Mr **Milica ANĐUŠIĆ**
University of Montenegro

MOTIVATION MECHANISMS FOR ENGAGING STUDENTS IN STARTUP INITIATIVES

Introduction

In modern higher education, student engagement in startup creation has become a central element of institutional strategies aimed at strengthening innovation, employability, and long-term socio-economic development (OECD, 2019). While universities traditionally emphasised lecturing and theoretical knowledge, today they increasingly redefine their mission to include entrepreneurial learning, practical skill development, and opportunities for students to transform ideas into real projects. Rapid technological shifts and the demand for adaptable, creative graduates have contributed to student entrepreneurship becoming a strategic priority for many universities (Moreno & Müller, 2022).

The rise of the entrepreneurial university illustrates this transition. Such institutions integrate teaching, research, and practical innovation activities, emphasising that the motivation of students plays a decisive role in whether they choose to participate in entrepreneurial initiatives (Galán-Muros & Davey, 2019). Simply offering entrepreneurship programmes is not enough; universities must understand the psychological, institutional, and social mechanisms that shape student engagement. Intrinsic motivation, external incentives, mentoring relationships, peer networks, and opportunities for real-world application all contribute meaningfully to students' willingness to explore entrepreneurship (Deci & Ryan, 2000; Ryan & Deci, 2017).

Despite the growing awareness of the importance of student entrepreneurship, many institutions face persistent barriers. Students often lack confidence, are unaware of available support structures, or do not perceive entrepreneurial activities as personally relevant (Fayolle & Liñán, 2014). Overcoming these barriers requires intentional motivational strategies that help students recognise their potential and feel supported throughout the entrepreneurial process (Walter et al., 2013).

This paper draws on international literature and institutional practice to analyse the key mechanisms that motivate students to participate in startup initiatives. It presents the interplay of intrinsic and extrinsic motivation, highlights the roles of mentorship and gamification, and examines how institutional support systems can strengthen student engagement. Based on these insights, the paper also discusses practical approaches applied at the University of Montenegro to encourage student participation in entrepreneurial activities.

MOTIVATION MECHANISMS FOR ENGAGING STUDENTS IN STARTUP INITIATIVES

Intrinsic Motivation: Curiosity, Autonomy and Personal Development

Intrinsic motivation is widely recognised as one of the strongest drivers of sustained student engagement in innovation and entrepreneurship (Deci & Ryan, 2000). When students work on ideas that genuinely interest them, they demonstrate greater creativity, persistence, and willingness to take risks. Three components are particularly important:

- **personal and professional growth**,
- **autonomy in choosing and shaping ideas**,
- **the desire to solve meaningful real-world problems**.

Universities that create opportunities for exploratory learning and allow students to test ideas in low-risk environments cultivate strong intrinsic motivation (Ryan & Deci, 2017). This autonomy not only enhances creativity but also helps students view entrepreneurship as a personally meaningful activity rather than an academic requirement.

Extrinsic Motivation: Rewards, Recognition and Opportunity Structures

While intrinsic motivation drives long-term commitment, extrinsic motivators often play a crucial role in initiating student engagement (Teixeira et al., 2018). These include:

- financial rewards,
- certificates and public recognition,
- access to workshops, labs, and incubators,

- progression opportunities such as competitions and startup programmes.

Such incentives validate students' efforts and communicate that the university values entrepreneurial learning (Fayolle & Liñán, 2014). For students who are initially uncertain about their abilities, external rewards can reduce hesitation by making the entry point into entrepreneurship clearer and more structured.

Mentorship and Supportive Networks

Mentorship is one of the most influential motivational mechanisms for early-stage entrepreneurs. Research consistently shows that mentors help students understand market needs, refine ideas, build confidence, and navigate the challenges of startup development (Ratten, 2017). For many students, mentors serve as tangible role models who make the entrepreneurial path seem achievable.

Alumni and industry networks play a similar role by connecting academic learning with professional practice (Moreno & Müller, 2022). Through exposure to real cases, students gain a clearer sense of what entrepreneurship looks like in practice and develop a stronger belief in their own capabilities.

Gamification and Engagement-Based Learning Models

Gamification introduces elements such as point systems, rankings, challenge-based tasks, and awards to increase motivation (Liguori & Winkler, 2020). These elements make learning more dynamic and engaging, especially for students who may be hesitant to participate at first.

By providing visible progress markers and small achievable milestones, gamification reduces fear of failure and encourages gradual engagement. The competitive yet enjoyable nature of gamified learning supports students' confidence and persistence—two key psychological factors in entrepreneurial development.

Institutional Support and Entrepreneurial Infrastructure

Effective student motivation is strongly influenced by the presence of structured institutional support systems (OECD, 2019). Universities strengthen engagement when they provide:

- startup centres and innovation hubs,
- pre-incubation and incubation programmes,
- coworking spaces and digital tools,
- entrepreneurship seminars and masterclasses.

Such infrastructure sends a powerful message that entrepreneurship is a valued and supported activity within the academic environment (Walter et al., 2013). Students who perceive their university as supportive are more willing to take risks, develop ideas, and experiment with entrepreneurial solutions.

Psychological and Social Factors Shaping Student Motivation

Several psychological and social dimensions influence students' decisions to engage in entrepreneurship:

- **self-efficacy** — the belief that they can succeed,
- **sense of belonging** in the entrepreneurial community,
- **perceived relevance** of entrepreneurial activities to future careers.

Students are more motivated when they see entrepreneurship as achievable and personally meaningful. Reducing fear of failure is particularly important, as this fear remains one of the biggest obstacles for young entrepreneurs (Shane, 2009).

Impact on Student Outcomes and University Ecosystems

When motivational mechanisms function together, they produce substantial benefits for both students and universities. Students become more confident, skilled, and proactive (Ratten, 2017). They develop teamwork, communication, and problem-solving abilities, and are more likely to pursue startup projects beyond their initial coursework.

For universities, strong motivation systems enhance their role in regional innovation ecosystems and contribute to higher employability among graduates (Galán-Muros & Davey, 2019). Effective motivation strategies therefore strengthen not only individual student trajectories but also broader institutional objectives.

Case Study: The University of Montenegro and Practical Motivation Mechanisms

The University of Montenegro (UoM) has made notable progress in building structures that encourage student participation in entrepreneurial initiatives. Rather than relying solely on theoretical instruction, UoM integrates real-world entrepreneurial experiences through various programmes. This approach aligns with European recommendations for strengthening university-based innovation ecosystems (OECD, 2019; Galán-Muros & Davey, 2019).

These activities span multiple faculties, including the Faculty of Tourism and Hotel Management, and emphasise exposure to real business challenges, collaboration with professionals, and practical skills development. As research suggests, such experiences help transform initial student curiosity into sustained entrepreneurial engagement (Teixeira et al., 2018).

Experiential Learning as a Driver of Motivation

UoM frequently organises innovation workshops, mini-hackathons, and project-based assignments in collaboration with the Science and Technology Park and ICT partners. Students work on real challenges faced by local companies, particularly in tourism and digitalisation. Through these hands-on tasks, students gain competence and confidence—two core components of intrinsic motivation (Deci & Ryan, 2000).

Many students report that real-world problem-solving helps reduce fear of failure, making entrepreneurship feel more accessible (Shane, 2009).

Mentorship and Peer Collaboration

UoM integrates mentorship by connecting students with both academic and industry experts. Mentors provide feedback on business ideas, help with market research, and guide students through pitching processes. For tourism students, mentorship from hospitality professionals and digital platform experts bridges theory and practice, reinforcing learning through authentic examples (Ratten, 2017).

Peer collaboration is also a strong motivator. Interdisciplinary teams—often including students from economics, IT, and design—create dynamic

project environments that increase engagement and creativity (Teixeira et al., 2018).

Gamification and Startup Challenges

UoM has adopted game-based elements such as:

- milestone points,
- team rankings,
- awards for innovation,
- certificates for completed training programmes.

These mechanisms make the learning process enjoyable and competitive, which encourages participation. Gamification is particularly effective for initially hesitant students who gain confidence as they see measurable progress (Liguori & Winkler, 2020).

Institutional Support Structures

To provide comprehensive support, UoM offers:

- coworking spaces,
- digital tools for prototype development,
- pre-incubation programmes for early ideas,
- entrepreneurship courses and seminars.

Students often emphasise that institutional support increases their motivation because it signals that their work is appreciated and guided. This aligns with findings that institutional infrastructure is a crucial predictor of entrepreneurial engagement (Walter et al., 2013).

Impact on Student Engagement and Competence Development

Student feedback following innovation events shows improvements in:

- self-efficacy and risk-taking readiness,
- understanding of startup development stages,
- teamwork and communication skills,
- motivation to join pre-incubation or incubation programmes.

These results confirm that structured motivational mechanisms—especially mentorship, experiential learning, and gamification—generate tangible benefits and support long-term entrepreneurial interest (Ratten, 2017;

Teixeira et al., 2018). For UoM, these initiatives strengthen its role in the national innovation system and support broader economic and digital development goals (Moreno & Müller, 2022).

Conclusion

Motivating students to engage in startup development requires a holistic and strategically coordinated approach. This paper demonstrates that meaningful engagement arises from the interaction of intrinsic motivation, external incentives, mentorship, gamification, and strong institutional support (Deci & Ryan, 2000; Teixeira et al., 2018). Students participate most actively when they feel personally inspired, appropriately challenged, and supported by their academic environment.

Intrinsic motivation provides the foundation for creativity and exploration, but must be complemented by opportunities that validate student effort, such as competitions, workshops, and recognition systems (Fayolle & Liñán, 2014). Mentorship enhances students' confidence and offers concrete guidance through the complexities of the entrepreneurial process (Ratten, 2017). Gamification strengthens engagement by making learning interactive and progression-oriented (Liguori & Winkler, 2020).

Institutional support remains essential. Universities that invest in startup infrastructure and interdisciplinary collaboration send a strong message that entrepreneurship is central to their mission (OECD, 2019). These systems reduce barriers, encourage participation, and cultivate an entrepreneurial culture that benefits both students and the broader community.

For the University of Montenegro, the mechanisms described here contribute not only to increased student participation but also to strengthening national innovation capacities (Moreno & Müller, 2022). As higher education continues to evolve, integrating evidence-based motivation strategies will be key to ensuring that universities remain engines of creativity, innovation, and regional development.

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