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An Examination of How Technological Universities Develop Cultural Capital Through Active Learning

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Abstract

Drawing on Bourdieu's (1986) framework of embodied, objectified and institutionalised capital, this paper explores how technological universities (TUs) support the development of students' cultural capital through active learning approaches. The formation of technological universities in Ireland marked a notable shift in the higher education landscape, with an emphasis on these institutions meeting the regional and economic needs of the location in which they operate. Currently, there is a dearth of studies pertaining to cultural capital and TUs. Consequently, there is an impetus for a conceptual study to help guide researchers towards understanding how active learning practices within Ireland's TUs can foster cultural capital development among students and provide a preamble for further studies in the area.

Through an analysis of current literature and policies, this study highlights the role that TUs have in developing institutionalised cultural capital. The findings from this study signify the importance of TUs adopting active learning strategies in an attempt to build cultural capital needed for both academic and workplace settings. This analysis contributes to theory by adding to the current body of knowledge on this topic through the unique lens of TUs, thus addressing a gap in literature. Practically, it is anticipated that educators utilise the findings of this study to ensure that they continue to review their assessment strategies. Finally, the study acknowledges the limitations of the research and suggests recommendations for future studies.

Keywords: Cultural Capital, Institutionalised Capital, Technological Universities, Active Learning.

Introduction

The establishment of Technological Universities (TUs) in Ireland represents a significant shift in higher education, reflecting efforts to provide accessible and industry relevant education. With an emphasis on equipping students with the skills they require in industry, these institutions are distinguished by their focus on active learning (Dwyer & Seery, 2024). This focus on applied learning offers students meaningful opportunities to work on real-world problems, bridging the gap between academic study and professional practice. This paper examines how the pedagogical approach of TUs contributes to the development of cultural capital. Cultural capital is a concept first introduced by Bourdieu (1986), who refers to the knowledge and competencies individuals acquire through their education and life experiences that shape their ability to traverse through various social and professional fields. This raises an important question: how can active learning approaches in higher education help students develop the cultural capital required for success beyond the classroom? This study is particularly timely given the growing demand from industry for interpersonal and problem-solving skills essential for success in professional environments (Dadelo, 2025).

Bourdieu's theory identifies three significant categories of cultural capital namely, embodied, objectified and institutionalised capital. For the purpose of this study, these three categories will be adopted in the context of higher education in the subsequent sections. While much of existing literature has focused on how cultural capital reinforces social inequalities (Clancy, 2024; Roksa et al., 2023; Amaral, 2023; Watkins, 2020; Ryan, 2019; Scanlon et al., 2019), there is increasing recognition of the potential for higher education to further enhance cultural capital, particularly amongst students from disadvantaged backgrounds (Hannon et al., 2017). Consequently, this study argues that active learning practices prevalent in TUs provide an opportunity for students to develop their cultural capital. By partaking in live industry projects, industry simulations and peer collaboration, students develop qualities such as confidence and skills in communication, which are highly valued in the workplace.

Accordingly, the aim of this study is to explore how TUs, through active learning, contribute to the development of cultural capital amongst higher education students. This paper examines the concept of cultural capital within the context of higher education, drawing on Bourdieu's (1986) framework. Furthermore, it analyses how higher education, particularly in TUs, can foster cultural capital through active learning and industry-based assessments. This conceptual paper synthesises existing scholarship pertaining to active learning and cultural capital.

Although this is a conceptual paper drawing on literature relevant to the broader TU sector, the authors' institutional perspective is informed by their experiences within Technological University of the Shannon (TUS). While the arguments may hold relevance for the wider TU context, the discussion is shaped by the authors' institutional lens. Finally, the study reflects on the theoretical and practical contributions, particularly in adopting inclusive learning environments that support students in developing the necessary skills for industry. It is important to first discuss the theoretical framework setting the foundations for this study beginning with Bourdieu's cultural capital.

Methodology

This paper adopts a conceptual research approach, synthesising existing literature, various policy documents as well as institutional reports to explore the relationship between active learning and the development of cultural capital within TUs. The aim was to build a coherent framework by critically engaging with relevant scholarship and contextual sources rather than collecting new empirical data.

The literature search was conducted through numerous databases, including Scopus, Web of Science, JSTOR and Google Scholar. Search terms such as “cultural capital,” “Bourdieu,” “authentic learning,” “higher education,” “Technological Universities,” “student development” and “Ireland” were used in combination to identify relevant studies. Additional sources included national policy reports and strategy documents, particularly those published by the Higher Education Authority (HEA), as well as internal documents from TUS itself, including the TUS Learning, Teaching and Assessment Strategy (Ryan, 2021) and the TUS Compendium of Active Learning and Assessment (Ryan, 2022).

The selected literature was reviewed to identify recurring themes, theoretical frameworks and pedagogical practices relevant to cultural capital development in higher education. This synthesis informed the thematic sections presented in the paper, which draws specifically on Bourdieu's (1986) model of cultural capital.

Bourdieu's Cultural Capital

Pierre Bourdieu introduced the concept of cultural capital in his work *The Forms of Capital* (1986), presenting it as a framework for understanding how social inequalities are reproduced within society. According to Bourdieu (1986), cultural capital can be defined as the knowledge,

skills and customs individuals in society acquired through an individual's *habitus*. This, cultural capital has an effect on individual's social positioning and subsequent access to resources. In simple terms, cultural capital is the knowledge that assists a person to operate in society. Bourdieu (1986) identified three primary forms of cultural capital: embodied, objectified and institutionalised. While these concepts assist in explaining the reproduction of social inequalities, they present a problem for understanding how individuals may overcome these disparities.

Embodied capital refers to a form of tangible cultural capital encompassing knowledge and skills that individuals acquire through their lifetime including education and life experiences (Garratt, 2015). Kille (2022) discusses how this form of capital is rooted in, and influenced by, the environment around an individual as they grow up. Unlike embodied capital, **objectified** capital can be depicted by its tangibility. Xie and Hutagalung (2025) define objectified cultural capital as the tangible elements of culture that one possesses in order to enrich their cultural knowledge such as art pieces, books, and dictionaries. Such objects hold cultural and symbolic meaning which in turn communicate an individual's social standing. However, just merely possessing the object does not constitute the individual's social standing as the person must be educated with knowledge acquired through interactions with the *habitus* to understand its cultural significance (Wu & Wang, 2025). Finally, **institutionalised** capital, while similar to objectified capital, is not directly inherited but acquired through interaction with one's *habitus*. Gilleard (2020) characterises institutionalised capital as the value obtained in being recognised by an elite organisation. For the purpose of this study such an organisation can be thought of as an educational body granting a degree or certification to an individual, thereby enhancing their human capital.

Higher Education in Ireland and Cultural Capital

Houghton (2020) discerns that higher education in Ireland can be classified by a two-tier structure. On the one hand, the top tier is signified by the older and more prestigious universities, such as Trinity College Dublin. On the other hand, there are newer entrants to the sector aiming to enhance their reputation, for example TUs (Houghton, 2020). Houghton (2020) goes on to discuss how TUs are underpinned by their previous Institute of Technology structure which focused on giving access to non-traditional learners. This is supported by the HEA (2025) when they state that TUs respond to the social and economic demands of the region in which they are situated. Dwyer and Seery (2024) highlighted TU's emphasis on student-

centred learning and industry collaboration, which provide students with cultural capital, equipping them with specialised knowledge and practical skills. Consequently, students succeed in their professional environments and improve their employability. As further evidenced by Griffen and Collins (2024), TUs represent a university model that offers tangible societal benefits and social development within the regions in which they are situated.

Given this context, TUs may offer significant opportunities for students to acquire forms of cultural capital that they may not have held previously. In his work, Bourdieu discussed the importance of education systems in distributing cultural capital to people in society. There is a growing body of research in Ireland that recognises the importance of cultural capital in higher education (McCall, 2023; Ní Dhuinn & Keane, 2023; Burke, 2021; O'Donovan, 2021; Courtois, 2020; Delaney & Brown, 2020). However, there is an evident dearth of studies conducted in TUs. There is an impetus for further research on cultural capital in higher education as it offers a framework to understand how students progress in higher education. Understanding this could better assist educators and policymakers to address inequalities in academic outcomes (O'Sullivan, 2017). Grenfell (2014) stated that the culture associated with learning in a higher education institution could only be understood through a social differentiation lens. As TUs continue to evolve, it is timely to consider how their learning environments contribute not only to academic outcomes but also to students' professional and cultural development.

Active Learning as a Pedagogical Approach in Technological Universities

Active learning can be defined as a teaching approach that actively engages students in the learning process, encouraging them to participate in their learning and reflect rather than passively absorb information (Lombardi et al., 2021). It encompasses a variety of teaching methods such as case-based learning, problem-solving activities, group projects, peer instruction and live industry assignments, all designed to promote knowledge and skills development (Pardjono, 2016; Felder & Brent, 2009). Rooted in Dewey's experiential learning philosophy, active learning emphasises the importance of real-world engagement and application of knowledge (Dewey, 1938).

Traditionally, university teaching has centred on lectures, where students were passive recipients of information (Nwone & Mutula, 2020). Thus, students had limited opportunity to actively engage with course material or contribute to the learning process. The shift from this traditional mode of teaching was influenced by the emergence of constructivist learning theory

and the work of John Dewey who articulated that learners do not only absorb information but instead construct knowledge (Pereira-Silva & Castellanos, 2025; Hein, 1991). He claimed that learners do this by organising information in ways they make sense of, and do so in unique ways (Dewey, 2024). This perspective advanced during the 1980s and 1990s when educators began introducing more interactive methods of teaching into the classroom such as group discussion and case studies. These activities and methods of teaching formed the basis for what would later be defined as active learning. This approach reflects Dewey's experiential learning philosophy, where knowledge is constructed through meaningful interaction with real-world tasks (Roberts, 2003).

Bonwell and Eison (1991) are widely credited for coining the term active learning in higher education (Uhing et al., 2025; Brame, 2016; Devi, 2014). In their report titled *Active Learning: Creating Excitement in the Classroom*, they define the term as “anything that involves students in doing things and thinking about the things they are doing” (Bonwell & Eison, 1991, p.19). This definition suggests that active learning requires behavioural and cognitive elements meaning it is not enough for students to just participate in the lecture. Bell and Kozlowski (2008, p.297) go further by describing the responsibility of the learner:

First, the active learning approach gives people control over their own learning. That is, the learner assumes primary responsibility for important learning decisions (e.g., choosing learning activities, monitoring and judging progress).

Bell and Kozlowski's (2008) definition indicates that active learning is learner-centred, placing the responsibility on the student to be the decision-maker in their learning experience. In more recent years, Mooney (2013) argued that active learning requires educators to support their students in developing their own abilities rather than passively providing content from a textbook. This perspective is particularly apt in the TU context, as it suggests this approach helps students build confidence and equips them with the skills they need for the workplace. Confidence and skills are key factors of institutionalised cultural capital validated through academic recognition. The scope of this paper does not allow for a comprehensive review of all active learning strategies. Consequently, case studies and minute papers are discussed to highlight how active learning approaches can support student engagement.

Active Learning Strategies

Active learning includes many different methods of teaching, but all methods are based on engaging students in meaningful ways involving reflection and critical thinking. Case studies

are a widely used method in universities whereby students can learn theoretical concepts through real-world situations (Rakha, 2025). This practice allows students to apply theory to practice with the guidance from educators. Ferns and Duffy (2019) illustrate various strategies of active learning including the minute paper, whereby students respond to questions posed by the instructor regarding the lesson, they are then asked to submit their response to the instructor. This strategy encourages students to reflect on the lesson while also giving the instructor immediate feedback.

In addition to these classroom-based techniques, a key feature of active learning within TUs is the emphasis on applied and industry engaged assessments. A key active learning strategy often used in TUs is live industry project-based assessment, where students work with teams in real companies to help them with challenges they face (Ryan, 2022). This approach to assessment promotes the development of critical thinking skills associated with the specific discipline.

In the TU context, active learning is a core pedagogical approach reflecting a commitment to student-centred education. For example, TUS in its *Learning, Teaching and Assessment Strategy 2022-2025* has included “Pedagogies of Engagement through Active and Applied Learning” as a pillar (Ryan, 2021). O’Connor (2021) discussed how TUS embeds active learning within programme design, teaching, and assessment strategies in order to strive for excellence. The adoption of active learning approaches by staff is vital for the development of students’ positive attitude towards furthering their education (O’Connor, 2021). Dwyer and Seery (2025) support this claim, reporting how Tus’ strength in teaching and their student-centred approach contributes to their overall impact, and the development of transformative learning (TL). Their results portrayed that this was primarily influenced by active learning strategies and the support of lecturers. Finally, Ryan (2022) argues that for the successful facilitation of active learning strategies, there is a need for ongoing reflection from staff during curriculum planning, implementation and evaluation.

The Role of Active Learning in Developing Cultural Capital

Active learning, as implemented in TUs, acts as a crucial function in supporting students to develop skills and knowledge that are sometimes taken for granted in higher education. The capacity to apply theory to real-world practice is a valuable skill for students to attain and enables them to be confident when presenting and working effectively in teams (Baepler, 2023). This aligns with both embodied and institutionalised forms of cultural capital which were discussed earlier. This experiential engagement supports the development of embodied

cultural capital by nurturing behaviours and skills that are valued in the workplace. Thus, when students develop these attributes through their experiences with active learning strategies, they not only meet the learning outcomes of the module but are also accessing social and professional ‘norms’ that are valued by society and employers (Kalfa & Taksa, 2015).

In the TU context, live industry collaboration projects have become a key feature of active learning strategies in these institutions. This commitment can be seen in the TUS *Compendium of Active Learning and Assessment for Student Engagement* which provides evidence of various opportunities students have to apply theory to practice (Ryan, 2022). Through industry collaborations, students engage with employers and are faced with real organisational challenges, gaining first-hand experience of the workplace. Partaking in such collaborations further strengthens students’ cultural capital development. These applied projects allow students to interact directly with real companies in industry, thereby extending both their social capital and embodied cultural capital through professional networks and confidence building experiences (Hannon et al., 2017).

This approach to assessment is not only valuable academically but also contributes to the development of institutionalised cultural capital as defined by Gilleard (2020). Participating in live industry collaborations exposes students to industry expectations and standards (Zendrato et al., 2025). Typically, assessments are evaluated through formal academic reports or presentations where students receive a formal grade. This recognition serves as institutional endorsement of the knowledge and skills acquired by the student when completing the project. Therefore, the grades students receive for these experiences constitutes institutionalised cultural capital, which holds value in both education and industry.

Importantly, this recognition is particularly valuable for students who may not begin their higher education journey with high levels of pre-existing cultural capital. TUs are committed to an ethos of applied learning, meaning that students from diverse educational and social backgrounds have the ability to thrive, something they may not be able to do elsewhere. Active learning-based assessments allow students to acquire significant skills such as critical thinking and effective communication without reducing any academic standards. Therefore, active learning facilitates the acquisition of subject knowledge in a structure whereby students can acquire recognition supporting social mobility and academic success. With this in mind, active learning in TUs may serve not only as an academic strategy but also as a mechanism for addressing inequalities and enhancing students’ life chances (Clancy, 2024; O’Sullivan, 2017).

Conclusions

This conceptual paper explored how active learning strategies, specifically in TUs, contribute to the development of students in higher education, drawing on Bourdieu's (1986) framework. While this paper discusses active learning strategies in the context of TUs in Ireland broadly, the examples and institutional practices referenced here are drawn primarily from the TUS. The insights offered are therefore most directly applicable to our experiences in TUS, although they may offer useful perspectives for other TUs as they develop their own approaches to active learning and cultural capital development. The study examined the forms of cultural capital namely: embodied, objectified and institutionalised, and specifically focused on how institutionalised capital is developed in TUs. Through examples of active learning strategies, the analysis demonstrated how these approaches build students' confidence and critical thinking skills, factors that align closely with Bourdieu's concept of institutionalised cultural capital. Primarily, this paper argues that active learning within TUs facilitates the development of institutionalised cultural capital by implementing collaborative industry projects within programmes.

Theoretically, this paper contributes to the growing body of literature available on culture capital in higher education. Moreover, this study addresses a gap in literature by contextualising culture capital theory through the lens of TUs. Given that much of the research available on this topic suggests that cultural capital is inherited, this study illustrates how students actively engage with coursework and develop cultural capital through active, applied learning. Practically, the findings of this study reinforce the value of integrating active learning as a core pedagogical strategy in TUs. For educators, this highlights the importance of reviewing assessment strategies to ensure that initiatives are connected to real world practices. In particular, the TU model offers an actionable blueprint for other institutions aiming to bridge academic learning with industry needs, while also meeting academic standards.

As this is a conceptual paper, there are limitations that need to be considered. Firstly, the study does not include empirical data in order to analyse how active learning contributes to the development of cultural capital in higher education. The arguments presented in the study are grounded in existing scholarship and informed by relevant theoretical frameworks but the absence of empirical data limits discussion of how these active learning strategies operate in various TUs. Secondly, the focus on institutionalised capital limits the discussion on both

embodied and objectified capital, and whether these can be developed through active learning in TUs. However, these limitations underline the importance of future research strands.

Further research should be undertaken to investigate how TUs develop cultural capital through active learning. Additional research is required to provide a greater understanding of how specific active learning strategies improve students' cultural capital. Further studies could potentially investigate how active learning strategies in TUs affect non-traditional learners' acquisition of cultural capital. This proposed study could take the form of a qualitative approach to gain a deeper insight of how active learning strategies impact the development of cultural capital across various disciplines. Furthermore, a longitudinal study is warranted to investigate how active learning strategies used within their third level education affect TU graduates' cultural capital post-graduation. This study could follow students from first year to eventual graduation and assess how active learning assists with career success. This conceptual review has conveyed that while there is an increasing amount of literature available on cultural capital in higher education, further research is required in relation to TUs.

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