et al., 2023) showed that first-year law students exhibit a spectrum of motivational profiles: competitive, narrative, and exploratory.

LUDIBRILANG accommodates this diversity through three tactics. First, games are optional and flexible. Students can decide not to play, or to engage at different levels of depth. The Bordeaux version of *Magna Carta* does not feature leaderboards or achievement badges, though another university that has independently adopted the game has created its own complementary activities, such as award-reception speeches.

Second, the two games differ in structure. In *Magna Carta*, players take the role a nobleman negotiating with King John in 1215. They face a series of choices that can lead either to success or to failure, making the outcome dependent on their negotiation strategy. In Supreme Court, by contrast, players select arguments in a climate-justice case and observe how federal and state competencies interplay. The case ends in one of two outcomes, but the decision itself is left to the player's judgement rather than being determined by hidden rules of success or failure.

Third, exploratory affordances are built in. Optional side briefings and jurisprudential or historical notes cater to curious learners, but these detours do not penalise those who prefer a more straightforward path through the game.

V. Serious Games: *Magna Carta* and *Supreme Court*

The two games developed under LUDIBRILANG are designed to complement one another and reinforce course themes.

A. Magna Carta

Magna Carta situates students in medieval England. They play the role of Robert Fitzwalter, who was one of the barons who forced King John to relinquish some of his powers in 1215. The game introduces learners to feudal adjudication, legal professions of the time, and the institutional tensions that culminated in the Magna Carta. Players face choices that can lead to success or failure in negotiation, illustrating how different strategies affect outcomes. By embodying a historical actor, students gain insight into the fragility of medieval governance and the long-term resonance of the Magna Carta in constitutional history.

B. Supreme Court

Supreme Court places learners on the bench of the U.S. Supreme Court in a contemporary climate-justice case. Playing the role of Justice Lin Singh, a fictitious character, they are presented with arguments from the parties and must select which to foreground, while observing the interplay of federal and state competencies. Ultimately, the player issues a decision, choosing between two possible outcomes. The design draws attention to the tensions between economic interests, environmental stewardship, and rights claims. Because the subject matter is contemporary and familiar, no glossary is provided; as adding one would have disrupted the flow of the game. The result is less a test of knowledge than an exercise in judicial deliberation and balancing considerations.

VI. Assessment Design and Rubrics

Weekly guiding questions structure not only course content but also assessment. The end-semester exam mirrors the guiding questions, creating full alignment between preparation, practice, and evaluation.

A rubric, communicated to students early in the term, sets out criteria of clarity, vocabulary, coherence, and pragmatic appropriateness. The same rubric is applied in practice activities and in the games. This transparency supports fairness and enables students to regulate their own progress. By practising under the same evaluative framework as the final exam, students are reassured that their efforts are directly relevant.

VII. Implementation Workflow and Staffing

Delivering an innovation at the scale of 1,200 students rests on a streamlined workflow rather than a large team. A single lecturer is responsible for the entire course: designing content, managing the learning platform, and integrating the games. Technical support is available on demand for troubleshooting but is not embedded in the teaching team, and there is no tutoring support.

To make this feasible, weekly units follow a consistent rhythm, reducing preparation time and providing clarity for students. Once created, assets such as guiding questions, polls, and videos can be reused with minor revisions. The serious games, though resource-intensive to develop, are conceived for long-term use and can be deployed across successive cohorts without modification. This emphasis on reusability and stability allows the course to scale despite limited staffing and constrained resources.

VIII. Support and Accessibility

Support in LUDIBRILANG rests on a small set of targeted mechanisms rather than extensive scaffolding. At the orientation stage, a dedicated video walks students through the digital environment, explaining how to access weekly materials and navigate the LMS, and download the games. Clear instructions are provided step by step, which reduces confusion and reassures first-year students who may have limited digital or gaming fluency.

Technically, the games are made available in two formats only—MacOS and Windows—and must be downloaded. While this may pose challenges for some learners, the restricted formats ensure stability and compatibility across most student devices. Navigation inside the games is deliberately kept simple, and explanations of difficult vocabulary and cultural references are embedded directly into gameplay, allowing learners to progress without being blocked by comprehension gaps.

Participation in lectures is supported through Wooclap polling. Although semi-anonymous—names are not displayed publicly in the amphitheatre—responses can be traced by the lecturer if needed. This balance encourages broad participation without exposing students to peer judgement, while still allowing the instructor to monitor engagement patterns.

Beyond the University of Bordeaux, accessibility was also conceived with other institutions in mind. The games are

freely available for download and were developed with a view to reuse in different law faculties. To facilitate this transfer, a video created in collaboration with the Ikigai consortium provides ideas for instructors wishing to integrate the games into their own courses.

Together, these measures—orientation resources, streamlined formats, semi-anonymous polling, and open dissemination—strike a balance between feasibility for a single lecturer and meaningful support for a large, diverse cohort.

IX. Method: Action-Research and Evaluation

The development of the two games was not a solitary endeavour but a collective process. The lead lecturer, a linguist in charge of the first-year ESP course, worked with a team of peers at the University of Bordeaux to write the scenarios. These were then refined in collaboration with a professional developer, who provided technical expertise and ensured that the mechanics aligned with the intended pedagogical outcomes.

The lecturer participated actively in playtests, checking the consistency of scenarios and ensuring that the narrative flow matched the intended learning objectives. Once a stable version of *Magna Carta* was available, it was circulated more widely. Through GERAS (a French association of ESP researchers and teachers), the game was shared with colleagues teaching English in law faculties across France. Informal peer feedback enriched the iterative process, allowing external validation from practitioners facing similar teaching contexts.

Formal evaluation with students was also conducted. A questionnaire on the first game, *Magna Carta*, was administered in 2023 to first-year law students in Bordeaux. The survey captured learner perspectives on accessibility, rhythm, engagement, and perceived pedagogical value.

The results were encouraging.

- 73% of respondents reported no difficulty installing or playing the game.
- 65% judged the rhythm appropriate.
- 79% found the experience attractive.
- 71% rated their overall satisfaction at 4 or 5 on a 5-point scale.
- 75% of Bordeaux first-years and 100% of other universities' students indicated they would recommend the game to peers.
- 68% agreed that the game helped them understand the historical context of the Magna Carta.
- 63% identified links between the game and institutional change.

These findings suggest that *Magna Carta* successfully achieved its dual purpose: introducing historical content while sustaining engagement in a population often difficult to mobilise.

By contrast, *Supreme Court* is too recent to have undergone systematic student testing. Preliminary trials have been conducted internally, but a full evaluation with learners is scheduled for the 2025–2026 academic year.

Beyond games, Moodle analytics provide a complementary layer of insight. Course data reveal patterns of engagement, such as exercise completion and time-on-task. Yet technical complications following the platform migration in September 2023 have limited their interpretability. The malfunction of the H5P "interactive book" activity, for instance, has made it impossible to delete obsolete videos or to upload new ones, compromising the fluidity of the course. Despite these difficulties, analytics confirm that the transparent weekly structure supports consistent engagement.

X. Ethical Considerations and Data Protection

Evaluation in LUDIBRILANG followed clear ethical principles. Student data collection was strictly voluntary, with informed consent obtained before administering questionnaires. Responses were anonymised and aggregated to prevent identification. The scope of data collected was deliberately limited to perceptions of usability, engagement, and pedagogical value, avoiding any sensitive information.

Moodle analytics were used only at the aggregate level, focusing on indicators such as completion rates and time-on-task. Individual trajectories were neither analysed nor shared. In this way, the project balanced the need for actionable feedback with the protection of student rights.

XI. Mechanics – Outcomes Mapping

The two games map onto complementary learning outcomes.

Magna Carta is designed to familiarise learners with the institutional and political tensions of medieval England. By making negotiation choices as Robert Fitzwalter, students rehearse patterns of conflict and compromise. The branching outcomes—success or failure—convey the precariousness of institutional legitimacy in a feudal context.

Supreme Court, by contrast, models judicial deliberation in a contemporary U.S. case. Players select from parties' arguments, weigh their interplay, and render a decision. Although only two outcomes exist, the focus is on the reasoning process rather than on success or failure. Students experience how federal and state competencies interact and how legal decisions balance competing societal claims.

Both games are debriefed in lectures, where links are made explicit to course objectives and to the assessment rubric. In this way, the games are integrated into the learning trajectory rather than being isolated diversions.

XII. Instructor Development and Community of Practice

At Bordeaux, the first-year Legal English lecture is one of only three lectures shared among more than thirty lecturers, senior lecturers, and professors, making it a highly sought-after and high-profile teaching responsibility. The LUDIBRILANG project transformed this context by inviting colleagues to contribute directly to the lecture through the design of the gaming scenarios and rehearsal of videos in their areas of expertise. This not only gave value to their pedagogical and scientific knowledge but also integrated their voices into a flagship course.

The collective scenario writing of the games reinforced this participatory approach. By involving multiple lecturers in shaping narratives and decision paths, the project

distributed ownership and highlighted the diversity of expertise within the department. Contributing colleagues were no longer peripheral to the first-year lecture but visible actors in its content and delivery.

In this sense, LUDIBRILANG was a genuine game changer. It built a sense of team spirit, transformed competition into collaboration, and remodelled the teaching team. Beyond the introduction of games and hybrid workflows, its most enduring contribution has been the creation of a shared community of practice around a central course, where colleagues support one another, feel recognised, and contribute to sustaining innovation over time.

XIII. Implications and Transferability

The LUDIBRILANG model has implications beyond Bordeaux. It demonstrates that large-scale ESP can be hybridised without the need for tutorials, provided that weekly units are transparent, assessment is aligned, and optional serious games provide motivation and variety.

The course architecture—weekly guiding questions, synchronous clarification, asynchronous repetition, and optional game-based enrichment—offers a replicable blueprint for other faculties of law. The games themselves, freely downloadable, invite adaptation elsewhere. Institutions may choose to embed them within their own courses, adapt the scenarios to national legal contexts, or even design parallel games for other areas of ESP, such as economics or medicine.

Importantly, the model shows that inclusive design is not only compatible with scale but may be necessary for it. By planning for heterogeneity from the outset, LUDIBRILANG prevents weaker students from being left behind while offering stronger students the chance to extend their learning.

XIV. Future Work

While the evaluation of *Magna Carta* yielded encouraging results, the study has limitations. Data collection relied primarily on student perceptions rather than triangulating with performance measures. Moreover, *Supreme Court*, released four years after the project began, has not yet been tested with learners. Finally, analytics designed for both games are still under development and not yet available, though they will soon provide more fine-grained insights into player decisions, time on task, and pathways through scenarios.

Future research should therefore combine perception-based data with learning analytics and longitudinal tracking to examine how serious games influence disciplinary awareness and skill retention over time. On the practical side, more systematic feedback from other institutions adopting the games will help assess their transferability and cultural adaptability in diverse ESP contexts.

Three main avenues emerge. First, longitudinal research will be needed to determine whether engagement with serious games produces lasting effects on students' disciplinary awareness and motivation. One-off evaluations offer useful snapshots, but the question remains whether benefits persist into later stages of study. Second, strengthened analytics will allow more robust measurement of student engagement with digital resources. In the case of the two games, such tools will make it possible to capture patterns such as the most frequently selected pathways in *Magna Carta* or the time students devote to optional briefings in both games. These insights will inform broader course development. Third, dissemination across institutions should be pursued. Since both games are freely downloadable, their impact can extend beyond Bordeaux. A growing number of law faculties in France and abroad are already exploring digital integration for large cohorts, and ready-to-use games, paired with orientation videos and teaching guidelines, open promising avenues for transfer. Feedback from these external adoptions will enrich the design and contribute to consolidating a broader community of practice around ESP in law.

XV. Conclusion

LUDIBRILANG shows that large-scale ESP courses in law can be redesigned around transparent weekly units, inclusive pedagogy, and serious games. The course addresses structural constraints by redistributing cognitive work across synchronous and asynchronous formats, embedding scaffolds for heterogeneity, and offering optional enrichment through games.

Evaluation of Magna Carta confirms both feasibility and positive reception: students reported high satisfaction, engagement, and perceived learning gains. Although *Supreme Court* awaits full evaluation, its contemporary focus adds a valuable complement to the historical framing of Magna Carta. Together, the two games illustrate how serious play can reinforce ESP learning in legal education.

Despite technical constraints linked to platform migration, the model has proved sustainable and transferable. Its key features—weekly cadence, transparent alignment, inclusive scaffolds, and game-based enrichment—offer a blueprint that other institutions may adapt. By integrating serious games into the heart of hybrid course design, LUDIBRILANG advances not only the teaching of Legal English but also the broader project of making ESP in higher education both inclusive and engaging at scale.

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Enhancing multiliteracies through Drama-based teaching in higher education

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Abstract— **This study explores the use of drama-based teaching to develop multiliteracies in higher education. This approach integrates multiple modes of meaning-making—linguistic, visual, kinesthetic, spatial, and digital—creating a learning environment that facilitates multimodal knowledge acquisition and expression.**

Research findings indicate that implementing drama-based techniques in university teaching enhances student attention and engagement, and develops a more creative and inspiring learning atmosphere (Robson, 2018). Additionally, it promotes collaborative and participatory learning, fosters creativity, and enables students to explore, experience, and internalize complex scientific and social issues. At the same time, it facilitates the introduction and comprehension of new topics through the sensory engagement of content (Österlind, 2025). Drama-based teaching allows students to bridge theory and practice by combining experiential learning with reflective analysis (Kettula & Berghäll, 2013). They can create multimodal knowledge approaches while fostering essential 21st-century skills.

This study considers various forms of multimodal communication in drama-based teaching, such as visual, kinesthetic, and digital. It studies practices that empower students to expand their capabilities as producers-transmitters of multimodal texts, fostering inclusive learning experiences. Furthermore, the adaptability of drama techniques across different disciplines in higher education highlights their potential to enrich teaching practices and address students' diverse needs.

Keywords— Drama Pedagogy, Multimodal literacy, Student-centred learning

I. INTRODUCTION

Enhancing multiliteracies in higher education prepares students to manage complex information within varied cultural contexts and to thrive as active global citizens (Anstey & Bull, 2009; Khadka, 2014). As technological advancements accelerate and globalisation and multiculturalism shape contemporary societies, students are required not only to reproduce meanings but also to interpret and generate them. This process occurs through diverse modes of communication, with digital media playing a dominant role. Thus, in the contemporary era, literacy is no longer understood as a single, uniform skill set but as multiple, dynamic, and multimodal practices of meaning-making that are shaped by social and cultural contexts. This communicative complexity requires learning environments that reflect the multilayered and multimodal nature of knowledge (Cope & Kalantzis, 2015).

Within this context, teaching in higher education constitutes a field of transformation, as the need for radical change is increasingly emphasised (Arum & Roksa, 2011; Freeman et al., 2014; Bower et al., 2024). The European report on student-centred learning stresses the importance of active participation, flexibility, and inclusion, so that university teaching becomes more effective and responsive to the needs of 21st-century students (Klemenčič, Pupinis & Kirdulytė, 2020).

Achieving this goal necessitates a shift from teacher-centred instruction to student-centred teaching, where students actively participate in constructing and reconstructing knowledge (Cope & Kalantzis, 2015). Drama Pedagogy is closely aligned with such practices: its principles include embodiment of concepts, use of personal experiences, collaborative creation, and reflective learning. Research demonstrates its value as a medium for dialogue and critical reflection in higher education (Kaplan, Cook & Steiger, 2006), fostering creativity and critical thinking (Lu, 2002; Kasbary & Novák, 2024).

This theoretical study examines the relationship between drama pedagogy and multiliteracies and reaches conclusions about its role in higher education. Specifically, it investigates how drama-based methods and techniques can be integrated into university teaching to enhance multiliteracies, through a review and synthesis of relevant literature. It also highlights the connection between drama pedagogy and the multimodality and pedagogy of multiliteracies, and formulates methodological proposals that bridge theoretical perspectives with teaching practice.

II. MULTILITERACIES AND DRAMA PEDAGOGY

A. Defining key concepts

The concept of multiliteracies, introduced by the New London Group (1996), expanded traditional literacy to encompass diverse, multimodal, and socially situated practices of meaning-making. Rather than fixed skills, multiliteracies is seen as a dynamic process of design, through which individuals construct meanings across linguistic, visual, auditory, spatial, gestural, and digital modes (Cope & Kalantzis, 2000, 2015; Kalantzis & Cope, 2020). Multimodality and the "design" of meaning hold central roles in the theory of multiliteracies. Multimodality encompasses, in addition to oral and written language, other modes or forms of expression and communication such as image, space, body, and sound, which constitute distinct systems of meaning. According to Cope & Kalantzis (2009, 2020, 2021, 2023), the meanings communicated in these different forms are never the same. Although they may sometimes overlap or complement each other, each maintains its own "grammar." Thus, multimodality is indispensable, and the combination of these forms generates a more comprehensive meaning. This pedagogical approach aligns with student-centred teaching practices and

integration of technology to leverage and create semiotic resources.

To incorporate and utilise the diverse forms of communication and cultural contexts in this process of design, the New London Group (1996) proposed four foundational approaches to the pedagogy of multiliteracies, which can also serve as stages in the development of a teaching process. These approaches are: *Situated Practice,* which immerses students in authentic learning contexts grounded in their own experiences; *Overt Instruction*, which provides explicit guidance and structured support to develop awareness of concepts and strategies; *Critical Framing*, which encourages learners to analyse knowledge within its social, cultural, and ideological contexts; and *Transformed Practice,* which applies new understandings creatively in different and new contexts. Later, Cope & Kalantzis (2009) renamed them as *Experiencing, Conceptualising, Analysing, and Applying*, emphasising that they need not follow a strictly linear sequence.

Drama Pedagogy refers to the structured implementation of theatrical techniques within education, functioning both on didactic/pedagogical and artistic/aesthetic levels. It is characterised by participants' active involvement, the use of body and voice as expressive means, and the symbolic transformation of time and space into a medium of meaning-making. Key features such as improvisation, embodiment, and collaborative creativity create inclusive and transformative learning environments, where concepts are explored "as if" through roles and dramatic representation (McGregor, Tate & Robinson, 1977). This "through theatre" process consists of and typically unfolds in three or four developmental phases. The drama facilitator, through the atmosphere established and the techniques applied, enables participants to engage in multiple physical and/or verbal representations through role-play, both individually and collectively. The degree of the facilitator's intervention and the method of implementation—for example, whether texts will be provided, whether improvisations will be guided or free—depends on the intended aims. Aims also determine the scope of drama facilitation: activities may vary in length and intensity and may involve the whole group, pairs, or smaller subgroups. Implementation can also take the form of a structured sequence with developmental phases, creating a complete action, or may include only one or more theatrical techniques, particularly when the objective is to achieve specific learning goals (Fleming, 1995).

B. Drama Pedagogy in Higher Education

Drama-based pedagogy has attracted growing research interest as a medium of experiential and transformative learning in higher education. Research shows that it functions as a participatory, embodied, and reflective practice fostering cognitive, social, emotional, and intercultural skills (Athiemoolam, 2018; Moyo, 2015; Robson, 2018). Across disciplines such as medicine, education, and language studies, it enhances communication, empathy, and oral and emotional expression (del Moral-Barrigüete & Massó-Guijarro, 2022; Prueksapitak & Inchan, 2025). It also provides space for reflection and moral development, strengthens the connection between personal identity and professional role, and offers a safe environment for experimentation (Anderson, 2015; Moyo, 2015; Skye, Wagenschutz, Steiger & Kumagai, 2014). In such environments, students' attention and participation increase, they activate broader cognitive skills, and adopt multi-perspective outlooks, developing creativity and deeper conceptual understanding. Further, drama-based pedagogy promotes humanistic education, builds confidence and metacognitive awareness in teaching, and supports intercultural competence (Adıgüzel & Timuçin, 2010; Bayat, 2019; Robson et al., 2025; Sarah & Qayyum, 2024).

The literature supporting these conclusions was identified through online searches using combinations of keywords such as "multiliteracies and drama in higher education" and "drama-based teaching in tertiary education." The main inclusion criterion was the use of drama-based teaching in higher education, while studies referring to other levels of education were excluded. In total, 29 sources were included, comprising both theoretical and empirical research: 2 doctoral dissertations, 22 research articles, and 5 theoretical studies. This process enabled the synthesis of findings and the development of a theoretical framework regarding the contribution of drama pedagogy to the cultivation of multiliteracies. Although the selected studies did not explicitly focus on multiliteracies, the analysis of the drama-based methods and techniques they applied strongly suggests that drama is an inherently multimodal, student-centred approach aligned with the pedagogy of multiliteracies. Overall, in drama-based teaching, students' bodies and voices become tools for exploring content and constructing knowledge collectively. This observation formed the basis for the development of the theoretical framework proposed below, which highlights the key aspects of multiliteracies in relation to drama pedagogy.

III. Multiliteracies in drama-Based Teaching

A. Drama-based teaching and Multimodality

Findings from studies on the use of Drama Pedagogy in higher education highlight drama, as a teaching approach, as a fertile ground for the cultivation of multiliteracies, encompassing experiential knowledge, critical reflection, and creativity. Moreover, drama embodies the concept of multimodality as its core dimensions develop and cultivate through its practices.

Below, the concept of multimodality is aligned with the principal elements of Drama Pedagogy to illustrate its potential for cultivating each form of communication separately, as outlined in the theory of multiliteracies.

According to Cope and Kalantzis (2009), multimodal literacy includes the following key dimensions of meaning-making: Linguistic – written and oral communication (e.g., print and digital texts, listening, live or recorded speech). i. Visual – meaning through visual representation (e.g., images, symbols, diagrams). ii. Audio – decoding and producing meaning through voice, sound, and music. iii. Gestural – gestures, bodily expression, and facial expressions as primary modes of meaning-making. iv. Tactile – the sense of touch, broadening sensory engagement, particularly significant in specific educational contexts. v. Spatial – spatial arrangement and possibilities of movement within space.

Thus, multiliteracies concern an individual's capacity to understand, analyze, produce, and communicate meaning across different media, forms, and linguistic environments (Cope & Kalantzis, 2009).

For students, it is essential to express their meanings both within each mode separately and through combinations of modes, thereby developing multimodal literacy (Kalantzis & Cope, 2015). This is fully achievable through drama-based teaching. The linguistic mode is activated through dialogue, monologue, or narration, enabling students to experiment with voice, perspective, and rhetorical function. The visual mode emerges not only

through scenery, costumes, and props but also through posture and facial expression. The audio mode is connected with the use of sound, voice, and music as signifiers contributing to the overall meaning of a scene. Gestural, spatial, and tactile modes are engaged through bodily expression, spatial framing of the action, the proximity or distance of roles and objects, and physical interaction with the performance space and co-participants.

The synthesis of all these communicative modes within the dramatic process enables students to move beyond linear, text-bound literacies toward complex, integrated multimodal expression. Thus, drama, as a teaching approach, operationalizes the modes of multiliteracies in ways that are both experiential and critically reflective.

B. Drama-based teaching and Multiliteracies Pedagogy

Beyond its connection with the concept of multimodality, drama-based pedagogy can also be linked to the four fundamental approaches of multiliteracies pedagogy, as formulated by the New London Group and later by Cope & Kalantzis.

In the approach of Situated Practice, students can express personal experiences through movement-based activities, bodily expression, and improvisation. In this way, their prior knowledge and lived experience are highlighted, allowing them to simulate concepts, relationships, and situations experientially. Each theme is thus connected to students' cultural, linguistic, and social realities. Instead of relying on abstract analysis, meaning-making begins with action and embodied engagement in familiar, lived contexts.

Through Overt Instruction, students interact with "design" in relation to multimodal "texts." Drama allows them, through guided improvisations and techniques such as "freeze-frame" or combinations of expressive means, to encounter new knowledge across multiple modes—linguistic, visual, auditory, gestural, spatial, and tactile. By analysing roles and modes of expression, they realise how different uses of forms and structures can produce new or alternative meanings. This leads them toward a critical framing of communication, as they gain awareness of conventions, codes, and ideologies embedded in language and interpretation. They learn to question how meaning is produced and positioned, and how modes shape interpretation. Drama thus becomes a site for the critical deconstruction and creative reconstruction of meaning.

Finally, Transformed Practice emphasises applying and reshaping knowledge in new contexts. In drama-based teaching, this occurs when students present structured improvisations developed from previous work and critical reframing, or when they create complete performances that reflect both their personal voices and broader social concerns. These structured scenic improvisations represent meanings negotiated, reinterpreted, and transformed through reflection and feedback, consolidating understanding and fostering active engagement in the learning environment.

Therefore, Drama-based Pedagogy becomes a powerful means of cultivating multiliteracies. It strengthens not only multimodal literacy but also critical thinking, cultural awareness, and collaborative meaning-making. It prepares students to respond effectively to a world where communication is no longer confined to written texts but distributed across diverse modes and experiences.

IV. Conclusions and Suggestions for the Utilisation of Drama-based Teaching for Cultivating Multiliteracies

Based on the above, drama techniques function as multimodal learning environments where speech meets image, sound, movement, and touch, thereby creating a dynamic field for the cultivation of multiliteracies. Bodily expression, gestures, and posture become powerful visual messages that support the development of visual literacy. Students learn how the spatial positioning of the body and objects influences communication and the perception of meaning. In this way, they become sensitised to observing, interpreting, and creating visual, gestural, and spatial messages.

Through verbal improvisations and role-play, language is employed in dynamic and creative ways, taking into account the contexts and frameworks in which it is embedded. Students thus learn to listen actively to the speech of others and to express themselves linguistically across diverse environments. Sounds, music, and tactile communication, which are integral elements of the theatrical experience, also constitute significant semiotic resources. Students practice considering them in both the interpretation and expression of meanings, since they may reinforce a communicative message.

Hence, meaning-making, style, and intention become conscious processes through experiential and participatory practices. Through this multimodal process, students can create and express experiences, explore, process, and more fully understand concepts and information, within the framework of Situated Practice and Overt Instruction. Moreover, through experiential practices, reflection, and democratic dialogue, they cultivate critical thinking and develop sensitivity to multiple perspectives, while also bridging theory with practice across diverse contexts through the safe process of the "as if." Additionally, within the framework of Critical Framing, and Transformed Practice, they creatively reshape meanings, concepts, and relationships within a collaborative framework, drawing on their personal interpretations and convergent creativity. Within such a process, inclusion emerges as an inherent element of Drama Pedagogy, a non-exclusionary practice where students of diverse experiences, sociocultural backgrounds, abilities, learning styles, and readiness can all participate.

Studies applying Drama Pedagogy in higher education have documented a wide range of methods and techniques. These include activation and bodily expression practices (warm-ups, bodily expression exercises, dramatic exercises for nonverbal communication), role-based practices (role-play, sketches, teacher-in-role, monologue, storytelling, role building), structuring techniques (dramatisation, dramatic tension, improvisation, freeze-frame, thought-tracking, hot-seating, conscience alley, mantle of the expert), and more complex forms (forum theatre, forum play, process drama, legislative theatre, interactive theatre), among others (McNaughton, 2004; Kaplan, Cook & Steiger, 2006; Ward, Connolly & Meyer, 2010; Robson, 2018; Bayat, 2019; Göksel, 2025; Österlind & Hallgren, 2025; Prueksapitak, Inchan & Pakdeeronachit, 2025).

Regardless of the techniques employed in a teaching process, it is recommended that they be situated within a broader four-phase methodological framework: liberation, reproduction/representation, scenic improvisation, and discussion/analysis (Kouretzis, 1991, 1997). This methodological development shapes the cognitive and socio-emotional environment for elaboration of concepts, principles, relationships, and theories, reinforcing both

comprehension and the expression of knowledge. Within this methodological framework, multiple dimensions of multiliteracies can be cultivated, and can be together with the approaches of Situated Practice, Overt Instruction, Critical Framing, and Transformed Practice. Concepts are "aestheticised" multimodally through lived experience and imagination, thus realising student-centred and inclusive teaching.

In the first phase, the central concept can be introduced, and students can express their prior knowledge individually and collectively through bodily, kinetic, auditory, spatial, and gestural representation, and through verbal improvisations, or by representation of authentic or symbolic contexts, so that they can experience new situations or concepts, an "as if" experience.

In the second phase, the introduction and processing of multimodal information through embodied action, role-play, improvisations, and other techniques can strengthen the understanding of essential concepts necessary for meaning-making. Participants also become aware of the various contexts that influence the formation of meaning and may experiment with the different forms of expression and interpretation through the processes of reflection and distancing.

In the third phase, students can present staged improvisations they have constructed in groups, which arise from the synthesis and critical shaping of knowledge and the formation of meanings. Through them, they are enabled to express themselves and communicate in a holistic, multimodal way.

In the fourth phase, they discuss and analyse their experiences and the meanings. This sharing of experiences not only consolidates understanding but also serves as a crucial process of reflection, transformation, and the generation of new ideas.

These four phases can provide a complete learning experience, but they may also be applied independently or non-linearly, depending on teaching time, learning objectives, and, most importantly, the profile of each participant group. Also, at all stages, technology can play an important role, for example, with the creation of digital theatrical stage environments, soundscapes, music, or video.

In conclusion, Drama Pedagogy in higher education teaching emerges as an innovative instructional approach with substantial learning and pedagogical benefits. Nevertheless, challenges remain, including limited teacher training in drama methods (Anderson, 2015), time constraints in university curricula (Göksel, 2025), and students' initial resistance to embodied activities (Moyo, 2015). Addressing these issues requires institutional support and professional development opportunities. As this paper is a theoretical study, future research could examine empirical applications across different disciplines in higher education, compare drama-based practices with other multimodal teaching approaches, and investigate the long-term effects on students' intercultural and critical literacies, as also suggested by other scholars (see Robson, 2018; Kasbary & Novák, 2024). Since the production and interpretation of meanings in contemporary society requires the ability to manage and combine diverse semiotic resources, Drama Pedagogy can serve as a fertile medium for cultivating multiliteracies, contributing to equal participation and access to education, το inclusion, and to the preparation of students for equitable, active, and conscious participation in multimodal and multicultural learning and social environments.

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Section V. Affective Engagement, Interest, and Student Motivation in Inclusive Pedagogy

These contributions explore how interest, emotional engagement, and culturally responsive practices shape inclusion, belonging, and deep learning across diverse contexts.

Kathleen Quinlan *Promoting Students' Interests: A Key to Inclusive, Student-Centred Pedagogy*

Eirini (Irene) Spanaki & Anastasia Pratikaki *University of Crete Science Students' Perceptions Regarding Formal and Informal Settings as an Inclusive Teaching Approach*

Evangelia Astyrakaki *A Case Study on Teaching Herodotus in an Inclusive Learning Framework*

Sofia Nikolidaki *Enhancing Student-Teachers' Communication Skills with Parents: An Example of Fostering Inclusive and Reflective Student-Centred Education*

Eleni Vasilaki & Aikaterini Vasiou *Happiness through Mindfulness: Transforming Higher Education*

In Section V, Inclusion is incomplete without attention to the emotional life of learning. Quinlan's Promoting Students' Interests anchors this section by demonstrating—through empirical studies on lectures, curricula, and assessment—that interest functions as the affective engine of student-centred education. Spanaki and Pratikaki's research on science students at the University of Crete highlights how informal and formal settings jointly sustain motivation and belonging. Astyrakaki's case study on teaching Herodotus connects classical texts to contemporary inclusivity through empathy and dialogue. Nikolidaki extends the discussion to teacher education, emphasising communication with parents as a bridge between institutional and emotional inclusion, while Vasilaki and Vasiou's Happiness through Mindfulness positions well-being as a pedagogical responsibility. Across these contributions, inclusion is reframed as an ethical and emotional practice that unites cognition, affect, and care.

Promoting Students' Interests: A Key to Inclusive, Student-Centred Pedagogy

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Abstract. **This paper argues that student interest—defined as meaningful emotional, cognitive, and behavioral engagement—is central to inclusive, student-centered pedagogy. Drawing on three empirical studies, it demonstrates how interest can be cultivated through teaching practices, culturally sensitive curricula, and engaging assessments. Findings show that students' interest is triggered by enthusiastic teaching, relevant and challenging content, five dimensions of cultural sensitivity of curricula, and assessments offering choice and real-world connections. The paper concludes with practical recommendations for educators and educational developers to design learning experiences that foster interest, thereby enhancing engagement, equity, and educational outcomes.**

Keywords: interest, engagement, culturally responsive curricula, higher education, authentic assessments

I. Introduction

Higher education can feel very different depending on how we teach. To illustrate this point, let me borrow from two poems featured in my book How Higher Education Feels: Commentaries on Poems that Illuminate Emotions in Learning and Teaching (Quinlan, 2016a).

The first, "Killing Chaucer" by Myra Schneider, describes a professor so absorbed in dissecting Chaucer's texts that every nuance is catalogued, every source meticulously tracked. Yet, in the process, Chaucer's compassion, humour, and humanity are stripped away. What remains is lifeless—a flower "de-petalled," the joy of literature lost beneath a heap of scholarly notes. Students watch the professor's analysis from their lecture seats.

In contrast, Carol Tyx's "The Pleasures of Teaching Emily Dickinson" portrays a collaborative classroom in which students and teacher are so engrossed they lose track of time. Students are moved by Dickinson's words, responding with passion, laughter, and even a sense of awe. The teacher, too, is energised, swept up in a shared encounter with poetry that feels transformative. Here we see teaching and learning at their best—when both students and teachers are emotionally and intellectually engaged and when education is a shared human endeavor of co-created meaning.

These two poems capture the stakes of our pedagogical choices. Our teaching can deaden subjects, sapping life from them, or it can treat subjects and the conversations about those subjects as sacred and life-giving. These choices affect whether students feel interested, enlivened, enthusiastic.

Myra Schneider's poem inspired me to think about how I might use poetry to create a student-centered – person-centered – discourse that would highlight the emotional dimensions of teaching and learning. Students are whole people – with thoughts, feelings and moral stances. To me, being student-centred means starting with that assumption.

This belief led me to edit a book called: How Higher Education Feels: Commentaries on Poems that illuminate emotions in learning and teaching (Quinlan, 2016a) that brings together 138 poems about learning and teaching in higher education written primarily from the perspectives of teachers and students. Too often we talk only about thinking and cognitive development in higher education, but we also need to acknowledge, recognize and talk about the emotions that lie at the heart of all the educational relationships that define students' experience of higher education. I used poems because poems not only make us think, they make us feel.

Students experience many emotions related to learning – anxiety, surprise, confusion, excitement, boredom that affect various learning relationships (Quinlan, 2016b). Since 2016, I have focused my research on students' interest– which I define as meaningful emotional, cognitive and behavioural engagement with their subject of study.

That brings us to the theme of this conference: inclusive, student-centred pedagogies. To be student-centred is to design learning around what interests students. It also means focusing on how we can stimulate, support and grow their interests in their subjects, potential careers, and the world around them. To be inclusive is to recognise the diversity of our classrooms and ensure that all students—not just those who already see themselves reflected in the curriculum—can find interest and meaning in their studies. In this paper, I argue that interest is the key motivational construct underlying student-centredness and inclusivity.

II. Interest as the Guiding Concept

Psychologists have long studied interest as a motivational variable. When we think of interest, we often think of it as a trait – students are either interested or they are not. But we can also think of it in state-like terms – as a momentary experience that is dependent upon situational variables. As teachers we can trigger and nurture it.

I rely on Renninger and Hidi's (2006) model, which proposes that, with appropriate supports, situational interest can grow through phases into individual interest. A situational interest might be triggered momentarily—perhaps by a vivid example, a surprising fact, or an engaging story. With appropriate nurturing, situational interest can grow into individual interest: a sustained commitment to a subject, often tied to identity and values. For educators, this means that interest is not simply something students bring with them to class. It can be cultivated—or extinguished—by the way we teach.

Research consistently shows that interest motivates students toward many positive learning behaviours that lead to higher academic achievement and influence career decision-making and success (Harter et al. 2016; Jansen, Lüdtke, and Schroeders, 2016; Nye et al. 2012; Quinlan and Renninger, 2022; Renninger and Hidi, 2022; Sansone et al. 2019). Interest is rewarding (Gottlieb et al., 2013). Thus, students seek it in their university programs (Vulperhorst, van de Rijst, and Akkerman, 2020) and careers (Gallup, 2019). Conversely, when students are bored or alienated, they disengage, sometimes withdrawing from study altogether.

Thus, if we are serious about inclusive, student-centred pedagogy, we must ask: how can we design teaching, curricula, and assessment to promote students' interests?

In this paper, I will draw on three empirical studies to explore that question:

What triggers students' interest in lectures (Quinlan, 2019).

How culturally sensitive curricula support student interest (Thomas & Quinlan, 2023; Quinlan & Thomas, 2024; Quinlan, Thomas, Hayton et al., 2024a).

How assessments can be designed to engage students' interests (Quinlan, Sellei, & Fiorucci, 2024).

Together, these studies illustrate that interest is not merely incidental. It can and should be designed for, if we want education that is both inclusive and student-centred.

III. Study 1: What Triggers Interest in Lectures?

Lectures are a longstanding feature of higher education, though they have been much critiqued. Yet many students still attend lectures, and what happens in them can matter profoundly, especially in the first year when most attrition occurs.

I asked: What instructional features trigger first-year students' interest during lectures? (Quinlan, 2019).

A. Methods

My research assistant and I observed 12 first-year undergraduate lectures across social science and science subjects. After each lecture, a total of 706 attending students (mean age 19, 460 females) completed a survey about the most interesting moment in the lecture. They described the moment and rated a variety of features that previous research showed were associated with higher student interest. We then analysed responses using descriptive statistics, t-tests, and regression analysis.

B. Findings

Several features stood out:

Perceptions of the teacher was the strongest predictor of interest. Students responded when lecturers were approachable, enthusiastic, and seemed to care.

Cognitive activation was vital: students indicated that these interesting moments challenged them to think.

Relevance and usefulness were key: students were drawn to examples that connected the content to real-world applications or to their own lives.

Cognitive incongruity mattered: when something surprised students, challenged assumptions, or posed a puzzle, their interest was piqued.

Novelty: when information presented or the process used to convey it were seen as fresh and new had small but significant effect on students' interest in that moment.

Appropriate challenge was essential. Over-challenging lectures—those pitched at a level far beyond students' current understanding—dampened interest.

C. Implications for Practice

A key lesson here is simple but important: to foster student interest, we must be interesting as teachers. Being interesting does not mean we must all become entertainers. Rather, it means:

Be present, listen, share your humanity, and connect to students as people.

Show enthusiasm for your subject.

We can also design our instructions so that we:

Ask students to think, not just copy notes.

Connect content to real-world issues or professional practice.

Use novelty and surprise strategically.

Pitch content at the right level—not too easy, not impossibly hard.

This study shows that inclusive, student-centred pedagogy, while usually associated with smaller, more personalised settings, can happen even in large lectures. It is about how we show up in lectures as people and how we connect with the class, even from the front of the room. It is about meeting students where they are, inviting them into the subject and trusting that they want to be challenged intellectually.

IV. Study 2:Culturally Sensitive Curricula and Student Interest

While lectures matter, the broader curriculum also shapes whether students engage with their students meaningfully. In the UK, persistent racial equality gaps have led to calls for universities to "decolonise the curriculum." Students themselves express this need powerfully. In a study of ethnically minoritized students' reflections' on their experiences of higher education curriculum, one put it bluntly: "It was literally White theorists all the time and it was just boring because you cannot relate to it." Another noted: "Seeing yourself represented did make a big difference to engagement in academic life." (Thomas & Jivraj, 2020). We wanted to see how widespread these views were. Yet, there was no survey instrument to illuminate students' perceptions of the cultural sensitivity of curricula across whole programmes, courses or universities.

To address this gap, my former doctoral student, Dave S. P. Thomas, and I developed the Culturally Sensitive Curricula Scales (Thomas & Quinlan, 2023), which we subsequently revised into a 27 item scale on which students rate their curricula on a 6 point scale from strongly disagree (1) to strongly agree (6) (Quinlan, Thomas, Hayton, et al., 2024). We also created a derivative work, the CSC Educator Self-Reflection Tool (Quinlan & Thomas, 2024). We defined curriculum was both what is taught and how it is taught. Culturally sensitive curricula are those in which attitudes, teaching methods and practice, teaching materials, curriculum, and theories relate to, affirm and respect students' diverse cultures, histories, identities, and contexts.

Inspired by the student voices in the earlier, qualitative work, we asked: Do culturally sensitive curricula promote student interest?

A. Methods

We surveyed 286 students across seven UK universities and eight subjects (Quinlan, Thomas, Hayton et al., 2024). The survey included validated scales assessing six dimensions of culturally sensitive curriculum:

Diversity represented (e.g., are authors from varied backgrounds included?).

Negative portrayals (e.g., are stereotypes challenged?).

Positive depictions (e.g., are people of colour portrayed as agents and innovators?).

- **Challenging power** (e.g., does the curriculum interrogate structures of inequality?).
- **Inclusive classroom interactions** (e.g., do all students feel respected?).
- **Culturally engaging assessments** (e.g., tasks that allow diverse perspectives).

We also asked about interest in the subject, their perceptions of their teacher, and demographics.

B. Findings

Several important findings emerged:

Black (African and African Caribbean heritage) and Asian heritage students experienced curricula as less culturally sensitive than White students.

Across all groups, culturally sensitive curricula predicted higher student interest—even when controlling for perceptions of the teacher.In other words, interest was not just about good teaching in the traditional sense. The curriculum itself mattered.

In separate analyses, all dimensions except negative portrayals predicted higher student interest. That is, all aspects of cultural sensitivity mattered, not just representation.

C. Implications for Practice

Educators can:

Attend to all six dimensions of cultural sensitivity of curriculum as each matters.

Reflect on their own curricula using the open-access Culturally Sensitive Educator Self-Reflection Tool (Quinlan & Thomas, 2024).

Using the specific items in the survey and reflection tool, create a personal action plan for enhancing their teaching.

This study highlights that inclusive pedagogy requires looking beyond classroom techniques to the content itself. Designing culturally sensitive curricula:

Validates students' identities and experiences.

Reflects the global, multicultural reality of today's world.

Makes education more relevant to the real-world.

Stimulates and sustains interest by making content feel relevant and just.

In short, to be student-centred and inclusive, curricula must represent the diversity of students and the world they will inhabit as professionals. Otherwise, we risk alienating some while privileging others. We also risk failing to prepare graduates with the cultural competencies required by professionals in multi-cultural societies (Thomas & Quinlan, 2021).

V. Study 3: Interest-Based Assessments

If lectures and curricula matter, assessments may matter even more. After all, students can skip lectures and skim readings, but they cannot ignore assessments. Assessments are also where students focus their energy and attention.

If we are thinking only of assessment *of* learning, we may limit ourselves to traditional timed exams that focus on determining what content students have learned. Assessment *for* learning, though, focuses on tasks that allow students to learn while they complete them. When assessments become part of the learning, the emphasis shifts to a range of skills and processes students need to practice to become scholars in their discipline, professionals, citizens, and change agents. Assessments are no longer just about content.

Viewing assessments as part of the learning process prompts us to consider how to design assessments to promote students' motivation and interest. There is a growing literature on what promotes students' interest during instruction, including those studies described above. But how might assessment tasks stimulate, support or grow students' interest? Some of the features already described, such as cognitive incongruity, may be counterproductive in an assessment situation. Likewise, when completing assessment tasks independently, students' perceptions of their teacher may not be as central to assessment tasks as it in lectures or seminars.

Therefore, we asked: *What makes assessments interesting and engaging for students?* (Quinlan, Sellei, & Fiorucci, 2024).

A. Methods

We surveyed 668 students at the University of Kent. Students were asked to describe the most interesting or engaging assessment they had completed during university. Of those who completed the survey, 302 provided detailed explanations of why they found the assessment engaging. We analysed their explanations. We coded their responses, staying close to students' words. A single explanation could have more than one code. We focused in greater depth on the two most frequently cited features—choice and real-world connection—developing sub-codes to capture the different ways these features manifested.

B. Findings

Students most often cited choice (116), real-world connection (52), novelty (32), collaboration (30), deeper learning (24) and self-reflection (19) as explanations for why their assessment was interesting. Choice and real-world connection could be achieved in different, often overlapping ways.

Choice involved having options in topics, processes, or formats that allowed them to pursue what mattered most to them. Real-world connection was seen when tasks linked to

real issues, clients, or audiences. Students often reported a combination of elements. That is, they might have offered multiple aspects of choice and real-world connection.

Student examples illustrate the overlaps of these assessment features. One student described a wildlife conflict debate in which they were able to choose the conflict they wanted to debate and choose the format by creating a debate structure. Another highlighted different aspects of real-world connection. The student described conducting a Great Crested Newt population survey on campus, responding to a real-world issue of a protected species. The assignment took place in a real place-the woodland on their own campus and involved a real-world task of using data collection techniques used by scientists.

Many of the examples also included other features, such as collaboration or perceived depth of learning.

C. Implications for Practice

To engage students inclusively, design assessments that:

Offer meaningful choice (topic, processes or output format).

Connect to real-world issues, tasks, audiences, and/or places.

Such assessments not only promote interest but also prepare students for life beyond university. They validate different backgrounds and aspirations by allowing students to bring themselves into the work.

VI. Synthesis: Toward Interest-Based, Inclusive, Student-Centred Pedagogy

Across these three studies, a consistent picture emerges: student interest is not incidental. It is shaped by how educators design teaching, curricula, and assessments. When students are interested, they are more engaged, more persistent, and more successful.

To bring this back to the conference theme:

Student-centred pedagogy means designing instruction to trigger, support, and grow students' interests.

Inclusive pedagogy means ensuring that all students, across cultures, backgrounds, and identities, can find themselves in the curriculum and engage meaningfully.

Promoting student interest, then, is not a luxury. It is central to our roles and responsibilities as educators.

A. Practical Recommendations

In this section, I pull out practical implications of these three studies for two main audiences of this paper.

For faculty members:

In lectures, be enthusiastic, pose puzzles, connect to real life, and avoid overwhelming students.

In curricula, review reading lists, examples, imagery, and case studies for diversity and representation.

In assessments, design for choice and real-world application.

For educational developers:

Provide tools and frameworks (such as the Culturally Sensitive Curricula Educator Self-Reflection Tool; Quinlan & Thomas, 2024) to help staff audit and redesign their teaching.

Encourage staff to collect student feedback on interest—not just satisfaction—as part of evaluating teaching.

Position interest as a bridge concept that unites inclusivity and student-centredness.

VII. Conclusion

Returning to the poems: "Killing Chaucer" reminds us of the risks when teaching becomes overly abstracted from students' lives and interests. In contrast, "The Pleasures of Teaching Emily Dickinson" shows us the joy possible when students and teachers engage passionately together. These three empirical studies outlined here illuminate some of the key elements teachers can use to promote student interest and and enliven learning.

When we promote students' interests, we are not just making our teaching more enjoyable. We are making higher education more inclusive and more student-centred. Doing so is, ultimately, better for students, staff and the world.

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University of Crete sciences students' perceptions regarding formal and informal settings as an inclusive teaching approach

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***Abstract*— The aim of this study was to investigate the perceptions of Sciences' students, participated in Teaching Certificate program, regarding formal and informal settings as an inclusive teaching approach. Informal learning takes place outside of formal settings, i.e. schools and colleges, and arises from the learner's involvement in activities, through experiential learning, that are not undertaken with a learning purpose. 56 Sciences' students and pre-service teachers (42 females and 14 males) visited two informal settings, a Museum and an International Organization and participated in experiential workshops. After their visits, they answered three open-ended questions, through semi structured interviews, investigating their perceptions about: a)the benefits and weaknesses of formal and informal setting in the teaching process, b) possible difficulties of applying informal setting in the teaching process and c)whether or not they would incorporate informal settings in their future teaching carrier.**

Almost half of the students' responses expressed the need to combine both formal and informal settings and the rest supported informal as often being of higher quality. Students' experiential and active learning are highlighted in informal settings, which facilitate the in-depth understanding of the topic and reflect the self-directed and self paced personal learning. Students' active participation, interest and motivation are deemed to be limited in formal settings. Most participants argued that formal settings can't encourage creativity, nor address students' different needs and learning profiles to promote inclusion for all of them. Finally, almost all participants claimed that they would incorporate informal settings into their teaching in the future, although they argued about organizational and students' management difficulties, as they are interested in providing active experiential learning opportunities to increase their students' motivation and make the teaching process more interactive.

Keywords—Science education, formal and informal environments, teachers' education, inclusive pedagogy

I. INTRODUCTION

Informal learning takes place outside of formal settings, i.e. schools and colleges, and arises from the learner's involvement in activities, through experiential learning, that are not undertaken with a learning purpose. Informal educational settings have been successfully embedded in schools' curricula and informal learning has been validated in primary and secondary education [1], [2]. Museums often design exhibitions to provide experiences and meet educational goals, especially with respect to school-aged children who visit either with families or in school groups [3],[4],[5],[6]. However, there is currently a lack of quantitative empirical studies to support this assumption for higher education [7]. A preliminary study on Sciences' undergraduate students' beliefs and expectations towards informal learning environments, and specifically a workshop at a Natural History Museum of Crete, was conducted [8]. In particular, 23 students (20 female, 3 male) from the School of Science and Engineering, University of Crete, participating in a two-hour experiential workshop on natural phenomena (volcanoes, earthquakes, seismic waves). The main finding of the study is that students greatly appreciate and highly validate informal learning environments in general. Students' gains referred mainly to experiential learning and to long term impact on science's knowledge [9], [8]. Most of the students were positive in suggesting a stronger integration of formal and informal learning processes to their scientific curriculum [10], [8]. Finally, most of the students would consider implementing informal learning environments to their future teaching practices, evaluating the important contribution of those settings to secondary students' engagement in science and to critical thinking [11], [8]. Scholars expect that informal learning will become an even more important part of students' education progressively and should be investigated more thoroughly [12], [13], [14]. Researchers have recognized the importance of informal settings for higher education contexts [7]. University students can learn in formal, also in informal settings, if the courses are organized to incorporate the self-directed and intentional way from fellow students [7]. Additionally, the informal settings include group activities, student-led activities, implementation of projects, voluntary courses [15].

In addition, students know that in informal STEM settings aren't held account able for their outcomes and they don't feel anxious for grading. Instead, students begin to learn about STEM in early infancy and childhood through social experiences and outdoor education such as virtual learning experiences, explorations, and educational visits to zoos, aquariums, and museums [16]. Often, these informal activities are voluntary and the students aren't anxious about their credits [17]. However, science teachers have some difficulties in order to include the informal settings in the traditional curricula [18]. The nature of the sciences curriculum itself, is a big obstacle on those changes [19]. Moreover, learning science in informal settings follows non organized schedule that is a difficulty additionally in students' engagement despite formal learning which is planned and measure assessed, certificated [20]. Overall, informal settings provide an excellent theoretical background with respect to promote achievement, equity, community and social capital. A model for including disadvantaged communities, too,

providing choices of active participation and students' involvement [21].

However, there has been a lack of valid measures to operationalize students' informal learning. The literature appears to refer to ways of overcoming obstacles related to the assessment of knowledge acquired by students in informal learning environments. Researchers propose statistical approaches to estimate the quality of learning in informal settings, like interviews with random assignment and case studies [22], [23]. That proposal builds on the present research. This study aims to examine the perceptions of science students regarding the benefits of using informal settings and the possible difficulties in applying formal and informal education in their future teaching career.

II. METHOD AND SAMPLE

This qualitative study, specifically a case study, was conducted at the University of Crete, which consists of 20.200 undergraduate and postgraduate students from Schools of Sciences, Humanities and Social Sciences. Specifically, 56 science students and pre-service teachers out of a total of approximately 300, who attend Teaching Certificate's modules annually, participated. 42 girls and 14 boys from the departments of Mathematics (21), Biology (19), Chemistry (8), Physics (5) and Computer Sciences (3), attending two different modules of the Teaching Certificate, visited two informal settings, the Natural History Museum of Crete and an International Organization for Migration. The students, in both settings, participated in experiential workshops, developed for educational reasons.

Data analysis.

The qualitative data collected through semi-structured interviews, were organized and analyzed based on thematic analysis [24]. Three main research questions developed and analyzed by the students' responses: a) Do you believe that learning is achieved better in a formal or informal learning environment? b) What might be some difficulties or problems of applying informal settings in the teaching process? c) As future teachers, would you choose to incorporate informal learning environment into your teaching? Justify your answer.

Thematic analysis involves systematic identification, understanding, and subsequent organization of recurring patterns of meaning [25]. In this way, the researcher gains cognitive access to the meaning of their data [24], following five steps: a) transcription of open questions, b) familiarization with the data and identification of excerpts, c) coding, d) transition from codes to themes, and e) presentation of findings [24].

Validity and reliability

The study achieved an increased level of reliability and validity, as the semi-structured interviews were conducted and processed by two researchers, providing greater objectivity. In addition, the transcribed texts of the interviews were reviewed and analyzed by the researchers. Also, the three open-ended questions were answered independently, in a Google form, by 35 students. After collecting the data, the research literature in accordance with the research data were carefully examined, followed by the development of coding. The results of the qualitative analysis are presented in Tables below.

III. RESULTS

According to the coding, the responses to the first research question, regarding the benefits and weaknesses of formal and informal setting in the teaching process, revealed five main codes. The reference files were organized by thematic category, with some texts coded in more than one category to highlight the interconnections between different concepts. At the same time, the responses to the third research question, whether they would incorporate informal settings in their future teaching career, revealed common perceptions with the first research question's responses. The indicative responses from the reports as coded are presented in Table 1. Regarding the second research question about the possible difficulties of applying informal and formal settings in the teaching process, students' responses were analyzed accordingly, revealing 5 codes for informal settings and 4 codes for formal settings**.** The indicative responses are presented in Table 2 and 3.

Table 1: Indicative answers regarding benefits of informal settings and incorporation in the teaching process

Codes	*References*	*Indicative answers for the first research question*	*Common answers related to the third research question*
Experiental/ active learning	23/56	1.I believe that experiential learning is necessary, as I was able to use and verify the knowledge I gained during the lectures. 2. The students actively participate in the educational process and immerse themselves in a more experiential teaching method. 3. In an informal environment, additional information is provided through visual aids, experiential learning, and student socialization.	1.Yes, because informal learning enforces better assimilation of the material, as it involves experiential learning and active learning through exploration. Linking knowledge to everyday life 2. I would choose to incorporate informal learning environments... as they offer unique opportunities for experiential learning and skill development. 3. Students can develop empathy, practical knowledge, and problem-solving skills that are not easily acquired through the formal education system alone.
Deep understanding	20/56	1.They can relate knowledge to the above stimuli and better encode knowledge. 2. Amusing way, therefore, assimilation. ... Self-pace time to assimilate information. 3. In an informal environment, because as a student I was anxious and introverted, information is better recorded, it helps with personal learning style, and there is a connection between knowledge and everyday life.	1. Yes... in an informal environment, outdoor education, experiential learning, active participation, interesting experiences, and perhaps additional motivation to engage with the subject. Understanding leads to interest and a better sense of the lesson. 2. Yes... correlating information with stimuli and, consequently, understanding and storing it in long-term memory. In combination with a typical environment, perhaps 3. Yes... the book may be difficult to understand, poorly organized, confusing to students... And with attention difficulties

Table 1 (cont.): Indicative answers regarding benefits of informal settings and incorporation in the teaching process

Codes	*References*	*Indicative answers for the first research question*	*Common answers related to the third research question*
Visual stimuli	15/56	1.They combine new knowledge with activities involving visual, tactile, and auditory stimuli. 2. As it is more interactive, there is visualization, which helps in understanding knowledge and problems in everyday life and applications. 3. The informal environment helps students understand the material better, due to visual stimuli ... and participation.	1. (Informal) Freedom for more educational and supervisory resources and presentation of material by experts on the subject. This will lead to a better understanding for all children. 2. It is also essential to pay attention to achievements and cultivate interest. 3. They see the transformation of scientific knowledge into everyday applied knowledge
Inquiry and collaborative method	26/56	1. They broaden their knowledge and gain a deep understanding of the material, assimilating it through personal engagement. 2. Informally, students and pupils acquire knowledge without realizing it, i.e., they learn by seeking information through exploration 3. ...opportunities for students to develop a relationship with the teacher...normalization of relationships, reinforcement of students' respect and attention towards the teacher.	1. Yes... it is positive that there was teamwork with different activities for each group. 2. Inquiry learning was interesting, and it is essential for students to search for information and apply the method. 3. Teamwork is essential for socialization and common goals, collaborative learning, and exchange of ideas.
Inclusion	35/56	1. In informal settings, they are more spontaneous and interactive without disturbing others, as they would in class. Students who do not participate in class, will be encouraged to participate in informal settings. 2. there is a prejudice against mathematics … informal settings would be chosen to seek attention to the subject and make it more interesting. For all children ... 3. Teacher-centered lecturing does not include all students and learning styles/temperaments. ..	1. Combining both learning environments for an interdisciplinary approach to natural sciences, ... cultivating interest in more students 2. ... usually, after an experiential activity (in an informal environment), children never forget it. It is something that is imprinted in their memories, so learning ceases to be short-term and takes on real meaning 3. Better understanding for all children... because attention is increased and interest is cultivated

Table 2: Indicative answers regarding difficulties in applying informal settings in the teaching process

Codes	*References*	*Indicative answers*
Difficulty in handling multiple stimuli	14/56	1. Children, in informal settings may be unable to concentrate and become disorganized. 2. Many students have difficulty in concentrating and paying attention, especially in environments with many distractions.
Adaptation to school curriculum/difficulty in feedback-evaluation	16/56	1.Difficulty combining the school curriculum with informal educational activities Difficulty in assessment and feedback: Without regular assessments and feedback, students may not have a clear picture of their progress or aspects of improvement. 2. Difficulty in finding the right method to teach and make it interesting for children, as well as linking the educational material to the school curriculum.
Risk of complacency/ distraction	6/56	1. It is not an organized process. This can lead to students' confusion 2. in informal environment is considered that there is a problem in managing students, due to distraction, relaxation…they leave the school routine and consider that they should relax.
Organizational Issues	14/56	1. Without proper structure and guidance, students may feel disorganized or uncertain about their skills and progress 2. In an informal learning environment, challenges may include the absence of structured teaching and difficulty in managing the time
Students' management	12/56	1…. problem in students' management by the teacher, due to lack of familiarity with the environment 2….practically unsuitable environment for providing school knowledge

Table 3: Indicative answers regarding difficulties in applying formal settings in the teaching process

codes	*References*	*Indicative answers*
Limited participation	30/56	1. In a formal setting, the teacher-centered approach does not encourage students' active participation. 2. Lack of student participation: Some students may feel alienated or insufficiently interested in a large classroom environment, resulting in their inactive participation in the learning process.
Limited interests and motives	37/56	1. It does not enforce motivation development, and it is challenging to gain the interest of students; it is a teacher-centered approach. The teacher must find a way to gain students' interest for teaching to be effective. 2. Teachers do not easily attract interest in relation to an informal environment.
Limited creativity	19/56	1 It does not allow students to develop skills such as collaboration and creative thinking. 2. One difficulty encountered in a formal learning environment is that it can become monotonous and does not encourage creativity and adaptation to individual needs.
Inclusion deficit in different learning styles	8/56	1.The teacher-centered lecturing does not include all students and learning styles/temperaments. 2. Each student has (different) learning needs, ... unique abilities and preferences that should be considered.

IV. DISCUSSION

Overall, sciences' students and pre-service teachers responded that the use of informal learning environments offers a better perspective on learning than formal ones. This involves the use of 'attractive' environments that capture students' interest and often increase interactive learning, which is more easily understood by all students. Experiential, inquire-based, and collaborative learning enables all students in the learning process. By using the above-mentioned learning approaches participants argue that a deeper understanding of cognitive subjects is achieved. They also argue that in a formal setting it is more difficult for all students' active participation, as different learning styles should be considered. From this perspective, a formal environment is not considered to be entirely inclusive.

Regarding the difficulties and problems that exist in informal learning environments, they referred to classroom management problems, due to distractions caused by many stimuli. Furthermore, there is a risk that students will relax and view the process more as entertainment. In addition, there are difficulties in organizing and correlating both the school curriculum and students' assessment. In contrast, formal classroom is a monotonous environment that does not offer students opportunities for cultivating their interests and creativity as well as increasing their motivation. At the same time, it is not considered inclusive for all different learning styles. Finally, formal classroom's curriculum does not aim to connect scientific knowledge with everyday life practices, so it depends on teachers' perception whether the acquired knowledge by students "would be neutered or assimilative, in order for them to apply it in other circumstances."

According to participants' perception, the combination of formal and informal settings would achieve effective learning, Regarding the third question, all participants claimed that they would incorporate informal settings into their future teaching. They argued that these environments increase opportunities for participation and enforce students' self-directed and self-paced learning, thus enable them to be more inclusive as future teachers. Particularly interesting was the response, "As future teachers, it is our duty to be inclusive, so we will promote cooperation and team spirit, motivating students by providing enjoyable and interesting learning experiences."

The results of this study are consistent with previous studies that have highlighted the active and voluntary participation of students in informal education [17]. At the same time, participants express thoughts regarding grading and its impact on learning, which are in accordance with previous studies [17],. In addition, they seem to agree with past studies that highlighted the importance of informal settings in relation to experiential learning [9], [8]. They also agree that informal settings include group activities [15], as essential medium for socialization and students' common goals.

According to participants, a significant difficulty in applying informal settings refers to their adaptation in curriculum, which is an obstacle that other researchers supported, too [18] [19]. Participants in present study, also, agree that the informal settings have difficulties like an organized and planned schedule [20]. However, participants argue that informal education is an inclusive model for all students' involvement in learning, because teachers encourage them to participate in a self-directed way [21]. Supporting this position, participants in present study agree that the teacher-centered lecturing in formal settings doesn't include all students who have different learning profiles, styles or temperaments.

This qualitative study, specifically a case study, focuses on a limited sample of students from the University of Crete.

Although a limited sample of sciences' students' responses is presented in this study, this research highlights the value of informal learning environments in Sciences' teaching, recognizing their inclusive dimension for students' effective learning. In addition, the heterogeneity of academic disciplines offered a multidimensional perspective on the use of informal learning environments in Sciences' teaching.

Participants suggested improvements for the formal Sciences' curriculum, so that Sciences to be more attractive to students. According to their response: "In the established sciences' curriculum, it would be a welcome addition the use of internet, books, interactive games as well as the incorporation of outdoor educational visits, always supporting the subject being taught. In this way, students find the lesson more enjoyable and therefore participate more. Although in an informal learning environment, students motivate and gain knowledge for everyday life, however this is not a structed educational process."

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A case study on teaching Herodotus in an Inclusive Learning Framework

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Abstract

For four consecutive academic years (between 2021-2025) I taught the course 'Ancient Greek Historiography: Herodotus'. In those four years 1.222 students were enrolled in this course thus I faced many challenges. My main aim was to apply the principles of inclusive education and to create a suitable pedagogical environment of acceptance, participation and belonging. The enrolled students were from the three departments of the School of Philosophy and had different levels of background knowledge of the subject. Among them there were several students with learning problems, as I was informed by the Counseling Center. Furthermore, I knew that some students would not be able to attend in person or, if they did, their attendance would be occasional at best. Among the students I have observed that there is a high degree of preconception that ancient Greek is a difficult language and does not offer knowledge that is relevant to modern times. Their observed preconception, which is based on their poor foundation on Ancient Greek as taught in high school, is rather exacerbated by the stylized and formalized teacher centered approach to teaching Ancient Greek literature in Greek Universities. Thus, the big challenge was to address their preconceptions about the difficulty of the course, and to motivate the students to participate actively and creatively. In this paper I present the approach I adopted which was based on the principles of inclusive education (physical inclusion, socio-cultural inclusion, cognitive inclusion) and the results of this approach, as derived from the formal quantitative and qualitative evaluation conducted by the students and their final exam grades.

Keywords: inclusive learning and education, Herodotus, intended learning outcomes, course and tutor evaluation

I. INTRODUCTION

Inclusive learning is emerging as a cornerstone of university education, going beyond simple access and promoting an environment where every student, regardless of background, abilities, origin, or identity, is not only accepted but truly belongs and thrives (Collins, Azmat, and Rentschler, 2019). The value of inclusive education in higher education is multifaceted and decisive, as it enriches the academic experience for all, encourages critical dialogue, and prepares students for an increasingly complex and interconnected world. A university that embraces inclusion becomes a living laboratory where diversity is a source of strength and creativity. In regards to Classics (Greek and Latin) there is a constantly growing movement, particularly in universities in the UK and the USA, to adopt inclusive approaches. For instance, the "Inclusive Classics Initiative" (ICI) is a significant international academic movement that began in the UK in 2020, founded by Professor Barbara Goff and Dr. Alexia Petsalis-Diomidis. Its aim is to make Classics a more equitable, accessible, and diverse academic field, adapted to the multicultural context of the 21st century. Although significant steps are being taken, there is always room for such approaches. With this work I hope to contribute towards this approach since the originality of this paper lies in combining classical studies with inclusive pedagogy.

II. The case study

For four consecutive academic years (between 2021-2025) I taught the course 'Ancient Greek Historiography: Herodotus'. In those four years 1.222 students were enrolled in this course; thus, I faced many challenges.

During my teaching years at the University of Crete I have observed that among the students there is a high degree of preconception that ancient Greek is a difficult language and does not offer knowledge that is relevant to modern times. Their observed preconception, which is based on their poor foundation on Ancient Greek as taught in high school, is rather exacerbated by the stylized and formalized teacher centered approach to teaching Ancient Greek literature in Greek Universities.

The stylized and formalized teacher centered approach to teaching Ancient Greek literature in Greek Universities essentially entails teaching a predetermined course material (irrespective of the student's needs and knowledge/abilities), the lectures being monologues, and, the course exams being a test of the students' memorizing skills and ability to replicate the taught course material.

My main aim was to apply the principles of inclusive education and to create a suitable pedagogical environment of acceptance, participation and belonging. The enrolled students were from the three departments of the School of Philosophy and had different levels of background knowledge on the subject. Among them, there were several students with learning problems, as I was informed by the Counseling Center.

Furthermore, I knew that some students would not be able to attend in person or, if they did, their attendance would be occasional, at best. Among the students I have generally observed that there is a degree of preconception that ancient Greek is a difficult language and does not offer knowledge that is relevant to modern times. The big challenge was to address their preconceptions about the difficulty of the course, and to motivate the students to participate actively and creatively.

In this paper I present the approach I adopted, which was based on the principles of inclusive education (physical inclusion, socio-cultural inclusion, cognitive inclusion) and the results of this approach, as derived from the formal evaluation conducted by the students and their final exam grades. Teaching Herodotus, with a focus on inclusive learning, requires the adoption of an approach that

recognizes and respects the diversity of the students, promoting equal participation and critical thinking.

III. The physical inclusion

With regard to the physical inclusion of the learning environment, which concerns the infra-structure and access to learning resources, the following were done:

- choice of an auditorium with a ramp, in order to provide access to students with disabilities. The auditorium is also equipped with a projector and screen to provide a variety of audio-visual resources.
- the use of asynchronous training. Since I knew that many students would not be able to attend in person, I used the e-learn platform to upload, on a weekly basis, notes, supporting material and a letter. The letter gives a personal tone and enhances the sense of inter-personal relationship.

In those letters I updated what we had discussed in the class and commented on the main points of the lesson, as well as the students' response. In this way, contact with the lecturer and the students is not lost and a sense of 'belonging' is enhanced.

It is noteworthy that in the final evaluation of the course, students praised the regular weekly letters, considering that they facilitated their communication with the lecturer and contributed to the smooth acclimatization of students who did not attend in person. I intend next semester to use AI to make the uploaded material more multi-modal (i.e. pod casts, more videos). It is essential to represent the teaching content in a variety of ways so that it is accessible and meets the needs of as many students as possible (Behling & Tobin, 2018).

IV. The first meeting

The first meeting is very important. I always place great emphasis on the first contact with the students, with the aim of creating an authentic learning community (Katsampoxaki-Hodgetts, K., 2023).

I started by briefly introducing myself and then asked the students open-ended questions: why they chose this course and what their expectations of it were. So, I got feedback on the students' knowledge background and the objectives I should set. It is very important to create a positive atmosphere, with a smile, good mood, humor and encouragement for students to participate and express their views. We had a discussion, in the form of a contract, about the boundaries we set and the ways we would use to create a safe and supportive atmosphere in the class.

Posture, eye contact, the use of understandable vocabulary, simplicity, politeness and even the way we ask questions are of particular importance. In adult education (and in education in general) we don't force someone to answer, if they don't want to, and we generally don't target. Especially in a large audience, there is intense shame and embarrassment. We therefore need to show great pedagogical sensitivity to make students feel safe and accepted.

Our encouraging attitude and avoidance of negative characterizations (i.e. irony, insult, outright disagreement in a negative way) create a climate of trust and allow students to express their thoughts and to actively participate.

In the first meeting, the general impression I got was that the students were not familiar with Herodotus' work, nor with the Ionian dialect in which it is written. Those facts, combined with the prejudice concerning the difficulty of the ancient Greek language, led me to determine the desired learning outcomes first.

V. The design of the course

In designing the course, I followed Wiggins & McTighe (2006) suggestion; they propose a process for designing educational environments in which goal setting precedes the selection of teaching methods and forms of assessment.

I did not emphasize on the quantity of content, but rather the substantial elaboration of the fundamental ideas expressed in Herodotus' work. That is, the definition of objectives preceded the selection of content, the educational methods and the forms of assessment.

Therefore, starting from the definition of desired learning outcomes, students should acquire a wide range of knowledge, skills and attitudes, at the end of the course.

On a cognitive level the students should be able to:

- ✓ know basic information about the life of Herodotus and the historical context in which he wrote his work,
- ✓ discern the Ionian dialect,
- ✓ translate and interpret selected texts from Herodotus.
- ✓ discern Herodotus' place in the history of historiography,
- ✓ report on the main features of Herodotus' methods of historical research and the synthesis of his material.
- ✓ obtain knowledge of elements, regarding the culture of other ancient civilizations,
- ✓ understand the importance of cultural differences and the interaction between different peoples.

Regarding the skills the students should be able to:

- ✓ develop critical thinking,
- ✓ have ability to evaluate historical sources and to distinguish between fact and myth,
- ✓ analyze and interpret historical events and cultural phenomena,
- ✓ conduct historical research and use primary and secondary sources,
- ✓ collect, organize and present historical information.

Regarding the attitudes the students should be able to:

- ✓ understand the importance of cultural diversity and to develop respect for different cultures and beliefs,
- ✓ evaluate the importance of history in understanding the present and the future and to develop an interest in historical research and archaeology.

As for the critical attitude, they should be able to develop a healthy dose of skepticism about information and to search for multiple perspectives.

Studies argue that traditional curricula, which focus primarily on cognitive and practical skills, may reinforce students' pre-existing ideologies, leaving untapped the potential to cultivate other values (Vale J., Kirkscey, R., Weiss, J. M., Hill, J., 2024). To address this challenge, it is

advised to incorporate pedagogical strategies such as reflective thinking and dialogue.

In general, the study of Herodotus can offer students a rich and multi-faceted educational experience, which can contribute to the acquisition of knowledge and the cultivation of skills and attitudes. Moreover, studies highlight the importance of focusing on the students' experience - personal histories, motivations, and emotions - to improve teaching and learning in higher education (Rogers, 2024).

VI. The selection of the texts

Therefore, taking into account the socio-cultural context, concerning the teaching content and the examples used during the teaching, I chose specific texts from Herodotus' first book.

In the first book, reference is made to Herodotus' methodology and in the preface the author refers to the subject of his history and the reasons that prompted him to write. What makes the first book particularly attractive, however, is the existence of the novels. By the term 'novel' in Herodotus, we mean self-contained narratives, which are interpolated into the historical narrative. The novels are dramatically articulated and contribute to the Herodotus' anthropology (Maronitis, 2009).

The first novel is about king Candaules, his beautiful wife, and his loyal guard Gyges. Herodotus structures the narrative as a tragedy, with dialogue scenes and action. Hermeneutically, there are many levels of analysis: the despotism of the East and the relations of subordination - subjugation / the extreme passion, which leads to *hybris* and punishment, etc. The first novel gives Herodotus the opportunity to write his view on the inevitability of human fate and the instability of human life.

In the second novel Herodotus recounts in detail the meeting of Croesus with Solon who makes a didactic admonition on the fragility of human life and the role of God in it. If a man exceeds the human standards, then divine envy is drawn and the man is punished. So, we cannot reach safe conclusions about the happiness of a man unless we know his end. This concludes the second novel and we have had the opportunity to discuss about the philosophical and religious views on human happiness and the role of God in human life. The interesting thing is that the ideas expressed by Herodotus have a universal dimension and apply to all people.

The third novel deals with Croesus and his son's death. Although Croesus tried hard to prevent the death of his son, which had been prophesied in a dream, he did not succeed. Herodotus completes his thoughts regarding human life, gods and fate.

VII. Herodotus as ethnographer

Last but not least, I selected texts from the first book that highlight Herodotus as ethnographer. To use Roberts' (2011) words, "Herodotus as ethnographer explains how Herodotus' natural curiosity led him to pioneer a new field that would greatly broaden his fellow Greeks' understanding of the human community and eventually lay the foundation of a new field for European anthropologists: ethnography." Thus, we read texts referring to the customs and traditions of the Medes, the Persians and the Massagetians.

Herodotus adopts an approach that today we would characterize as comparative ethnography (Asheri, Corcella, & Lloyd 2007). He describes in detail the customs, traditions, religious beliefs, social structures, and geographical factors that shaped these peoples. His descriptions of the Egyptians, Scythians, Persians, and Libyans are rich in detail and reveal a genuine curiosity about the "other."

Furthermore, Herodotus shows a remarkable effort for objectivity, despite living in an era where an ethnocentric (or rather a Greek-centric view, since we are talking about a Greek historian) worldview was the norm. He often expresses his admiration for the achievements of other cultures and largely avoids outright condemnation of them. His phrase, in 3.38 "*οὕτω νομίζουσι πολλόν τι καλλίστους τοὺς ἑωυτῶν νόμους ἕκαστοι εἶναι*" ("each nation honors its own customs as the best") reflects this effort toward respecting and understanding cultural diversity.

VIII. Course and Tutor Evaluation by the Students

The following quantitative results, along with the quantitative and qualitative evaluation of the course and tutor by the students should be viewed within the confines of a rather unfavorable context where: the course was considered as being "difficult", the course was non-mandatory (i.e. it was selective), the tutor, in the words of a student: "In the exam, she grades more strictly than expected." was grading rather strictly (but fairly).

Despite all the above obstacles, the application of the principles of inclusive education and the creation of a suitable pedagogical environment of acceptance, participation and belonging yielded the following, rather impressive quantitative results summarized in Table 1.

During the four consecutive academic years (between 2021-2025) 1.222 students chose to enroll in this course. Students' attendance in each lecture ranged between 150 and 180 persons, which is a rather remarkably high rate of attendance for the Department of Classics.

Of the 1.222 students 1.046 (85,60%) took the exams and 730 (69,79%) passed the course (these are impressively high figures).

A brief qualitative examination reveals that:

- ✓ 390 students gained the basic knowledge and skills that enabled them to successfully pass the course exams (with grades 5 and 6 out of 10),
- ✓ 239 students gained significant knowledge and skills that enabled them to successfully pass the course exams and actually learn about Herodotus' work (with grades 7 and 8 out of 10), and,

Table 1: Herodotus exams results statistics for 4 academic years: 2020-2025.

	FAIL	PASS					
	FAIL (1-4)	PASS (5-6)	PASS (7-8)	PASS (9-10)	TOTAL	ENROLLED STUDENTS	EXAMS PARTICIPATION PERCENTAGE
2021-2022	79	78	69	45	271	311	87,14%
PERCENTAGE	29,15%	28,78%	25,46%	16,61%			
	29,15%	70,85%					
2022-2023	66	66	52	25	209	239	87,45%
PERCENTAGE	31,58%	31,58%	24,88%	11,96%			
	31,58%	68,42%					
2023-2024	93	83	71	15	262	287	91,29%
PERCENTAGE	35,50%	31,68%	27,10%	5,73%			
	35,50%	64,50%					
2024-2025	78	163	47	16	304	385	78,96%
PERCENTAGE	25,66%	53,62%	15,46%	5,26%			
	25,66%	74,34%					
for the 4 Academic Years	316	390	239	101	1.046	1.222	85,60%
	FAIL: 316 (30,21%)	PASS: 730 (69,79%)					

Data provided by the Quality Assurance Unit (QAU) of the University of Crete.

- ✓ 101 students, that excelled in the exams (with grades 9 and 10 out of 10), acquired in depth knowledge about Herodotus' work and skills that enabled them to successfully pass the course exams.

All in all, and if nothing else, 730 students overcame their negative preconceptions about the Ancient Greek literature (i.e. Herodotus' Historiography) and were able to appreciate the richness and aesthetic beauty of this literary treasure.

The quantitative assessment of the tutor and course by the students is summarized in the following Table 2.

The following remarks, along with their acceptance rates, are worthwhile mentioning here:

- ✓ 85,11% of the students agree/agree strongly with the statement that "The course helped improve my competences and skills."
- ✓ 94,50% of the students agree/agree strongly with the statement that "The Professor/Faculty staff was well prepared and able to explain and clearly analyze the course content, during weekly lectures and additional educational activities."
- ✓ 87,24% of the students agree/agree strongly with the statement that "The Professor/Faculty staff could demonstrate the connection between course and current research.",
- ✓ 93,57% of the students agree agree/agree strongly with the statement that "The Professor/Faculty staff encouraged questions and remarks made by students and promoted discussions during lectures."
- ✓ 84,41% of the students agree/agree strongly with the statement that "The Professor/Faculty staff could make me interested in the course."
- ✓ 88,38% of the students agree/agree strongly with the statement that "The learning outcomes, as described in the course outline, were achieved."
- ✓ 17,38%, 31,69% and 28,57% (77,82% in total) of the students chose this course because a) "It is an elective course that offers further specialization or has specific orientation", b) "I was interested in the topic", and c) "I enjoyed a previous course with this Professor/Faculty staff".

Table 2: Students' Quantitative Assessment of the Tutor and the Course Herodotus

Academic Year	2021-2022	2022-2023	2023-2024	2024-2025	Average for the 4 Academic Years
Question	Agree/Agree Strongly	Agree/Agree Strongly	Agree/Agree Strongly	Agree/Agree Strongly	Agree/Agree Strongly
A3. Using a webpage or an educational platform (e-learn, e-class etc.) to upload course material, was useful, helped me understand the course and study further.	95,24%	95,65%	100%	94,44%	96,33%
A4. The course helped improve my competences and skills.	66,67%	97,83%	100%	75,93%	85,11%
B1. The Professor/Faculty staff was well prepared and able to explain and clearly analyze the course content, during weekly lectures and additional educational activities.	85,71%	97,83%	100%	94,44%	94,50%
B2. The Professor/Faculty staff could answer questions clearly during lectures.	85,71%	97,83%	100%	94,44%	94,50%
B3. The Professor/Faculty staff was available and willing to guide me during office hours (in person or online).	61,90%	82,61%	93,33%	92,59%	82,61%
B4.The Professor/Faculty staff encouraged questions and remarks made by students and promoted discussions during lectures.	85,71%	97,83%	100%	90,74%	93,57%
B5. The Professor/Faculty staff could make me interested in the course.	76,19%	84,78%	93%	83,33%	84,41%
B6. The Professor/Faculty staff could demonstrate the connection between course and current research	X	89,13%	96,67%	75,93%	87,24%
B7. Distribution of course material between weekly lectures and additional educational activities (tutorials, laboratory rotations) was sufficient.	90,48%	89,13%	93%	94,44%	91,85%
B8. The learning outcomes, as described in the course outline, were achieved.	80,95%	84,78%	93%	94,44%	88,38%
I2. I chose this course because:					
It is mandatory for obtaining the program degree. (SQ001)	19,05%	25,64%	33.33%	36.00%	22,35%
It is an elective course that offers further specialization or has specific orientation (SQ002)	4,76%	15,38%	6.67%	32,00%	17,38%
I am a freshman, and the course is introductory. (SQ003)	0.00%	0.00%	0.00%	0.00%	0.00%
I had no other choice, according to the curriculum of this semester. (SQ004)	19,05%	5,13%	13%	8.00%	12,50%
I was interested in the topic. (SQ005)	42,86%	20,51%	33.33%	52.00%	31,69%
I enjoyed a previous course with this Professor/Faculty staff (SQ006)	28,57%	28.21%	33.33%	32.00%	28,57%
Other	9,52%	0.00%	0.00%	4,00%	6,76%
Not completed or Not displayed	4,76%	5,13%	6.67%	Helpful material and the professor explains the course well.	4,95%
Data provided by the Quality Assurance Unit (QAU) of the University of Crete.					

The impressively high acceptance rates of the above statements reveal that the students were very satisfied with the course contents, the teaching methodology and approach, as well as with the tutor's knowledge, care and attitude.

The qualitative assessment of the tutor and course by the students is summarized in the following Table 3.

The following remarks stand out and are worthwhile mentioning here:

- ✓ Ms. Astyrakaki's transmissibility [ability to convey information] and her capacity to explain the lesson in a simple and understandable way for everyone.
- ✓ The strong elements of the course that should be maintained are the professor who teaches the class. She is very good, understandable, and pleasant. She imparts knowledge and willingly listens to our [ideas/concerns].

Table 3: Students' Qualitative Assessment of the Tutor and the Course Herodotus

Academic Year 2022-2023	Academic Year 2022-2023	Academic Year 2023-2024	Academic Year 2024-2025
STUDENTS' COMMENTS			
Question: D1. In your opinion, which were the strong points of the course, worthy of being maintained?			
Ms. Astyraki's transmissibility [ability to convey information] and her capacity to explain the lesson in a simple and understandable way for everyone.	The strong elements of the course that should be maintained are the professor who teaches the class. She is very good, understandable, and pleasant. She imparts knowledge and willingly listens to our [ideas/concerns].	I wish all the professors and instructors in the department would help students so much in understanding each course.	Satisfactory course without being incomprehensible. The material provided is very helpful, especially for those who, for various reasons, cannot attend the lectures.
The professor's politeness, her analytical explanation, and the discussion during the class.	The fact that there was an intense grammatical and syntactical analysis which helped students understand the meaning of the texts and get an overall picture.	The professor's questions to the students during the lesson; there was great interactivity.	It was very helpful that she told us specific things about the interpretative questions for each important point, and we developed the topic as much as needed.
Promotion of dialogue, helpful and lenient towards the History-Archaeology and Philosophy and Socia Studies Departments students, limited subject matter.	The interaction between the professor and the students was one of the strong elements of the course. The questions asked during the lesson helped with better comprehension. Also, the syntactical analysis of the text was quite helpful.	Mainly the material we need is available on the course page. This is everything for me, as I can't always be in class due to work.	In my opinion, the course should be maintained as it is! The professor makes the course very understandable and is always willing to answer questions!
The professor's positive attitude towards the subject as well as the students.	The encouragement of students to participate in the class.	The push for dialogue from the professor.	The notes dictated by the professor, as well as her encouragement for dialogue (related to the course content).
The professor/instructor posing questions and thus 'activating' the students, making them think instead of remaining passive recipients.	Encouragement of questions and discussion.	The summary of each lesson and the most important points of each lecture that the professor uploaded to Elearn.	The encouragement for questions and the understandable explanation in the lectures.
The professor's/instructor's willingness to further explain certain points that the students may not have understood or may not even know (not having previous experience).		The professor's willingness to answer questions and discuss in class.	In general, very nice organization of the lectures. The instructor gives us the opportunity to develop our questions regarding the course content. Also, the way she has chosen to conduct the course does not cause us fatigue or boredom during the lesson!
The help provided to students via Teams.		The professor's encouragement for students to participate.	The strong points were the dialogue and the simplification of the course as much as possible.
		Dialogue, highlighting important points, interesting lesson.	Direct contact with the students/questions and answers.
		Very good plan and understandable lesson	The outline of the course and then its analysis.
		Analysis	The instructor's encouragement for student participation and the promotion of dialogue.
			The linear way the course was delivered.
			The notes on elearn were very good and organized.
			Syntax was taught in the course, which doesn't happen in other courses.
			The professor was organized and very analytical.
Question: D2. Suggestions for improving the course:			
None	No suggestions, the lesson is being conducted as it should.	There are no negatives.	I don't have any suggestion.
None	None	Everything was perfect.	I don't have any suggestion.
For Improvement: To have time for further discussion around issues/matters of culture, so that we can connect the text of Herodotus and Herodotus himself with the broader historical context of his place (Ancient Greece, etc.). In the exam, she grades more strictly than expected.	I would prefer that not so much emphasis be placed on syntax/grammar. I would be interested in also examining the views of researchers who have studied the work of Herodotus.	I wouldn't like to add anything further. In my opinion, the instructor does everything she can both to attract the students' interest and to get them to participate in the lesson, something which she has achieved. The environment is always pleasant, and of course, she offers us something new in every class.	None, everything is perfect!
	None	Nothing.	I don't have anything to propose.
		I believe the lesson is quite good and satisfactory.	I don't have anything to propose.
		More texts. (This likely means the student would like more reading materials/texts).	Everything's good.
		Slow lesson. (This likely means that the teaching was in depth and analytical at the expense of speed and that the student would like more reading materials/texts).	
Data provided by the Quality Assurance Unit (QAU) of the University of Crete.			

- ✓ I wish all the professors and instructors in the department would help students so much in understanding each course.
- ✓ Satisfactory course without being incomprehensible. The material provided is very helpful, especially for those who, for various reasons, cannot attend the lectures.
- ✓ The professor's politeness, her analytical explanation, and the discussion during the class.
- ✓ The fact that there was an intense grammatical and syntactical analysis which helped students understand the meaning of the texts and get an overall picture.
- ✓ The professor's questions to the students during the lesson; there was great interactivity.
- ✓ It was very helpful that she told us specific things about the interpretative questions for each important point, and we developed the topic as much as needed.
- ✓ Promotion of dialogue, helpful and lenient towards the History-Archaeology and Philosophy and Social Studies Departments students, limited subject matter.
- ✓ The interaction between the professor and the students was one of the strong elements of the course. The questions asked during the lesson helped with better comprehension. Also, the syntactical analysis of the text was quite helpful.
- ✓ Mainly the material we need is available on the course page. This is everything for me, as I can't always be in class due to work.
- ✓ The professor/instructor posing questions and thus 'activating' the students, making them think instead of remaining passive recipients.
- ✓ The professor's/instructor's willingness to further explain certain points that the students may not have understood or may not even know (not having previous experience).
- ✓ In general, very nice organization of the lectures. The instructor gives us the opportunity to develop our questions regarding the course content. Also, the way she has chosen to conduct the course does not cause us fatigue or boredom during the lesson!
- ✓ Syntax was taught in the course, which doesn't happen in other courses.
- ✓ I wouldn't like to add anything further. In my opinion, the instructor does everything she can both to attract the students' interest and to get them to participate in the lesson, something which she has achieved. The environment is always pleasant, and of course, she offers us something new in every class.

The above statements reveal that the students were very satisfied with the course contents, the teaching methodology and approach, as well as with the tutor's knowledge, care and attitude.

The, rather unexpected, finding is the students' desire to have *more* course material! In my view this reflects the actual overcoming of their preconceptions about the "difficulty" of Herodotus' historiography and, simultaneously, a display of genuine interest in his work.

IX. Conclusions

To conclude, in this paper I emphasized on how important is the starting point of educational planning to be the intended learning outcomes and not the content to be taught *per se*. Defining the desired learning outcomes first, taking into account the challenges I had to face, and the needs exploration I conducted in the first meeting, guided me to the appropriate selection of texts.

With the selection of the above texts, the students of the other departments (history/archaeology and philosophy) were given the opportunity to actively participate in the discussions, overcoming the obstacle of the ancient Greek language. Philosophical discussions on the meaning of happiness, fate, freedom, free will and death dominated. These are issues that are timeless, which gave the course a universal dimension and connected it to the students' contemporary life and reality. After all, students with intrinsic motivation (i.e., motivation stemming from an interest in learning itself) have authentic engagement (Saeed & Zyngier, 2012). With this approach, I managed to arouse the interest and enthusiastic participation of the students.

Allow me to close with a personal remark. Although significant steps towards inclusive learning have been taken in recent years in the Greek Universities, we are still at the beginning. The main problem, in my view, is the refusal and resistance of many lecturers to get out of their comfort zone and the established professor-centered way of teaching. I close with a student's final remark: "I liked the course because the atmosphere was not filled with self-conscience and selfishness".

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Enhancing Student-Teachers' Communication Skills with Parents: An example of fostering inclusive and reflective student-centered education

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Abstract— Student-centered education is essential and beneficial for all university students, particularly for those preparing to become teachers, who need firsthand experience in order to apply child-centered educational techniques in their future classrooms. This research paper employs the method of action research, conducted during the 2023–2024 academic year as part of the Erasmus+ Coalition program, which promotes student-centered education. During their internships in kindergartens, fourth-year student-teachers collaborated with their tutor-researcher to identify key areas for further training in their university laboratory sessions.

Through a voting process, students prioritized the exploration of communication strategies and approaches to engaging with parents whose children face behavioral challenges. This paper presents: (a) the methodology co-developed by the researcher and the student-teachers, and (b) reflective insights from both the instructor and the students on the teaching process, with particular attention to inclusiveness. Working in small groups, students examined strategies for addressing children's behavioral challenges through methods such as role-playing.

The main conclusions and contribution of this research are twofold: (a) it provides an applied example of action research used as a methodology in a university laboratory setting, serving as a lived experience for both students and the researcher, and (b) it highlights the strengths and challenges of implementing action research as experienced by both the students and the researcher.

Keywords— student-centered education, inclusion, reflection, role play, higher education, preschool teacher, training
Introduction (Heading 1)

I. Introduction and the purpose of this paper

Student-centered education is founded on principles that encourage students to: actively engage in their learning process, reflect on their learning and the assessment methods employed, collaborate and co-design their learning outcomes with their tutor, develop autonomy in assuming responsibilities, and integrate and respect students' experiences in shaping their learning (McDonough, 2012).

Trainee kindergarten teachers must gain firsthand experience in student-centered education as a prerequisite for implementing child-centered approaches in their future classrooms (Nikolidaki, 2023). This is based on the hypothesis that if trainee kindergarten teachers are taught practically how to cooperate with their tutors at the university, participate actively and design their own learning process bearing in mind basic skills that need to be taught as requirements to each module but also their special needs and interests, they will be flexible, capable and prone to adopt such practices with younger children in schools promoting student-centered education not in a theoretical scheme but as a lived experience.

This research contributes to the existing literature and educational practice by providing an applied example of student-centered education that enhances student-teachers' inclusivity and reflective capacities within university laboratory lessons. The study employs the action research method and was conducted during the 2023–2024 academic year as part of the Erasmus+ Coalition program, which promotes student-centered approaches. During their internships in kindergartens, 36 fourth-year student-teachers collaborated with their tutor-researcher to identify key areas for further professional development within the laboratory sessions, thereby linking practical classroom experiences with reflective academic inquiry.

This paper presents: (a) the methodology co-developed by the researcher and the student-teachers and (b) reflective insights from both the instructor and students on the teaching process, particularly regarding student inclusiveness. Students worked in small groups to examine strategies for addressing children's behavioral challenges through the application of methods such as role-playing games (Johnson et al., 2014; Walker & Leary, 2009; Mumtaz & Latif, 2017).

Through a voting process, students prioritized further exploration of communication strategies and approaches to engaging with parents. The main question voted by the student teachers which will be further explored is "How do student-teachers engage with parents whose children face behavioral challenges". First, confirm that you have the correct template for your paper size. This template has been tailored for output on the A4 paper size.

II. Methodology

The methodology used was Action research (observation and data collection through dialogue with students). Based on action research, the student-teachers engaged in planning (what they would like to learn), acting (participating in simulations or real cases in kindergartens), observing (themselves, the teachers in the classroom and the other students), and reflecting carefully and systematically on their teaching methods and evaluation procedures (Borgia & Schuler 1996; Cohen, Manion & Morrison 2018; Katsarou & Tsafos 2013).

The data are qualitative in nature and pertain to the following: a) written reflections by the students on what they believe parents want from their children's school based

on their theoretical studies and their observations and discussions with teachers in kindergarten schools where they accomplish their internships, b) conflict scenarios proposed by the students, along with the resolution strategies they suggested (group work), c) observations and notes from the role play, as recorded in the instructor's research log, d) observations and notes on how the Freeze–Pause technique functioned during the role play, also recorded in the instructor's research log, e) observations and records of students' reflective responses, f) the instructor's own reflections on the teaching process and g) notes from the instructor's discussions with a critical friend regarding the progression of the teaching.

More specifically, the methodology process that was followed is divided into three phases"

A. Before the implementation of the lesson at the university

During the first two lessons of the winter academic semester student teachers were invited to discuss with their tutor and write down their expectations regarding their internship at kindergartens. Student teachers discussed questions regarding the content of the taught module such as "what do they think practice in kindergarten is for?", "what do the students want to learn?", "what kind of information are they most interested in?" and "what mode of engagement do they prefer?". Student-teachers were invited to vote for a topic, related to their practice at schools.

B. During the implementation of the laboratory lesson at the university

Student- teachers used a word cloud application and they provided their perspectives regarding "What do parents want from school?" which followed by a whole-class discussion and connection of students' views with relevant literature.

Then the students were split into small groups (group work):. Students were asked to consider a specific case (either hypothetical or based on real experience) of a potential conflict within the school environment, drawing on their teaching experience in kindergartens. On a sheet of paper, they recorded whether and how the proposed conflict had been resolved, as well as alternative ways it could have been resolved.

Then a brief plenary discussion took place on cases of conflict that may arise between educators or between educators and parents.

Student voted on the two most prominent conflicts they wished to explore in greater depth.

The method of Role play of the two selected conflict scenarios was used by students who volunteered to take on the key roles in each scenario. The rest of the class participated actively as it was divided in two sections and transformed into a "teachers' council" and a "parents' association." Student-teachers were allowed to intervene in the main role play, supporting either the teacher's or the parent's role and contributing additional arguments for further analysis.

"Freeze–Pause" technique was also implemented. The instructor or any student had the right to interrupt by saying "Freeze" or "Pause" if a particular statement—by either the "teacher" or the "parent"—required further analysis or brief discussion.

After the role play a whole-class discussion took place delving in the content of the conflicts, identifying commonalities, and exploring possible resolution strategies.

After the discussion there was connection of the topic with relevant literature on conflict management through the use of presentation slides.

The laboratory lesson ended with Reflection and feedback from the supervisor and the students regarding what worked well in the lesson and what could have been done differently.

C. After the Implementation of the lesson

The data were collected by the researcher and further analysis. The researcher reflected upon the entire process and also had a discussion of the overall process with a critical colleague ("critical friend") with whom exchanged ideas for future actions.

The picture below, summarizes students' brainstorming on how the course can become more inclusive and how ICT can be further integrated into teaching. The chart was posted on a classroom wall, where student-teachers added their views using different colors.

III. FINDINGS

A. Before the lesson

"Fig.1" summarizes students' brainstorming on how the course can become more inclusive and how ICT can be further integrated into teaching. The chart was posted on a classroom wall, where student-teachers added their views using different colors.

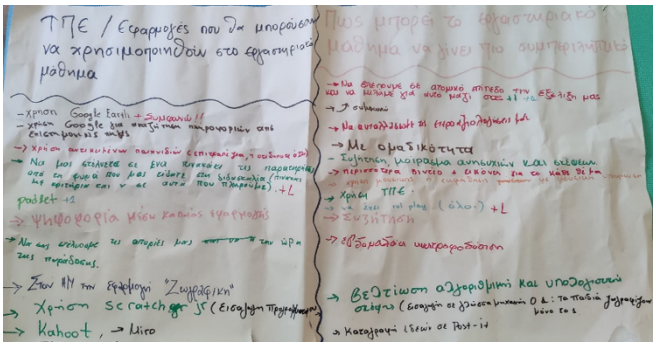

Fig.1: Students' brainstorming concerning how the course can become more inclusive

According to the students' ideas inclusivity can be implemented in the course through:

- Opportunity for individualized discussions with each student and personalized feedback on their progress.
- Exchange of peer assessments.
- Emphasis on teamwork.
- Weekly feedback.
- Discussion.
- More frequent use of role play.
- Improvement of algorithmic and computational thinking.
- Recording of ideas on Post-it notes.

The students' responses regarding what parents expect from their children's schooling were categorized as follows:

- Desired personality traits of the teacher: e.g., love, patience, approachability
- Professionalism of the teacher: e.g., the teacher knows what and how to teach children
- Kindergarten infrastructure: sufficient equipment and resources
- Communication between teacher and parent: communication skills of the teacher; regular updates on children's progress; information on any emerging issues
- Children's social development: adherence to rules; participation in group activities
- *Children's cognitive development: e.g., expectations that children learn to read and write*

At this point, the students' responses were linked to relevant educational theory and literature. Through a brief discussion led by the instructor, students recognized that when teachers are aware of both parental expectations and the actual educational offerings of each level of schooling, many potential conflicts can be preempted. For example, in cases where parents expect their children to learn reading and writing in kindergarten, it is the teacher's responsibility to explain that such outcomes are not aligned with the current curriculum framework.

B. During the lesson: How do we engage with parents whose children face behavioral challenges (Question selected by the students)

Students' suggestions regarding what do parents expect from kindergarten teachers are summarized below:

- Safety for their kids
- Teachers' providing a rich learning environment for the kids
- A flexible environment
- Teachers taking into consideration children's needs and interests
- Kids having fun
- Kids learning and behaving well

- Conflict between parent and educator regarding the methods of evaluating children's cognitive performance (use of worksheets) (1 student group)
- *Conflict between parent and educator regarding the children's learning difficulties (difficulty accepting that a child needs evaluation by a specialized entity) (4 student groups)*
- *Conflict between parent and educator regarding children's behavior (e.g., aggressive behavior, failure to follow rules) (3 student groups)*
- Conflict between educators due to differing approaches to teaching topics (1 student group)
- Conflict between educator and parent due to the parent's lack of willingness to cooperate with the educator – frequent and unjustified absences of the child (1 student group)
- Conflict between parent and educator regarding negative stereotypes of sexuality-gender identity (1 student group).

- Kids socializing with each other
- Prepare children for school
- Get extra help in cases children have special needs.
- Good communication and collaboration between parents and teachers regarding their kids

Dealing with conflicts between teachers and parents

Students were divided into groups and, drawing on their experiences in schools, discussed cases of conflict between teachers or between teachers and parents. Fig. 2 and 3 present examples of the students' collaborative work, illustrating specific problems along with proposed alternative solutions.

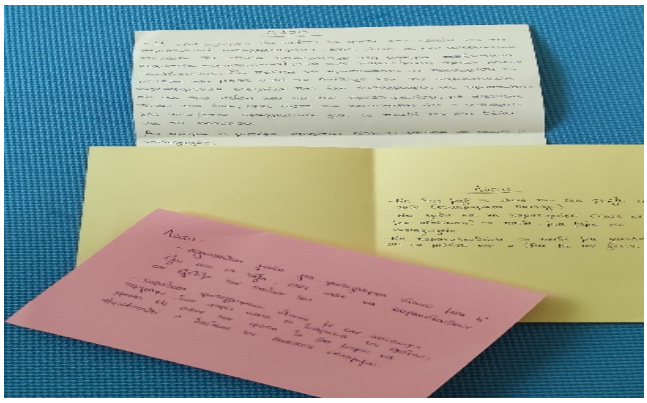

Fig.2: Example of students working in groups on a classroom problem and proposing alternative solutions

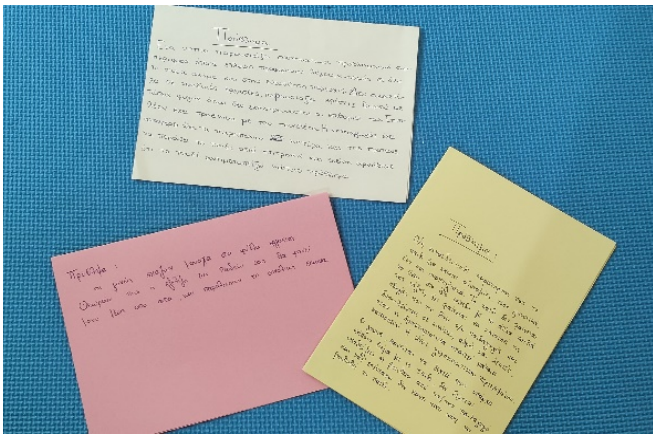

Fig.3: Example of students working in groups on a classroom problem and proposing alternative solutions

The main categories of conflicts between parents and educators or between educators themselves, as emerged from the analysis of the incidents proposed by the students, are listed below:

Role Play

The vote from the students using the Exit Poll application highlighted conflicts that most interested them. The conflicts in italics, as shown in the box above, where the ones that student-teachers wanted to explore through role play in the context of the workshop.

Freeze pause technique

The instructor or any student had the right to intervene by saying "Freeze" or "Pause" if a linguistic formulation by either the "educator" or the "parent" required further analysis and brief discussion. The "Freeze-Pause" was used by the instructor in expressions such as:

- Student as “Educator” addressing the Student as “Parent”: "You can come at another time to discuss when you’re calmer."
- Student as “Educator”: "Here we accept diversity, and it would be good if you did the same with your children."

The students had to identify whether there was an issue with the linguistic formulation and what the implication was each time specific expressions might be used by educators toward parents. Additionally, the instructor encouraged students to think of alternative expressions.

Towards resolving conflicts

Some conflict resolution strategies between parents and educators discussed in the plenary session were as follows:

- The need for careful observation of pupils and documentation, which is a sign of professionalism, regarding what the educator communicates to the parent. Maintaining a portfolio for each student, using observation logs of children's behaviors and keeping a class and school life diary are also methods that allow student-teacher to be convincing and professional towards the parents.
- Communication skills: The educator speaks clearly to the parent, avoiding unnecessary words that might confuse or mislead the parent. Being polite and maintaining composure are also skills that enable teachers-parents communication.
- Genuine willingness to help and empathy: According to the student-teachers, teachers should always think of “How might the parent feel?” and “How can the educator "win" the parent over?”.

Students’ reflections

Below are examples of reflections from the students, as recorded after the lesson, as well as reflections from the instructor:

"I liked the role play. It's more direct, and even though it's a hypothetical situation, you need to approach it as if it were real. It’s definitely better than just talking about things theoretically."

"It's amazing how much you can do through role play. I wasn't in the lead roles, but I participated as an educator to support the student who was playing the educator. I also liked the idea suggested by the supervisor. You really need to be careful how you speak because your intentions could be misunderstood, leading to more problems."

"I didn't really like the Freeze-Pause because it interrupted the role play. We don’t know how it would have progressed. Of course, it was useful to spot the 'mistake' at that moment, but who knows how the conversation might have evolved without it? Maybe the students who were playing the roles would have solved the conflict on their own."

"Definitely more enjoyable and experiential when the lesson has theatrical elements. I think this way we learn better."

Researcher’s reflections

Some of the researcher’s thoughts as written down into her research log are as follows:

"I really liked how the students responded to the role play and the idea of the teachers' and parents' associations. The latter idea came to me in the moment as I was trying to avoid having only two students dramatizing a situation, and I wanted to creatively involve the rest. I was thrilled because students who don’t usually participate got involved by embodying the role of the supportive educator or supportive parent, developing arguments. The class had turned into a theatrical scene, a participatory theater where both the protagonists and the audience could actively engage. "

The “freeze pause” was an impromptu addition to the role play. I intervened when a student, in the role of educator, told the “parent”: “We’ll talk again when you’re calmer.” I paused the scene to discuss the phrasing, which students quickly recognized could sound aggressive or insulting, as it suggests the parent lacks calmness or clarity. The intervention helped them reflect on language use, though I may have relied on the freeze pause too often; in some cases, it would have been better to let the role play unfold naturally”.

“When students were divided into groups, they had the opportunity to talk with one another, discuss a classroom dilemma, and propose alternative solutions. The atmosphere was lively and engaging; all students participated actively instead of remaining passive, as often happens in a traditional lecture. I moved between groups, discreetly asking if they needed any further clarification. Their conversations were not idle or unrelated to the lesson; on the contrary, they were genuinely focused on the task at hand. Teachers sometimes hold the preconception—or even the misconception—that if students are free to talk to each other, they will become distracted and disengaged. My experience in this session showed quite the opposite.”

C. After teaching: Discussing with a critical friend

In discussing the educational process with a colleague and former educator, the researcher highlighted that students rarely have opportunities for experiential learning. The colleague emphasized its inclusivity, as it enables all students to participate actively to the extent they wish, making lessons more engaging and motivating. However, he also noted that experiential learning in universities is often undervalued, perceived as less “scientific,” and not highly regarded by colleagues or students. Since academic advancement depends primarily on publications, teaching tends to be treated as secondary, despite its fundamental importance.

IV. DISCUSSION

A. Taking into consideration students’ needs and interests

Discussing the goals of teaching practice in schools and laboratory lessons with student-teachers helps them fully understand why these activities are essential for their studies, rather than merely being requirements imposed by the faculty study guide. This democratic approach is reinforced by allowing space to redesign the module to better meet students’ needs and interests (Nieminen, 2022). The voting process gives student-teachers a sense of

belonging within a community of inquiry, enabling them to choose what to learn collaboratively, autonomously, and with intrinsic motivation. For instance, student-teachers voted to focus on strategies for addressing conflicts among parents or colleagues.

Action research supported the pursuit of this learning goal by incorporating role-play activities (Mumtaz & Latif, 2017), attention to language and non-verbal communication during simulated teacher-parent interactions, reflection on their kindergarten teaching experiences, and linking theory with practice (Johnson et al., 2014; Walker & Leary, 2009). Student assessment was based in part on performance in schools and laboratory lessons, as well as self- and peer-assessment (Tai, 2022), which further encouraged active participation.

B. Action research as a lived experience

Action research is often described as a way of life within educational practice, integrating teaching with systematic inquiry through the process of planning, acting, observing and reflecting (Burns, 2005). It enables educators to teach while concurrently investigating the effects of their instruction on both students and themselves. This methodology fosters a collaborative environment in which both educators and students engage as co-researchers, jointly shaping and evaluating the learning experience. Such a reciprocal process enhances understanding—not only of the content, but also of the relational and procedural dimensions of teaching and learning. In particular, the spiral or cyclical nature of action research—planning, acting, observing, and reflecting—supports continuous, iterative development (Kemmis & McTaggart, 1988; Burns, 2005).

Action research inherently combines dynamic action with continual reflection and evaluation—promoting a lack of complacency in teaching (Carr & Kemmis, 1986; Mills, 2007). It supports both students and educators to:

a) deepen grasp of the subject and refine methods to communicate it effectively;

b) enhance content presentation and comprehension; c) recognize how students learn;

d) gain insight into personal teaching biases, learning styles, and educational philosophy (Hendricks, 2006).

In our study, action research fostered active student engagement by allowing learners to vote on topics they wished to explore—nurturing intrinsic motivation and shared responsibility. This approach transformed students from passive recipients into active collaborators. University educators also assumed roles as co-researchers, embracing mutual discovery and acknowledging that preparedness isn't absolute. Co-organizing learning with students, models inquiry skills and collaborative strategies—especially pertinent in teacher education where fostering child-centred pedagogy depends on experiencing and practicing joint inquiry (Catelli et al, 2000; Barbre & Buckner, 2013).

C. Reflections

Involving student-teachers in co-designing the module alongside the tutor fosters creativity and prevents redundancy. Tutors expand beyond standard content by exploring relevant subtopics, while students participate actively in shaping the learning process. This collaborative model enhances co-creation, engagement, ownership, and inclusivity (Bovill, 2020). By attentively observing the effects of each teaching activity, tutors can iteratively refine teaching strategies—retaining, adjusting, or discarding elements based on their impact. For example, feedback like a critique of the "freeze-pause" technique surfaces valuable insights that enrich subsequent instruction.

This reflective collaboration helps student-teachers understand that critique is constructive and crucial for improvement. This dynamic aligns with reflective practice theory: engaging in dialogue and self-examination fosters deeper comprehension for both tutors and learners (Parsons & Stephenson, 2006). Furthermore, student-teachers' lived experiences become transferable evidence-based practices they can apply in future kindergarten settings.

Tutor and student reflections revealed excitement, fulfillment, and motivation throughout the learning process. Experiential techniques that promote active learning, like role play activate all participants and bring the learning to life—enhancing engagement, critical thinking, and contextual understanding (Bonwell & Eison, 1991 Greenleaf Brown & Chidume, 2023). A joyful learning environment does not undermine academic rigor; instead, positive energy from the instructor invigorates student participation and drives motivation for deeper learning.

V. CONCLUSION

No matter how positive the impact of this example within the university classroom, the main limitation of the current study is that it represents only a single case and therefore cannot be generalized. Moreover, the involvement of the critical friend was limited, consisting mainly of informal discussions that followed certain sessions—both mine, which she observed, and hers, which I observed in my role as her critical friend. At the same time, the fact that both the researcher and the critical friend shared a similar understanding of university teaching and a common appreciation for action research may also be regarded as a limitation, since it reduced the diversity of perspectives. Moreover, several challenges in higher education need to be addressed in order to enable the development of more such paradigms.

University environments are not always collaborative, and teaching is rarely a criterion in faculty selection. Professors may be experts in their field, but this does not guarantee effective teaching or the ability to motivate students. As long as professional advancement depends solely on publications, developing and improving teaching methods is deprioritized. Without institutional interest in teaching quality, instructors have little incentive to engage in action research, which is often time-consuming and labor-intensive.

Action research in university settings promotes communication, inclusivity, and reflective, student-centered education, as it is a collective process where everyone contributes to shared outcomes. However, highly specialized subjects may limit students' ability to act as co-researchers. Instructors must maintain a general command of the content to ensure studies are substantive rather than superficial. Methodologically, action research allows participants to learn from each other and build collective knowledge, but it also presents challenges: a) abundance of data complicates organization and presentation, b) instructors may feel uncertain about their approach, and c) it demands time, focus, coordination, and communication, which can lead to fatigue.

Engagement in action research often depends on personal passion or prior training that demonstrates its benefits. Further large-scale research is needed to ensure that paradigms like this do not remain isolated cases but

provide mutually beneficial outcomes for both university teachers and students.

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Happiness through Mindfulness: Transforming Higher Education

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***Abstract*—This With increasing levels of anxiety and stress among university students, higher education must be transformed by incorporating happiness, well-being, and mindfulness into its very fabric. This article considers whether Mindfulness-Based Pedagogy can assist in filling what has come to be known as the "happiness deficit" of universities. Integrating results from educational and cognitive psychology, and our own research findings, our view considers happiness not as an add-on but rather something integral to the learning process. The article includes empirical work from three studies we carried out with university students that examined the relationship between emotional intelligence, self-awareness, and mindfulness with academic achievement and well-being. Furthermore, the article introduces the Happiness Through Mindfulness (HTM) model, which encompasses the major features: mindful pedagogy, inclusive learning environments, reflective assessment, and emotional intelligence training. These features form a conducive setting wherein students learn as well as thrive socially and emotionally. Global models of education such as UNESCO's Happy Education and the COIL project are also called models that emphasize purpose, presence, and emotional safety. Faculty development, curriculum reform, contemplative campus spaces, and community engagement are some proposals. Mindfulness interventions are evidenced to enhance attention, mood management, and overall health, decreasing depression and anxiety. Students look to cope with new and recurring problems particularly in the post-COVID-19 era. Despite its promise, the article finds methodological concerns and cultural diversity in current mindfulness studies. Expanding mindfulness in universities represents a promising path toward academic resilience, emotional well-being, and a more humane model of learning.**

Keywords— Well-being in Higher Education, Happiness Deficit, Happiness through Mindfulness Model, Mindfulness-Based Pedagogy

I. Historical Context

Mindfulness as an official practice became popular during the latter part of the 20th century, primarily owing to the work of Jon Kabat-Zinn, who created the Mindfulness-Based Stress Reduction (MBSR) program in 1979 (Kabat-Zinn, J., 2003). MBSR was implemented in order to assist patients in coping with chronic pain and stress disorders, making mindfulness a therapy intervention within clinical environments (Mortlock, 2023; González-Martín, 2023). Research, over the years, started unveiling the general psychological advantages of mindfulness, and consequently, it was also included in educational environments to foster students' well-being.

During the early 2000s, the use of mindfulness in school settings began to be given more attention. Research showed that mindfulness could improve academic performance and mental well-being among students, aiding them in coping with the challenges of university life (Nardi et.al., 2022).As the concept of mindfulness became better understood, it came to be seen as a resource for emotional control and self-knowledge, skills crucial for students coping with the rigors of academic life (Li, 2025).

The COVID-19 pandemic further boosted curiosity in mindfulness activities. The crisis became a spur for people to examine their lives and priorities, causing many to turn to mindfulness as a way of enhancing resilience and mental health (da Silva et al., 2023). Empirical studies have demonstrated the effectiveness of mindfulness-based interventions in alleviating symptoms of depression and anxiety among students, as well as their potential within higher education settings (Nardi et al., 2022; Serrão et al., 2022). This highlights the evolving role of mindfulness in promoting student well-being and academic success.

II. Theoretical Framework

The theoretical basis for the relationship between mindfulness and happiness in higher education is rooted in a set of interconnected concepts, such as mindfulness, academic resilience and psychological well-being.

Mindfulness, a meditation practice focused on present-moment awareness and acceptance of feelings, has been found to increase psychological well-being and lower students' stress (Modrego-Alarcón et al., 2018; González-Martín et. al., 2023). Several established interventions, including Mindfulness-Based Cognitive Therapy (MBCT) and Mindfulness-Based Stress Reduction (MBSR), greatly contribute to mental health improvement, which in turn can influence academic performance positively (González-Martín et. al., 2023). Evidence points that mindfulness, apart from minimizing anxiety and depressive symptoms, also fosters a heightened sense of life satisfaction and happiness and helps the individuals to adapt to changes in different environments like the academic environment (Arkin, et. al., 2025; Shian-Ling Keng, et. al., 2011).

Academic adaptability is the measure to which students adapt their learning environment, which is crucial to achieving academic success. The conceptual model that forms the basis of this framework suggests that mindfulness plays a significant role in students' adaptability and school academic performance (Bordbar, et al., 2024). Individuals who are mindfulness-trained have the ability to better manage the pressures of higher education and hence ensure an improved effective and positive learning experience (Bordbar, et al., 2024; Modrego - Alarcón, et al., 2018). This adaptability involves the awareness and utilization of accessible resources, sincere goal setting, and adaptation to inevitable study pressures (Bordbar, et al., 2024).

A. Rethinking Success in Higher Education

Modern higher education is increasingly modeled on the cultural values of performance societies, such as evolving

achievement standards, competitive excellence and productivity metrics. Students in this model are exposed to greater pressures characterized by ongoing assessment, high-stakes testing, and pervasive rivalry to achieve professional and scholastic excellence. Such aims are frequently justified as being for institutional excellence, but an emerging body of studies indicates that such is a setting that may harm student welfare through fostering increased stress, anxiety, and emotional disaffection (Vasiou et. al., 2023; Vasiou & Vasilaki, 2025; Vasilaki & Anastasakis, 2023).

We suggest reshaping the fundamental mission of higher education: from producing solely high-achieving graduates to creating emotionally strong, psychologically well-adjusted, and intellectually empowered human beings. Student well-being—hitherto ancillary—needs to be acknowledged as central to the learning process itself. Relying on empirical evidence in education, psychology, and neuroscience, we examine how education in emotional intelligence, mindfulness education, and school-based self-regulation lead to improved mental health, engagement, and academic success in the long run.

Recent global efforts, such as UNESCO's "Happy Schools" model (2016), have focused on integrating happiness, emotional literacy, and mindfulness into mainstream schooling as part of quality learning foundations. These models turn the focus away from traditional measures of academic success to measures of in-built motivation, sense of purpose, and overall life satisfaction.

Empirical data also indicate this transformation. The OECD reported in 2017 that more than 60% of university students reported experiencing severe academic pressure, and COVID-19 worsened already present vulnerabilities. This data requires institutions to rethink metrics of success. Universities must not imagine any more in terms of intellectual growth but must consider students' affective, relational, and existential requirements as constitutive of the academic project.

This article charts this changing terrain of education. Based on conceptual analysis, case studies, and a review of best practices such as the Happiness through Mindfulness (HTM) model, we contend that happiness and emotional well-being are not add-ons to learning. They are, instead, the psychological foundations on which profound, transformative education rests.

B. The Happiness Deficit in Universities

Despite academic rigor, emotional intelligence remains undernourished in higher education. Success is often measured by competition, not connection, leaving emotional growth overlooked. This has led to a crisis of disconnection, with global studies showing rising student depression, anxiety, and burnout over the past two decades (OECD, 2017). These are not isolated issues but signs of systemic failure. Universities teach logic and analysis but rarely equip students to manage emotions. Mindfulness and resilience remain sidelined. The result is a “happiness deficit,” where students excel academically yet suffer emotionally. Addressing this requires redefining education to integrate emotional intelligence into its very core.

The happiness deficit is not a student problem—it’s an institutional one. Disengaged, emotionally exhausted students result in lower retention, poor classroom participation, and even teacher burnout. When students' emotional needs are unmet, they cannot contribute meaningfully to the learning community. But when they feel safe and supported, campuses thrive as diverse, vibrant environments where everyone—students, educators, and staff—can flourish. Well-being is not an add-on; it must be the core mission of higher education.

Research confirms this. At institutions like Harvard, Oxford, and Sydney, studies show that emotional health fuels—not hinder academic success (Buchheit, 2024; Lindorff, 2020; Stallman, 2010). Supported students are more curious, resilient, and likely to succeed. To make real change, shallow solutions like wellness apps or stress workshops won’t suffice. We must rethink education itself. Joy and mindfulness must move from the margins to the center—not just as practices, but as guiding principles for how we educate, relate, and grow.

III. What Makes Students Happy?

Based on the Happy Education model by UNESCO (2016), happiness in higher education has been conceptualized on four dimensions. The first is belonging, i.e., feeling one belongs to a community with support and actual belonging. The second is competence and progress, i.e., the perception of personal development, mastery, and effort being worth it. Third is presence and mindfulness, where one is completely in the moment of learning without the shadow of failure or distraction from pressure to succeed. Lastly, there is hope and purpose—a sense of belief that school is not only a ticket to work but a path to a good life and a good world.

If these dimensions are developed, learning is more than a chore of memorization or spectacle; it is one of transformation. Students advance beyond the activity of accumulating mere information to developing clarity, courage, and compassion. Emotionally healthy learners are learners who learn more richly, work together more kindly, and remember more precisely.

A. Empirical Evidence: Three Studies at the University of Crete

At the University of Crete we have gone beyond theory and put mindfulness into practice, carrying out a series of three empirical studies which examine how emotional well-being and happiness can benefit students' lives. These studies make a strong, evidence-based case for putting happiness and well-being right at the heart of university education.

The first study (Vasiou et al., 2023) examines Emotional Intelligence (EI) as a predictor of happiness among university students. Based on self-report questionnaires from over 200 students and using Self-Determination Theory, the research showed that EI supports the satisfaction of three basic psychological needs—autonomy, competence, and relatedness—which, in turn, foster happiness. The findings revealed a strong positive correlation between EI and happiness. Competence—feeling capable—emerged as the strongest predictor of well-being. Key aspects of EI, especially emotional regulation and recognition of other emotions, were closely linked to happiness, helping students manage stress and build healthy relationships. Gender differences appeared, with females scoring higher EI. The study emphasizes the educational and social significance of EI, highlighting how universities can enhance student well-being by promoting emotional development through counseling, training, and inclusive policies. It recommends integrating EI training into higher education via mentoring, workshops, reflective practices and mindfulness.

The second study (Vasiou & Vasilaki, 2025) is a narrative review of two decades of research on test anxiety, offering insights into students’ real experiences. Defined as an emotional response to testing situations, test anxiety

includes cognitive (worry), emotional (nervousness), behavioral (avoidance), and biological (cortisol) components. The review outlines various explanatory models, such as the Cognitive-Attention Model (split focus), Deficit Model (poor preparation), and biopsychosocial approaches that consider personal, psychological, and societal influences. Evidence shows that test anxiety negatively impacts academic performance and mental health, contributing to lower grades, learning withdrawal, and disorders like depression. While high anxiety is harmful, moderate anxiety can sometimes enhance motivation and focus. Future research should explore test anxiety during crises (e.g., COVID-19) and adopt longitudinal, student-centered approaches. The study recommends interventions like cognitive restructuring, study skill training, mindfulness, and parental involvement. Teachers can reduce test anxiety by building students' competence and encouraging learning goals.

The third study (Vasiou et al., 2025) explores the factors influencing university students' academic performance, with a focus on Emotional Intelligence (EI) and Test Anxiety. Conducted at the University of Crete, the research involved 205 students who completed the Emotional Intelligence Scale and the Cognitive Test Anxiety Scale-Revised. Their responses were paired with their Grade Point Average (GPA) to examine how EI and anxiety relate to academic outcomes. Findings revealed that higher levels of cognitive worry were negatively correlated with GPA, while higher levels of EI were positively associated with academic success. These results emphasize the need for holistic approaches that support students' emotional development in higher education. Interventions such as emotional literacy programs, mindfulness training, and social-emotional learning strategies can reduce test anxiety and enhance academic performance. By fostering mindfulness and emotional intelligence, universities can empower students to navigate academic challenges more effectively, promoting both well-being and academic achievement.

Together, these findings suggest that universities can significantly enhance students' well-being and academic outcomes by embedding mindfulness-based practices across curricula. Practical applications include incorporating emotional literacy workshops, reflective journaling, guided mindfulness exercises, and stress-reduction programs. Such interventions not only cultivate emotional resilience but also create more supportive, engaging, and effective learning environments.

IV. Mindfulness Practices in Institutions of Higher Learning

Institutional mindfulness practices have been the focus because of their capacity to create student well-being and academic achievement. By incorporating mindfulness courses into curricula, institutions strive to equip students with skills to manage college pressures, like stress and anxiety, and gain a greater awareness and acceptability.

Evidence suggests that guided mindfulness training may result in substantial improvement in mental health outcomes, provision of appropriate coping skills for stress and emotional problems (Kunzler, 2022). Mindfulness-Based Stress Reduction (MBSR) and Mindfulness-Based Cognitive Therapy (MBCT) are the most widely accepted mindfulness interventions used in schools. The programs aim at decreasing stress, emotional distress, and enhancing cognitive functioning among students (Deep, et. al., 2025; María, 2023; González-Martín, et. al., 2023).

There is recent integration of mindfulness training in some universities into their first-year seminar classes to provide equal access to mindfulness opportunities for every student. For example, the Koru Mindfulness model that was created at Duke University has been adapted in multiple institutions and is specially tailored to serve University students. This very flexible program, with its varying sizes and formats of courses, has been successful; about 62% of students' involved reported positive results with their mindfulness exercise, reporting a decrease in anxiety and tension because they used these skills in their everyday lives (Greeson, et. al., 2014).

A. Mindfulness-Based Pedagogy in Practice

To unlock the findings of neuroscience, emotional growth, and the Happy Schools model in the classroom, teachers require more than positive intentions in the range of a guidebook on how to get there. That is where Mindfulness-Based Pedagogy (MBP) steps in. MBP is not a teaching technique, it's a state of mind. MBP addresses students as human beings, not simply scholarly achievers. MBP fosters their minds and hearts together, incorporating mindfulness skills into their daily learning to create awareness, resiliency, and attention.

According to experts like Davidson and McEwen (2012) and De Vibe et al. (2013), MBP enhances critical executive abilities like working memory, cognitive flexibility, and metacognition. These aren't hypothetical improvements—these affect students directly in how they learn, problem-solve, and grow.

Some of the common MBP practices are mindful breathing, whereby students are able to ground their focus and stabilize emotional storms; deep listening, whereby empathy, belonging, and more open-ended interactions result; cognitive flexibility training, whereby students learn to switch frames of reference, reframe obstacles, and adopt growth mindsets; and reflective journaling, whereby students are motivated to reflect and learn more. All these practices are adaptable across all subjects and can function equally in physical or virtual classrooms. MBP is less about adding in more content, it's about revolutionizing how we teach and learn.

B. Benefits of Mindfulness for Students

The advantages of mindfulness go beyond emotional and social well-being, with a real impact on academic performance. Students who practice mindfulness have better concentration, attention regulation, and academic self-efficacy. Meta-analyses show that mindfulness-based interventions have enormous gains in students' stress management and coping skills, eventually leading to improved academic performance. Improved concentration and attention, which are essential elements of the learning process, also increase the capacity of students to learn and process information optimally (María, 2023).

Mindfulness is also crucial in improving social relationships among students. Mindfulness-based interventions have been discovered to boost social support, which acts as a defense against stress and supports resilience in high-stress contexts such as universities. Enhanced mindfulness abilities allow students to become better attuned to their social setting, building supportive relations and increasing their sense of belonging within their group. Such a sense of belonging is especially significant because deficiency of sufficient social support may aggravate psychological distress and undermine the coping capacities of students (Arkin, et. al., 2025; María, 2023).

As mindfulness practices gain recognition for their potential benefits in higher education, it is important to understand how students perceive and engage with these practices. Exploring students' attitudes and barriers can

inform the development of accessible mindfulness programs tailored to their needs. For example, a cross-sectional survey of 533 students at a rural public college in North Carolina revealed that most participants believed contemplative practices to be beneficial and expressed a strong interest in increasing opportunities for mindfulness engagement during their studies (Wang et al., 2018). This highlights both the perceived value of mindfulness among students and the need to address accessibility challenges to effectively support their wellbeing and academic success.

Also, a recent study (Chung et al., 2021) conducted with 427 university students from Monash University and King's College London evaluated a brief, self-guided, online mindfulness-based intervention aimed at enhancing students' ability to manage stress and promote well-being. The results showed that participation in the intervention accounted for up to 12% of the variance in improvements in mindfulness, perceived stress, and overall well-being by the end of the semester. These findings demonstrate the effectiveness and accessibility of asynchronous, online mindfulness programs in supporting student mental health (especially for non-traditional learners) and highlight the need for scalable, flexible interventions in both online and on-campus settings.

A qualitative pilot study (Schwind et al., 2017) explored the impact of brief, instructor-guided mindfulness and loving-kindness meditation on higher education students' experiences of stress, anxiety, and wellbeing. Over eight weeks, students participated in short (five-minute) mindfulness practices at the beginning and end of class, supplemented by brief home practice. Participants reported a greater sense of calm and decreased anxiety, while instructors noted improved focus and grounding at the start of lessons. Although the intervention was generally well received, the study identified a need to provide more in-depth information about mindfulness to both students and instructors in order to better support its integration into higher education contexts.

In a randomized controlled study by Gallo et al. (2023) involving 136 students, an 8-week mindfulness program adapted from Mindfulness-Based Relapse Prevention was evaluated for its effectiveness in reducing psychological distress. Participants in the intervention group experienced significant reductions in stress, depression, and insomnia symptoms compared to the control group, although no significant changes were observed in trait anxiety. These findings highlight the therapeutic value of structured MBIs in supporting student mental health and point to their preventative potential against the development of more serious mental health conditions in academic settings.

A recent meta-analysis of 11 randomized controlled trials, conducted by Zuo et al. (2023) with 1,824 participants, demonstrated that mindfulness therapy significantly reduces symptoms of depression, anxiety, stress, and improves sleep quality. However, it found no significant improvement in mindfulness levels themselves. These findings highlight the effectiveness of mindfulness therapy as a valuable mental health intervention, while also suggesting that future research should focus on enhancing therapy adherence and fidelity to maximize benefits.

V. GLOBAL PARTNERSHIPS AND FUTURE DIRECTIONS

Global partnerships are therefore essential to scale up what has been achieved. One model taking the lead is COIL —Collaborative Online International Learning. With COIL, institutions create collaborative environments where students from around the globe work together on mutual projects (colla-edu.com).

COIL will transform the University of Crete. With institutions such as CUNY in the US, professors collaborate to design courses that connect students across cultures. Virtual classrooms become conversation rooms, spaces for understanding and shared growth. Students learn intercultural sensitivities—how to navigate differences with curiosity and respect, while developing collaboration skills and global citizenship.

What's so great about COIL is that it teaches connection, not content. It encourages presence, deep listening, and authentic interest in the other person's point of view. It's the ultimate definition of mindfulness-based pedagogy: teaching motivated by empathy, intention, and human connection.

And this isn't happening in vacuum. Globally, top-notch institutions are introducing mindfulness and happiness into their pedagogical DNA. Harvard University's "Science of Happiness" course has touched more than 300,000 learners globally, integrating positive psychology with well-being tools (Harvard University, 2025). The University of Oxford is a leader in mindfulness research in its Mindfulness Centre, bridging science, mental wellbeing, and education (Oxford University, 2025). In the University of Sydney, well-being has also been central as a core performance indicator within the curriculum, situating mental health as the educational quality nexus (Browne, 2017).

All these varied programs share one assumption: being mindful won't get in the way of academic seriousness, it's the key to making learning deeper. It grounds students and teachers, makes them resilient, and enables them to relate to the world more richly. As this movement expands, international collaboration will be the most essential factor in supporting worldwide existence—more compassionate, active, and aware universities.

VI. CONCLUSION: BRINGING HUMANITY BACK TO EDUCATION

Something is amiss in higher education. Around the world, stress, anxiety, and disconnection have become all too common in university life. For many, college feels more like a grind than an opportunity to flourish. But it doesn't have to be this way.

This article proposes an alternative: a model of education grounded in happiness, mindfulness, and emotional well-being. Rooted in psychological research and global efforts like UNESCO's Happy Schools framework, this model envisions universities where well-being is central —not a luxury, but a necessity. To achieve this, universities must embed emotional care into every layer of education. That means revisiting not just what we teach, but how and why. Professors should be trained not only as content experts but as emotionally intelligent mentors. Strategic planning must prioritize student well-being, while classroom life should encourage reflection, not pressure.

Mindfulness and emotional growth must be visible in syllabi, discussions, assessments, and student services. Small changes—like mindfulness courses, quiet spaces, and accessible emotional support—can have big impact. Real change requires community: students, educators, staff, and families co-creating environments of care. Happiness in higher education is not pursued alone, it's cultivated together. And it starts with seeing students as full human beings, worthy of compassion and support.

A. Toward a Mindful University: Re-centering Flourishing as the Core of Education

The Happy Education movement, supported by organizations like UNESCO, expresses this vision in the manner of asserting that happiness needs not be secondary to education but is more fundamental. Psychological and educational literature all show that learning environments that are emotionally safe improve cognitive capacity but also institute such qualities as empathy, resilience, and intrinsic motivation (Immordino-Yang & Damasio, 2007; UNESCO, 2016).

This is not a future or utopian dream. It is an imperative pedagogical need. Research demonstrates that emotionally supported students have greater chances of academic enjoyment, long-term well-being, and civic activity (OECD, 2015). Therefore, higher education must go beyond its sole models of academic achievement and instead focus on environments of psychological safety, presence, and relational trust.

To bring about this transformation, universities need to re-define success not merely as accomplishments but also as thriving students. This involves incorporating mindfulness-based teaching, social-emotional learning, and inclusive instruction into the mainstream curriculum. Such transformations allow students not only to excel as students but also to emerge as resilient, empathetic individuals who can keep on evolving. Finally, the mission of a university is not simply to create successful graduates but to develop complete individuals capable of leading rich, emotionally intelligent lives in an increasingly complex world.

B. Limitations, Challenges, and Directions for the Future

Although mindfulness-based practices (MBPs) show promise for enhancing student learning and psychological well-being, significant challenges remain. A key limitation is the lack of systematic, context-relevant studies. Most research focuses on individual outcomes and overlooks institutional factors like social support, faculty engagement, and mental health services. Future studies should adopt a whole-system approach to improve ecological validity. Participant diversity is also limited. Most MBP studies occur in North America, Europe, and Asia, with underrepresentation from Africa, Latin America, and the Middle East. There is also a lack of research on racially, ethnically, socioeconomically, and culturally diverse populations, restricting generalizability and masking cultural influences on mindfulness. Research must address non-traditional and disadvantaged groups, such as mature-age, first-generation, international, and male students from non-help-seeking backgrounds. Tailoring interventions will boost relevance, engagement, and long-term data. Methodologically, mixed-method designs combining quantitative and qualitative approaches are needed to capture mindfulness's complexity and students' experiences. Variables like emotional regulation, prior contemplative exposure, motivation, and adherence must be controlled as well. Overcoming these challenges will strengthen MBPs as integral to inclusive, global higher education.

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Reflexive Pathways toward Inclusive Student-Centred Pedagogies

Epilogue

Kallia Katsampoxaki-Hodgetts

In the concluding reflection, I try to synthesise insights from across the volume, tracing how theory, policy, digital innovation, and emotional engagement converge in the i-SCP framework in an attempt to invite educators and institutions to view inclusivity as an evolving, on-going relational process sustained by reflexivity and collaboration. Rather than offering a final model that may be limited by its context-bound parameters, this final chapter is a call for a continuing conversation; a collective act of design through which higher education can remain humane, equitable, and transformative.

Epilogue – Reflexive Pathways toward Inclusive Student-Centred Pedagogies

Kallia Katsampoxaki-Hodgetts

When we look across the chapters of this book, what emerges is not a single theory of inclusion but a constellation of practices and relationships that reimagine what it means to teach and to learn in higher education. The *Inclusive Student-Centred Pedagogies (i-SCP)* framework, as it unfolds through these studies, is grounded in the belief that learning is a shared ethical act—one that calls on both educators and students to design, question, and transform the spaces they inhabit.

The opening contributions, by Marin and colleagues, Brennan, and Engel-Hills, remind us that inclusion is not a policy goal but a moral stance with pedagogical implications. Through the lens of democratic participation, they illustrate how institutions can cultivate equity only when they embrace difference as an intellectual resource. This democratic turn echoes Freire's (1970) insistence on dialogue as the starting point of liberation and hooks' (1994) conviction that education must always be an act of freedom.

In the following section, inclusion becomes tangible through the practice of partnership. Cook-Sather's work on co-creating courses with students shows how shared authorship in curriculum design transforms classroom trust and dialogue. Kappe's case from Inholland demonstrates that when teachers and students work as co-designers rather than as separate agents, learning gains authenticity and mutual respect. Spanaki's study brings the focus to institutional culture, revealing that partnership also depends on policies that recognise student voice as a driver of change. These examples show that inclusive teaching begins with humility—the willingness of educators to listen and to learn alongside their students.

The chapters on assessment and curriculum design, by Katsampoxaki-Hodgetts and Penderi, Rontou and Galani, and Łuczak, confront one of the most resistant structures of academia: the way we evaluate learning. Each author demonstrates that assessment can either reproduce exclusion or nurture agency, depending on whether it is treated as surveillance or as conversation. When assessment becomes formative, reflective, and dialogic, it affirms the learner as a partner in the process rather than a subject of measurement. This resonates with Boud and Soler's (2016) notion of sustainable assessment, which extends learning beyond the boundaries of the course.

In the sections dedicated to digital and multimodal pedagogies, the conversation expands to the contemporary realities of the digital university. Smith and colleagues, Galani, Barrault-Méthy, and Kefalaki invite us to see technology not as an end in itself but as an instrument for equity and creativity. Their work recalls Kalantzis and Cope's *Digital Learner: Towards a Reflexive Pedagogy* (2020), which argues that in an age of constant information flow, the purpose of education is not only to acquire knowledge but to design it, critique it, and transform it responsibly. These authors reveal that the digital can serve inclusion when it supports reflexivity—when it helps students to see themselves as designers, not consumers, of knowledge.

The final chapters, by Quinlan, Spanaki and Pratikaki, Vasilaki and Vasiou, Astyrakaki, and Nikolidaki, return us to the human dimension of learning. They remind us that inclusion also lives in the emotional and relational spaces of education: in curiosity, in care, and in the fragile yet powerful act of belonging. Quinlan's exploration of student interest as the affective engine of learning reinforces the idea that emotion is not separate from cognition but part of its very architecture. The studies on mindfulness, informal learning, and teacher-parent dialogue illustrate that inclusive pedagogy requires presence—the capacity to attend to others with attention and respect.

Across these diverse contexts—digital and embodied, scientific and humanistic, formal and informal—the chapters speak to a single reflexive impulse: to make education a space where meaning is not transmitted but co-created. Reflexive pedagogy, as Kalantzis and Cope (2020) describe it, is recursive and participatory. It invites learners to move between practice and reflection,

between personal experience and collective inquiry, always aware that learning changes both the learner and the world they inhabit.

This book, then, closes not with conclusions but with openings. The practices described here point toward a university that learns alongside its members, a university that recognises inclusion as the foundation of excellence rather than its supplement. They invite educators to view teaching as an ongoing act of design—an ethical and imaginative effort to make space for every voice.

For readers who wish to continue this journey, the collaborative outcomes of the Erasmus+ **COALITION** partnership extend beyond these pages. The open-access **e-book, MOOC, and Faculty Guide** produced by the project offer further examples, reflective tools, and professional learning resources developed by educators across Europe. These materials can be freely explored at

👉 https://coalition-erasmusplus.com

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EBook on Inclusive student-centred pedagogies

The lack of inclusive practices in higher education can be overcome when students are positioned as equal partners. For this purpose, six European Universities collaborated around the topic of inclusive student-centred pedagogies. During this project understanding of inclusive teaching and practical tools for faculty and academic developers were constructed, tested, and validated in various higher education contexts.

- Model for inclusive teaching
- Assessment for learning
- Digital equity
- Lesson plan design
- Peer obestervation of teaching
- Action research