

# Enhancing Student Motivation and Engagement: Exploring Higher Education Students' Experiences as Co-Creators of Curriculum

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## Abstract

This article presents a study exploring students' experiences as co-creators of the curriculum in three master's level courses within a teacher education programme at the University of Akureyri, a small state university in Iceland. The authors, who also oversaw the courses, adopted the principles of the Scholarship of Teaching and Learning (SoTL) to guide the research. The MUSIC model of motivation served as the analytical framework, focusing on aspects of the learning environment that foster motivation and engagement. Findings indicate that students experienced empowerment, usefulness, success, interest, and care—the core components of the MUSIC model—throughout the courses. These factors contributed to strong motivation, active engagement, and increased resilience when facing challenges. The results suggest that student involvement in curriculum design played a significant role in shaping this experience. While based on a relatively small sample, the study provides valuable insights for higher education teaching practices, both within the local context and on a global scale.

**Keywords:** Higher education; curriculum co-creation; MUSIC model of motivation; student engagement.

## Introduction

Technological advancements have profoundly transformed higher education, expanded access, and created new opportunities for learning. This transformation has resulted in rising enrolment rates and increasing diversity of university student cohorts (Eurostudent, n.d.; Ólafsdóttir & Jónasson, 2017). However, designing courses that address the varied expectations of a diverse student body presents significant challenges, particularly in terms of curriculum design and its implementation (Könings et al., 2021; Lubicz-Nawrocka & Bovill, 2023). The curriculum encompasses all planning stages, from design to evaluation. It establishes educational goals and content to guide student learning. However, translating the intended curriculum into the achieved curriculum depends on instructional practices, classroom interactions, and the broader learning environment, with student engagement playing a key role (Bovill & Woolmer, 2019; Thijs & van den Akker, 2009). Actively involving students in course design offers a promising approach to enhancing motivation and improving outcomes (Bovill & Woolmer, 2019; Cook-Sather et al., 2014; Jones, 2009, 2018, 2019). Jones' MUSIC model of motivation emphasises five components—*eMpowerment*, *Usefulness*, *Success*, *Interest*, and *Caring*—all of which support engagement. Embedding these principles in curriculum design requires ongoing development of educators' pedagogical skills. The Scholarship of Teaching and Learning (SoTL) offers a framework for professional growth, integrating research and teaching practice to address demands for high-quality instruction in diverse contexts (Gurung & Swartz, 2013; Ólafsdóttir & Geirsdóttir, 2022).



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This article presents a study which aimed to explore students' experiences as co-creators of the curriculum in three master's level courses within a teacher education programme in a small state university, i.e., the University of Akureyri, in Iceland. The authors, who also were responsible for overseeing the courses, adopted the principles of the Scholarship of Teaching and Learning (SoTL) to guide the research. The MUSIC model of motivation was used as an analytical framework, thus focusing on themes related to aspects of the learning environment that foster motivation and engagement.

## Background

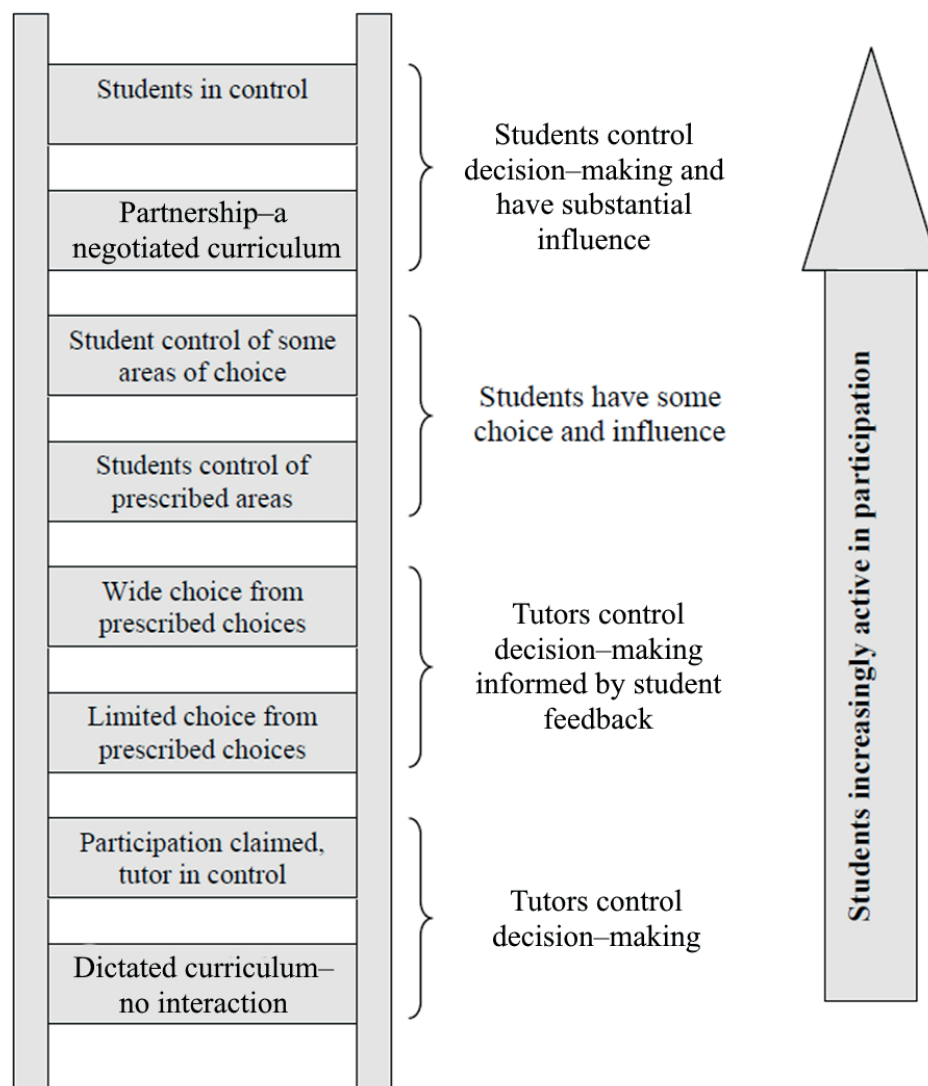
The background for this study is rooted in the growing recognition of the need to enhance student engagement and motivation in higher education through innovative pedagogical approaches. Research increasingly highlights the value of involving students as active participants in their educational journey, including co-creation of curricula, to foster a sense of ownership, collaboration, and agency. The following sections review key concepts and frameworks which informed the study, including student co-creation of curriculum design, research into student motivation, wherein the MUSIC model of motivation plays a vital role, and the principles underpinning Scholarship of Teaching and Learning (SoTL) which provided the authors with valuable guidelines for undertaking the research.

### *The Curriculum*

In recent years, interest in involving students as co-creators of the curriculum has grown, particularly in the light of research evidence highlighting the benefits of such collaboration (Bovill, 2013). Within this context, student participation in curriculum co-creation has been identified as a means of fostering innovation and collaboration, which, in turn, enhances student interest, engagement, and commitment (Bovill & Woolmer, 2019; Healey et al., 2014). Moreover, involving students in curriculum design and institutional decision-making not only strengthens their motivation but also contributes to improved retention and academic achievement (Allen & Nichols, 2017).

Engaging with the concept of curriculum calls for consideration of its three key manifestations. These include the *intended curriculum*, the formal, documented curriculum based on a specific vision of the intended learning content; the *implemented curriculum*, which reflects how the curriculum is interpreted and delivered by its users; and the *attained curriculum*, which represents the learning outcomes achieved (Thijs & van den Akker, 2009). Student involvement as co-creators may contribute to one, two, or all three aspects of the curriculum.

Bovill & Bulley (2011) developed a framework referred to as the “ladder of student participation in curriculum design” (see figure 1), comprising eight levels where the degree of student contribution and agency increases progressively (Bovill & Bulley, 2011; Bovill, Cook-Sather et al., 2011; Cook-Sather et al., 2014).

**Figure 1***The Ladder of Student Participation in Curriculum Design*

*Note.* Adapted from Bovill and Bulley (2011). *A model of active student participation in curriculum design: Exploring desirability and possibility* (p. 5, Figure 1). Used with permission

Research indicates that when students actively participate in shaping their learning experiences, they develop a greater sense of ownership and control, which in turn enhances their motivation and engagement (Bridge et al., 2024). Institutional structures that promote shared decision-making further support student empowerment, strengthening their intrinsic motivation and resilience. Moreover, collaboration in curriculum design benefits both students and teachers, fostering a learning community where students feel a sense of ownership of their education, and all participants experience the developmental process as a shared learning journey (Cook-Sather et al., 2014). However, for such collaboration to be successful, educators must actively engage students and sustain their motivation throughout the process (Bovill & Woolmer, 2019; Cook-Sather et al., 2014; Marquis, 2018).

### ***The MUSIC Model of Motivation***

To better understand the interplay between the learning and teaching environment on the one hand, and student interest and engagement on the other, increasing attention has been directed toward students' experiences and perceptions of their educational setting. Research in this field has highlighted the importance of students experiencing their learning environments positively, with a particular focus on factors that enhance their motivation. Such insights aim to guide educators in the development of effective teaching and learning strategies in higher education (Jones & Skaggs, 2016). This development has been accompanied by efforts to increase student autonomy and choice, both in terms of course content and approaches to learning (Cook-Sather, 2022; Cook-Sather et al., 2014; Locke & Latham, 2006; Ormrod & Jones, 2018; Weimer, 2013). Numerous studies indicate that such practices foster student empowerment and have a positive impact on motivation, particularly in areas such as curriculum decisions, learning objectives, assignments, and assessment methods (Cerasoli et al., 2016; Cook-Sather et al., 2014; Jones, 2018; Locke & Latham, 2006; Ormrod & Jones, 2018). Furthermore, students are more likely to maintain focus, interest, and satisfaction when tasks are perceived as engaging and appropriately challenging (Deci & Ryan, 2008). Deci and Ryan (2008) emphasise that when students find tasks interesting and moderately demanding, they are more likely to be intrinsically motivated, deriving satisfaction from both the process and the experience itself (Csikszentmihalyi, 1990; Jones, 2018). Additionally, understanding the purpose and relevance of tasks further enhances motivation. A close relationship exists between self-efficacy and a growth mindset, as students who view challenges and mistakes as opportunities for learning tend to be more motivated, resilient, and optimistic in achieving their goals (Bandura, 1997; Deci & Ryan, 2008; Dweck, 2006; Locke & Latham, 2006). Finally, research underscores the importance of care in fostering student motivation. When students feel a sense of belonging, they are more inclined to build meaningful connections with others, leading to increased confidence, engagement, and academic success (Anderson et al., 2020; Noddings, 2012).

Jones (2009, 2018, 2019) developed the evidence-based MUSIC model of motivation, which identifies five key elements that students need to perceive in their learning and teaching environment to foster strong motivation and increased engagement. These elements—eMpowerment, Usefulness, Success, Interest, and Caring (see Table 1)—serve as a framework for supporting educators in enhancing student motivation and engagement in learning (Jones, 2018). In this context, it should be noted that each of these components may encompass multiple motivational factors and may also overlap (Jones & Skaggs, 2016).

**Table 1**

#### *Definitions of the MUSIC Model Components and Related Constructs*

| <b>MUSIC model component</b> | <b>The degree to which a student perceives that:</b>                                                                | <b>Related constructs*</b>                                                                                                                                                                  |
|------------------------------|---------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| eMpowerment                  | He or she has control of his or her learning environment in the course.                                             | <ul style="list-style-type: none"> <li>• <i>autonomy</i></li> </ul>                                                                                                                         |
| Usefulness                   | The coursework is useful to his or her future.                                                                      | <ul style="list-style-type: none"> <li>• <i>utility value,</i></li> <li>• <i>instrumentality</i></li> </ul>                                                                                 |
| Success                      | He or she can succeed at the coursework.                                                                            | <ul style="list-style-type: none"> <li>• <i>expectancy for success,</i></li> <li>• <i>self-efficacy,</i></li> <li>• <i>competence</i></li> </ul>                                            |
| Interest                     | The instructional methods and coursework are interesting.                                                           | <ul style="list-style-type: none"> <li>• <i>situational interest,</i></li> <li>• <i>intrinsic motivation,</i></li> <li>• <i>intrinsic interest value,</i></li> <li>• <i>flow</i></li> </ul> |
| Caring                       | The instructor cares about whether the student succeeds in the coursework and cares about the student's well-being. | <ul style="list-style-type: none"> <li>• <i>caring,</i></li> <li>• <i>belongingness,</i></li> <li>• <i>relatedness,</i></li> <li>• <i>attachment</i></li> </ul>                             |

*Note.* \*Items in the MUSIC inventory were designed to measure the constructs in italics, although the other constructs listed are closely related. Adapted from: Jones, B. D., & Skaggs, G. (2016). Measuring students' motivation: Validity evidence for the MUSIC model of academic motivation inventory. *International Journal for the Scholarship of Teaching and Learning*, 10(1), p. 2. Reprinted with permission. Licensed under [Creative Commons Attribution-NonCommercial-NoDerivatives 4.0](https://creativecommons.org/licenses/by-nc-nd/4.0/)

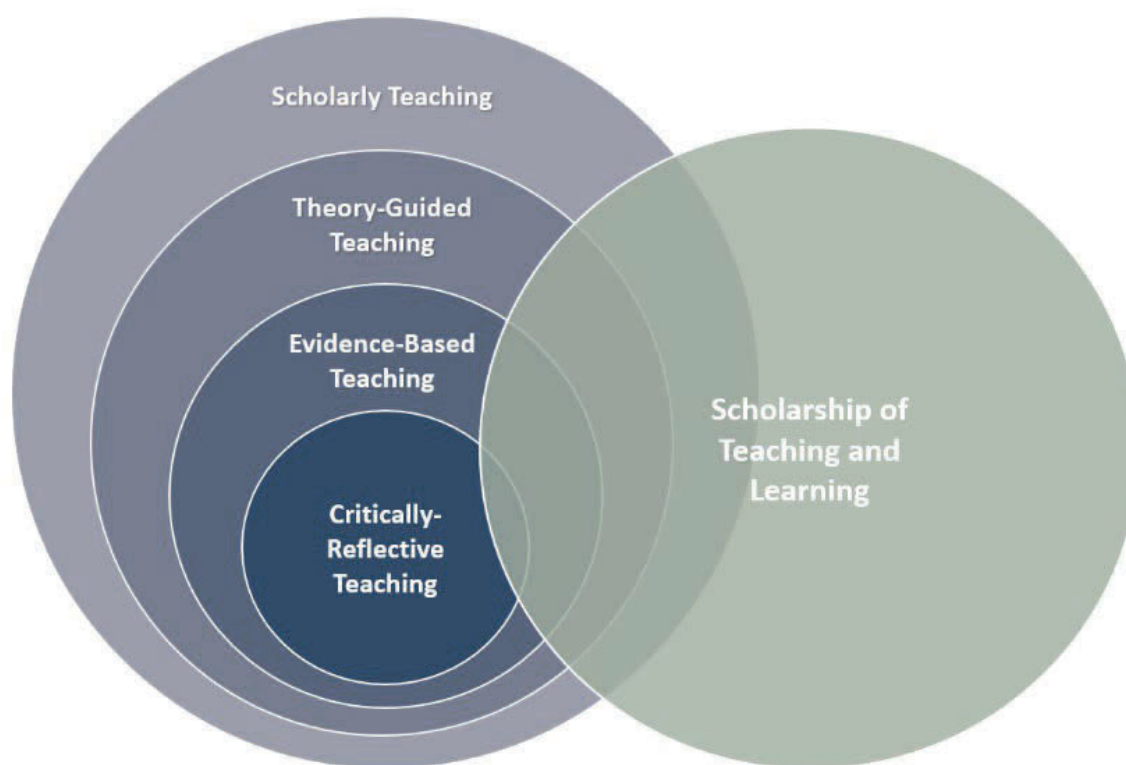
The MUSIC model of motivation identifies student empowerment as a crucial factor in fostering engagement and success (Jones, 2018). Supporting this, Bridge et al. (2024) argue that when students have decision-making power, their confidence, interest, and motivation increase.

### ***Scholarship of Teaching and Learning (SoTL)***

In recent decades, there has been growing interest in research focused on teaching and learning development in higher education, often categorised under the framework of the Scholarship of Teaching and Learning (SoTL) (Gurung & Schwartz, 2013; Ólafsdóttir & Geirsdóttir, 2022). While no single definition of SoTL exists, its core involves educators, often in collaboration with students, reflecting on teaching and learning practices informed by research and scholarship in the field. This process includes implementing intentional changes, evaluating their impact, and disseminating the outcomes of such inquiry (Gurung, 2023). SoTL is built upon a foundation of ideas, research, and scholarship related to Scholarly Teaching (ST). Broadly, the same elements must be considered in both the preparation and delivery of teaching, whether the focus is on teaching development within the scope of ST or the broader framework of SoTL. Scholarly Teaching is thus viewed as integral to and a foundation for SoTL (Groccia, 2023). The primary distinction lies in the dissemination of the outcomes of teaching development (Boyer, 1990; Groccia, 2023; Ólafsdóttir & Geirsdóttir, 2022).

**Figure 2**

*The Overlapping Magisteria Model of Scholarship of Teaching and Learning (SoTL)*



*Note.* Adapted from: Potter, M. K., & Kustra, E.K. (2011). The relationship between scholarly teaching and SoTL: Models, distinctions, and clarifications. *International Journal for the Scholarship of Teaching and Learning*, 5(1), Article 23. Used with permission

Over the 30 years since the adoption of the SoTL framework in universities for systematic teaching and learning development, it has been applied across diverse disciplines and a variety of academic institutions (Groccia, 2023; Gurung, 2023).

The literature reviewed in this section underscores the importance of promoting student empowerment, engagement, and collaboration to improve learning outcomes in higher education. These key principles collectively informed the design and focus of the research. The following research questions guided the study:

- *How do students describe their experiences in courses where they have a role as co-creators of the curriculum?*
- *In what ways do these experiences align with the key components of the MUSIC model?*

Before presenting the findings, the following section will provide an overview of the methods employed, as well as addressing some ethical considerations.

## Methods

A qualitative approach was adopted to examine three master's-level courses (10 ECTS each)<sup>1</sup> within the Teacher Education programme at the University of Akureyri, Iceland. The courses focused on Information Technology (IT) in Learning and Teaching, and were delivered sequentially over three semesters, combining four on-campus sessions in each course with online instruction. The authors collaboratively prepared, oversaw, and taught the courses.

The curriculum design process was grounded in a student–staff partnership approach (Cook-Sather et al., 2014), positioning students as active collaborators in shaping the learning experience. Accordingly, the process reflected the second-highest level of the participation ladder for student involvement in curriculum development, which entails a partnership between students and teachers that enables students to exert significant influence on decision-making (Cook-Sather et al., 2014). Students enrolled in the programme were meaningfully engaged through structured discussions (both prior to the launch of the IT programme and during on-campus sessions for each course), feedback activities (e.g., focus groups), and iterative reviews (e.g., reflective journals). However, all decisions had to remain consistent with the learning outcomes specified by the university's formal curriculum.

These forms of engagement collectively informed decisions regarding course content, structure, learning activities, and assessment methods. Thus, in collaboration with the teachers, students contributed to specific decisions, such as the selection of additional course reading material, the organisation of on-campus sessions, and the types of assignments to be undertaken and how these would be assessed. The students' contributions were drawn upon not only during the delivery of individual courses but also in shaping subsequent courses within the programme.

## Participants

The study included 28 students enrolled across the three courses, over 80% of whom were women, which is about the same proportion as reported by the University of Akureyri (n.d.) for its student population. Participants ranged in age from 26 to 55 and represented diverse teaching backgrounds and levels of experience. Four students attended all three courses, five attended two, and 19 participated in one.

## Data Collection and Procedures

Data collection varied across the three courses. In the first course, a final evaluation scale assessed six areas: content, organisation, teaching methods, assessment, innovation, and individual contributions (California State University Chico, n.d.). For the second course, focus group interviews were conducted using a semi-structured guide to explore participants' experiences in depth (Kamberelis & Dimitriadis, 2011). In the third course, data were gathered through video recordings of student project presentations and reflective journals. Video recordings captured interactions for later analysis (Hammersley & Atkinson, 2019). Reflective journals, structured using Gibbs's (1998) six-step model, encouraged deep reflection and offered insights into student learning experiences (Quinton & Smallbone, 2010). This multimethod approach was intentionally adopted in order to ensure a nuanced and layered understanding of the students' experiences.

## Data Analysis

Data were transcribed and analysed using NVivo software. The analysis was guided by the components of the MUSIC model, focusing on themes related to elements of learning environments that enhance motivation and engagement.

<sup>1</sup> In Iceland, ECTS (European Credit Transfer and Accumulation System) is a standardised system for accumulating and transferring credits earned during higher education

### ***Ethical Considerations***

Students were informed that various data would be collected on their experiences. Informed consent for using the data was obtained via email. Ethical considerations included maintaining anonymity and employing an external interviewer for the focus groups. The research adhered fully to established ethical guidelines for educational research and was financially supported by the university (see acknowledgement).

### **Findings**

The reported findings are based on analysis of all data collected from students. As previously outlined, the authors used the key components of the MUSIC model as a framework for analysing students' experiences. The findings are presented in the order in which the key components of the MUSIC model are introduced. For clarity, a summary of each component is provided before reporting the corresponding findings.

The MUSIC model defines the first component, *eMpowerment*, as students' belief in having autonomy or ownership over their learning process, a key factor being the sense of choice regarding tasks and the ability to influence their own outcomes (Jones, 2018).

Students' presentations of self-selected projects reflected a sense of autonomy and responsibility. This was noticeable in their willingness to undertake ambitious projects and their vision of supporting colleagues in their respective schools:

We plan to work together as a team of four to develop a curriculum in information technology for primary school students from grades 1 to 10. This is something we've been eager to do. We're also considering how we can support teachers in integrating this curriculum throughout the entire school, not just teaching it as a standalone subject. (project presentation)

Feeling empowered often appeared to manifest through interactions among students about the projects they had chosen to work on. This was evident, for instance, in the following remark:

It is so enjoyable to study alongside people who are incredibly smart, like we are ... it's so much fun, it's so empowering for me, I have learned a great deal from the other students through all these projects. (focus group)

*Usefulness* is the second component of the MUSIC model. In the model it is referred to as courses having practical value for the students (Jones, 2018). This could be seen in the students' accounts when describing the learning material and their assignments:

It was good to be able to delve deeper into certain subjects that we could somewhat choose ourselves in relation to the assignments. This way, we could connect the theory to our areas of interest and what suits us best for our own professional development. (evaluation scale, open option response)

Students highlighted more than just the usefulness of focusing on practical projects and pursuing their personal academic interests. Many also emphasised the benefits of listening to their peers' presentations: "... in particular, I found it both valuable and beneficial to listen to my fellow students' presentations on their projects. It opened countless ideas for me to explore further" (focus group). It was also evident that they recognised significant value in their interactions with one another: "... it is immensely beneficial to meet teachers who share similar thoughts and ideas, to chat, exchange ideas, and receive support with the projects one is tackling" (reflective journal).

The third element of the MUSIC model is *Success*, that is students' confidence in their ability to succeed (Jones, 2018). The notion of success was apparent, for example in students' confidence regarding their assignments, and their ability to act as change agents in their future work:

I believe this course met its objectives perfectly. We have worked on outstanding assignments involving the use of technology across all educational levels. What could be better than that? We will return to the system and strive to implement changes and improvements. Who knows, maybe something great will come of it. (reflective journal)

However, there also were comments suggesting that some students had negative experiences related to certain topics which nevertheless transformed into a positive sense of motivation, self-confidence, and belief in their ability to succeed when they were given the freedom to choose their own tasks, the following being an example:

When we were being taught programming, I felt that I didn't understand it well enough, and I must admit that I'm still not entirely sure how I'm supposed to teach it. However, when we got to work on examples ourselves, I found it much easier and more enjoyable. I even started creating more complex examples and experimenting [with programming]. (reflective journal)

*Interest* is the fourth element of the MUSIC model being commonly seen in engagement and curiosity (Jones, 2018), as was clearly reflected in this comment:

When we all come together like this, an incredible dynamic emerges, and you feel ready to face anything ... I was very pleased to see how many people are in the course and how diverse the group is. You could really feel everyone's enthusiasm. Such a group creates an amazing dynamic that I absolutely thrive on. I simply can't wait to get started. (focus group)

Peer teaching within the group also seemed to play a significant role in fostering their enthusiasm: "... the real advantage was this—we were teaching each other so much, and somehow, you just got carried away with it" (focus group), and field trips were another example of learning experiences that sparked interest: "... it was fantastic to get to explore the FABLAB project. I'm so eager to properly learn how to use everything there. It's absolutely a place where you can unleash your creativity" (reflective journal).

The last component of the MUSIC model, *Caring*, refers to students' perceptions of supportive interactions (Jones, 2018). Expressions of care were evident in students' remarks about their peers. These comments often related to feelings of insecurity, with students commonly highlighting how willing their peers were to provide help and support: "... this is like reading Chinese to me ... stepping so far outside my comfort zone. X [name of peer] helps me a lot, is quick to grasp this. Y [name of another peer] solves everything instantly" (reflective journal).

The element of care consistently stood out when students discussed their relationships with peers. They described feeling recognised and encouraged by others in the group, as illustrated by the following:

Friendships within the group have developed, and more of us are now in closer contact than before, which is a tremendously positive development. Some individuals in the group really need the support, and it's great to expand the core group ... if someone is a bit stuck and needs ideas, we're all ready to come up with some really great suggestions. (reflective journal)

Students also expressed experiencing care from their teachers, particularly when dealing with challenging tasks: "... these projects are very demanding ... It makes all the difference that X [name of teacher] is always ready to help us and seems to have almost endless patience for our not-so-brilliant questions" (reflective journal).

The findings reported above highlight how students experienced the key components of the MUSIC model—empowerment, usefulness, success, interest, and caring—through their participation in curriculum co-creation. These experiences were observed in various contexts, including their interactions with peers, engagement with learning tasks, and reflections on their educational journey. The next section will discuss these findings in relation to the broader literature, offering insights into their relevance for higher education practices.

## Discussion

The study aimed to explore higher education students' experiences as co-creators of the curriculum, using the components of the MUSIC model of motivation as an analytical framework. This involved focusing on themes related to aspects of the learning environment that foster motivation and engagement.

Data from students' presentations of their self-designed projects, undertaken as part of their curriculum co-creation role, highlighted their willingness to engage in ambitious initiatives, their collaborative vision, and their commitment to integrating projects within their schools. This suggests that student involvement in shaping the course curriculum contributed to their sense of empowerment. One student remarked that collaboration with peers fostered enjoyment, empowerment, and meaningful learning, illustrating how empowerment emerged through interactions while working on self-selected projects. These findings align with research indicating that active participation enhances positive experiences, engagement, and learning outcomes by fostering empowerment (Cerasoli et al., 2016; Cook-Sather, 2022; Healey et al., 2014). Autonomy in project selection and meaningful collaboration with peers further bolstered empowerment, aligning with research demonstrating that choice and collaboration foster a sense of agency and responsibility (Cook-Sather et al., 2014). Similarly, Allen & Nichols (2017) highlight that when students actively shape their learning, they experience greater motivation and engagement. Seeing

themselves as contributors rather than passive learners enhances their persistence and satisfaction, reinforcing the value of co-creation in education.

The data indicated that allowing students to influence, manage, and make decisions enhanced their perception of the courses' usefulness, with regard to both theoretical content and practical work. Operating at the second-highest level of the student participation ladder in curriculum design, students collaborated with teachers and had significant influence over the implemented curriculum. These positive perceptions align with research on progressive student participation, which highlights increased responsibility, ownership, and perceived usefulness as key benefits (Bovill, Bulley et al., 2011; Cook-Sather et al., 2014). Such elements have been shown to enhance motivation and improve learning outcomes. Bridge et al. (2024) further emphasise that meaningful collaboration between students and faculty fosters engagement by ensuring that students' contributions shape their learning experience. Their findings suggest that co-creation strengthens students' sense of purpose and ownership, reinforcing the link between active participation and motivation in higher education.

Students' belief in their ability to succeed was evident in their confidence regarding course objectives, particularly in engaging assignments that integrated technology across educational levels. They expressed a sense of empowerment and readiness to act as change agents in their careers, reflecting their belief in achieving meaningful advancements. While some initially struggled with topics like programming, autonomy in task selection transformed their experiences. This led to experimentation with more complex assignments, resulting in increased motivation, self-confidence, and a sense of achievement. These findings underscore the role of autonomy and appropriately challenging tasks in fostering a sense of capability. They align with research showing that motivation thrives when tasks balance simplicity and complexity, keeping students engaged at the edge of their competence (Csikszentmihalyi, 1990). Additionally, research suggests that when students have genuine choice and believe in their capacity to succeed, they exert greater effort, resulting in enhanced satisfaction and outcomes (Cook-Sather, 2022; Dweck, 2006; Jones, 2018).

Interest, the fourth element of the MUSIC model, was evident in how the group dynamic fostered enthusiasm and readiness. Collaborative peer teaching and experiential activities, such as field trips, were identified as sources of inspiration and curiosity. These findings align with research suggesting that collaboration and dialogue energise the learning environment, generating motivational and emotional engagement (Bovill & Woolmer, 2019; Dweck, 2006; Noddings, 2012).

The final component of the MUSIC model, caring, emerged through supportive peer and teacher relationships. Students emphasised patience and encouragement from peers, which fostered confidence and camaraderie, particularly in challenging tasks like programming. Collaborative problem-solving helped them overcome obstacles, while teachers' guidance and encouragement strengthened their sense of belonging in the learning community. These reflections align with research demonstrating that educational environments characterised by care enhance motivation and a sense of inclusion (Anderson et al., 2020; Noddings, 2012). Also, supportive teacher-student relationships have been found to promote students' confidence, reinforce their sense of recognition, and assure them that their contributions are valued (Anderson et al., 2020).

The discussion above has demonstrated how the key elements of the MUSIC model shaped students' experiences, suggesting that perceptions of empowerment, usefulness, success, interest, and care within the learning environment enhanced their engagement and motivation. Moreover, students' active role as co-creators of the curriculum appeared to be a significant factor in shaping these experiences.

These findings align with Jones' (2009, 2018) assertion that student motivation strengthens when the learning environment reflects the core components of the MUSIC model. They also support prior research demonstrating that co-creation fosters autonomy, which in turn enhances motivation and improves outcomes (Bovill & Woolmer, 2019; Cook-Sather et al., 2014). Furthermore, they reinforce studies suggesting that collaboration between students and faculty (Bridge et al., 2024) and student involvement in decision-making (Allen & Nichols, 2017; Cook-Sather et al., 2014) enhance participation, ownership, and academic perseverance. Taken together, these insights highlight co-creation not only as a pedagogical tool but as a powerful driver of motivation, commitment, and meaningful learning.

## Conclusions

This study emerged from a collaborative initiative to design and implement a pedagogical approach in three master's-level courses overseen by the authors. Central to this approach was the active participation of students as co-creators of the curriculum. Grounded in the principles of the Scholarship of Teaching and Learning (SoTL), the study explored students' experiences through the lens of the MUSIC model of motivation. Findings suggest that students experienced empowerment, usefulness, success, interest, and care—the core elements of the model. These factors contributed to increased motivation,

deeper engagement, and greater resilience in the face of challenges. Although the study sample was small, the diverse data collection methods enriched the findings, offering valuable insights for university educators and policymakers. These insights are particularly relevant for strategies aimed at enhancing student engagement and they demonstrate the utility of the MUSIC model as a framework for teaching development in higher education. The authors also highlight the potential of collaboration among educators, grounded in SoTL principles and the MUSIC model, as an effective strategy for improving teaching and learning quality. Drawing on the authors' experience of conducting this research, further studies could explore the opportunities and challenges for teachers in integrating students as co-creators in curriculum design across different disciplines.

While the study is based on a relatively small sample, and conducted in an Icelandic higher education context, the findings align with broader research on student motivation and co-creation, offering valuable insights for faculty worldwide on how participatory curriculum design can enhance student motivation, engagement, and learning in diverse educational settings.

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## References

- Allen, J., & Nichols, C. (2017). Do you hear me? Student voice, academic success and retention. *Student Success*, 8(2), 123–129. <https://doi.org/10.5204/ssj.v8i2.387>
- Anderson, V., Rabello, R., Wass, R., Golding, C., Rangi, A., Eteuati, E., Bristowe, Z., & Waller, A. (2020). Good teaching as care in higher education. *Higher Education*, 79(1), 1–19. <https://doi.org/10.1007/s10734-019-00392-6>
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. Freeman.
- Bovill, C. (2013). Students and staff co-creating curricula – a new trend or an old idea we never got around to implementing? In C. Rust (Ed.), *Improving student learning through research and scholarship: 20 years of ISL* (pp. 96–108). The Oxford Centre of Staff and Educational Development.
- Bovill, C., & Bulley, C. J. (2011). A model of active student participation in curriculum design: Exploring desirability and possibility. In C. Rust (Ed.), *Improving student learning (18): Global theories and local practices: Institutional, disciplinary and cultural variations* (pp. 176–188). The Oxford Centre for Staff and Learning Development.
- Bovill, C., Bulley, C. J., & Morss, K. (2011). Engaging and empowering first-year students through curriculum design: Perspectives from the literature. *Teaching in Higher Education*, 16(2), 197–209. <https://doi.org/10.1080/13562517.2010.515024>
- Bovill, C., Cook-Sather, A., & Felten, P. (2011). Students as co-creators of teaching approaches, course design and curricula: Implications for academic developers. *International Journal for Academic Development*, 16(2), 133–145. <https://doi.org/10.1080/1360144X.2011.568690>
- Bovill, C., & Woolmer, C. (2019). How conceptualisations of curriculum in higher education influence student-staff co-creation in and of the curriculum. *Higher Education*, 78(4), 407–422. <https://doi.org/10.1007/s10734-018-0349-8>
- Boyer, E. L. (1990). *Scholarship reconsidered: Priorities of the professoriate*. The Carnegie Foundation for the Advancement of Teaching.
- Bridge, C., Horey, D., Julien, B., Thompson, B., & Loch, B. (2024). Making the student experience everybody's business: Cultivating collaboration in the exosphere. *Student Success*, 15(2), 34–44. <https://doi.org/10.5204/ssj.3434>
- California State University Chico. (n.d.). *Exemplary online instruction: The rubric*. <https://www.csuchico.edu/eoi/rubric.shtml>
- Cerasoli, C. P., Nicklin, J. M., & Nassreelgrawi, A. S. (2016). Performance, incentives, and needs for autonomy, competence, and relatedness: A meta-analysis. *Motivation and Emotion*, 40(6), 781–813. <https://doi.org/10.1007/s11031-016-9578-2>
- Cook-Sather, A. (2022). *Co-creating equitable teaching and learning: Structuring student voice into higher education*. Harvard Education Press.
- Cook-Sather, A., Bovill, C., & Felten, P. (2014). *Engaging students as partners in learning and teaching: A guide for faculty*. Jossey-Bass.
- Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. HarperPerennial.
- Deci, E. L., & Ryan, R. M. (2008). Self-determination theory: A macrotheory of human motivation, development, and health. *Canadian Psychology / Psychologie Canadienne*, 49(3), 182–185. <https://doi.org/10.1037/a0012801>
- Dweck, C. S. (2006). *Mindset: The new psychology of success*. Random House.
- Eurostudent.eu. (n.d.). *Eurostudent database (data reporting module)*. <http://database.eurostudent.eu/>
- Gibbs, G. (1998). *Learning by doing: A guide to teaching and learning methods*. Further Education Unit.
- Groccia, J. E. (2023). The similarities and difference between scholarly teaching and the scholarship of teaching and learning. *Estonian Journal of Education*, 11(2), 23–39. <https://doi.org/10.12697/eha.2023.11.2.02b>
- Gurung, R. A. R. (2023). The scholarship of teaching and learning: Scaling new heights, but it may not mean what you think it means. In C. E. Overson, C. M. Hakala, L. L. Kordonowy & V. A. Benassi (Eds.), *In their own words: What scholars and teachers want you to know about why and how to apply the science of learning in your academic setting* (pp. 61–72). Society for the Teaching of Psychology. <https://teachpsych.org/ebooks/itow>
- Gurung, R. A. R., & Schwartz, B. M. (2013). *Optimizing teaching and learning: Practicing pedagogical research*. Wiley-Blackwell.
- Hammersley, M., & Atkinson, P. (2019). *Ethnography: Principles in practice*. Routledge.
- Healey, M., Flint, A., & Harrington, K. (2014). *Engagement through partnership: Students as partners in learning and teaching in higher education*. Higher Education Academy.
- Jones, B. D. (2009). Motivating students to engage in learning: The MUSIC model of academic motivation. *International Journal of Teaching and Learning in Higher Education*, 21(2), 272–285. <https://www.isetl.org/ijtlhe/pdf/IJTLHE774.pdf>
- Jones, B. D. (2018). *Motivating students by design: Practical strategies for professors* (2nd ed.). CreateSpace Independent Publishing Platform.
- Jones, B. D. (2019). Testing the MUSIC model of motivation theory: Relationships between students' perceptions, engagement, and overall ratings. *The Canadian Journal for the Scholarship of Teaching and Learning*, 10(3), 4. <https://doi.org/10.5206/cjsotl-rcacea.2019.3.9471>

- Jones, B. D., & Skaggs, G. (2016). Measuring students' motivation: Validity evidence for the MUSIC model of academic motivation inventory. *International Journal for the Scholarship of Teaching and Learning*, 10(1), 7. <https://doi.org/10.20429/ijstol.2016.100107>
- Kamberelis, G., & Dimitriadis, G. (2011). Focus groups: Contingent articulations of pedagogy, politics, and inquiry. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research* (pp. 545–562). Sage.
- Könings, K. D., Mordang, S., Smeenk, F., Stassen, L., & Ramani, S. (2021). Learner involvement in the co-creation of teaching and learning: AMEE Guide No. 138. *Medical Teacher*, 43(8), 924–936. <https://doi.org/10.1080/0142159X.2020.1838464>
- Locke, E. A., & Latham, G. P. (2006). New direction in goal-setting theory. *Current Direction in Psychological Science*, 15(5), 265–268. <https://doi.org/10.1111/j.1467-8721.2006.00449.x>
- Lubicz-Nawrocka, T., & Bovill, C. (2023). Do students experience transformation through co-creating curriculum in higher education? *Teaching in Higher Education*, 28(7), 1744–1760. <https://doi.org/10.1080/13562517.2021.1928060>
- Marquis, E. (2018). Embracing and/or avoiding the risks of partnership: A faculty perspective. *Teaching and Learning Together in Higher Education*, 1(24), 1–8. <https://repository.brynmawr.edu/tlthe/vol1/iss24/9>
- Noddings, N. (2012). The caring relation in teaching. *Oxford Review of Education*, 38(6), 771–781. <https://doi.org/10.1080/03054985.2012.745047>
- Ormrod, J. E., & Jones, B. D. (2018). *Essentials of educational psychology: Big ideas to guide effective teaching* (5th ed.). Pearson.
- Ólafsdóttir, A., & Geirsdóttir, G. (2022). “This can open doors”: University teachers’ experiences as researchers of their own teaching [„Þetta getur opnað dyr“: Reynsla háskólakennara sem rannsakenda eigin kennslu]. *Sérít Netlu 2022 – Framtíð og tilgangur menntunar: Sérít til heiðurs Jóni Torfa Jónassyni, prófessor emeritus*. <https://doi.org/10.24270/serritnetla.2022.88>
- Ólafsdóttir, A., & Jónasson, J. T. (2017). Quality assurance in a small HE system: Is the Icelandic system in some ways special? In S. Georgios, K. M. Joshi & S. Paivandi (Eds.), *Quality assurance in higher education: A global perspective* (pp. 203–226). Studera Press.
- Potter, M. K., & Kustra, E. K. (2011). The relationship between scholarly teaching and SoTL: Models, distinctions, and clarifications. *International Journal for the Scholarship of Teaching and Learning*, 5(1), 23. <https://doi.org/10.20429/ijstol.2011.050123>
- Quinton, S., & Smallbone, T. (2010). Feeding forward: Using feedback to promote student reflection and learning – A teaching model. *Innovation in Education and Teaching International*, 47(1), 125–135. <https://doi.org/10.1080/14703290903525911>
- Thijs, A., & van den Akker, J. (Eds.). (2009). *Curriculum in development*. Netherlands Institute for Curriculum Development (SLO).
- University of Akureyri. (n.d.). *Number of students*. <https://www.unak.is/english/university/about-unak/unak-in-numbers/highchart>
- Weimer, M. (2013). *Learner-centered teaching: Five key changes to practice* (2nd ed.). Wiley.

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