

ACADEMIC STAFF TRAINING FOR ACADEMIC ENTREPRENEURSHIP: PHILOSOPHICAL, SOCIOLOGICAL, PSYCHOLOGICAL, PEDAGOGICAL DIMENSIONS

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Annotation. This article presents a conceptual framework for training academic staff for academic entrepreneurship within the university's professional development system, grounded in the principles of interdisciplinary theoretical integration. It is argued that effective training requires authentic engagement in educational, research, and innovation-driven projects that reflect the complexity of real-world challenges in higher education and its intersection with business and society. The theoretical foundation of the training academic staff for academic entrepreneurship within the university's professional development system is constructed through the synthesis of philosophical, sociological, psychological, and pedagogical theories and concepts. These include social, cognitive, and radical constructivism, existentialism, and pragmatism (philosophy); theories of social capital, social entrepreneurship, and social learning (sociology); the theory of personal development (psychology); and lifelong learning, adult learning theory, transformative learning, and experiential learning (pedagogy). The integration of these theoretical underpinnings enables a holistic understanding of academic entrepreneurship as a dynamic and reflexive practice, fostering autonomy, agency, and institutional innovation. Drawing on Kolb's experiential learning cycle, comprising concrete experience, reflective observation, abstract conceptualisation, and active experimentation, the study positions academic entrepreneurship not merely as a set of competencies to be acquired, but as a transformative process of personal and professional development. The article contributes to the discourse on higher education reform by proposing a systems-based approach to academic staff development, one that aligns individual growth with institutional transformation. It highlights the potential of experiential learning environments to cultivate entrepreneurial readiness and reframe professional identity in response to evolving academic and societal demands.

Keywords: academic staff; academic entrepreneurship; social constructivism; cognitive constructivism; radical constructivism; existentialism; pragmatism; theory of social capital; social entrepreneurship; social learning; theory of personal development; lifelong learning; adult learning theory; transformative learning; experiential learning.

Підготовка науково-педагогічних працівників до академічного підприємництва: філософічні, соціологічні, психологічні та педагогічні аспекти

Анотація. У статті представлено концептуальну рамку підготовки науково-педагогічних працівників до академічного підприємництва в умовах системи професійного розвитку університету, що ґрунтується на принципах міждисциплінарної теоретичної інтеграції. Обґрунтовується, що ефективна підготовка передбачає автентичне залучення до освітніх, наукових та інноваційних проєктів, які відображають складність реальних викликів вищої

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освіти та її взаємодії з бізнесом і суспільством. Теоретичне підґрунтя підготовки науково-педагогічних працівників до академічного підприємництва в межах університетської системи професійного розвитку сформовано шляхом синтезу філософських, соціологічних, психологічних і педагогічних теорій і концепцій. До них належать: соціальний, когнітивний і радикальний конструктивізм, екзистенціалізм і прагматизм (філософія); теорії соціального капіталу, соціального підприємництва та соціального навчання (соціологія); теорія особистісного розвитку (психологія); концепція неперервного навчання, теорія навчання дорослих, трансформативне навчання та досвідне навчання (педагогіка). Інтеграція цих теоретичних засад забезпечує цілісне розуміння академічного підприємництва як динамічної та рефлексивної практики, що сприяє автономії, суб'єктності та інституційним інноваціям. Спираючись на цикл досвідного навчання К. Колба, який охоплює конкретний досвід, рефлексивне спостереження, абстрактну концептуалізацію та активне експериментування, дослідження розглядає академічне підприємництво не лише як набір компетентностей, що мають бути засвоєні, а як трансформаційний процес особистісного та професійного розвитку. Стаття робить внесок у дискурс реформування вищої освіти, пропонуючи системний підхід до професійного розвитку науково-педагогічних працівників, який узгоджує індивідуальне зростання з інституційною трансформацією. Акцентується потенціал середовищ досвідного навчання у формуванні підприємницької готовності та переосмисленні професійної ідентичності відповідно до змін академічного та суспільного контексту.

Ключові слова: науково-педагогічні працівники; академічне підприємництво; соціальний конструктивізм; когнітивний конструктивізм; радикальний конструктивізм; екзистенціалізм; прагматизм; теорія соціального капіталу; соціальне підприємництво; соціальне навчання; теорія особистісного розвитку; неперервне навчання; теорія навчання дорослих; трансформативне навчання; досвідне навчання.

Introduction

At the outset of the twenty-first century, academic entrepreneurship has emerged as a strategically significant dimension of higher education transformation. Universities are increasingly positioned not merely as educational and research institutions, but as active agents of socio-economic development, capable of generating innovation, facilitating knowledge transfer, and cultivating entrepreneurial ecosystems. Within this context, there arises an urgent need to prepare academic staff for the effective enactment of entrepreneurial functions. The training of academic staff for engagement in academic entrepreneurship constitutes a complex, interdisciplinary endeavour that demands a systemic approach and robust theoretical legitimation. It entails not only the development of entrepreneurial competencies, but also a fundamental rethinking of the lecturer's role as a change agent, innovator, and strategic partner within the university. To organise the training effectively, it is essential to undertake a comprehensive analysis of the theories and conceptual frameworks underpinning this process.

An analysis of the theoretical foundations enables the delineation of the boundaries and functions of academic entrepreneurship within the educational context; the construction of a theoretical model for the training of academic staff that integrates pedagogical, managerial, and innovative components; the alignment of the training with institutional strategies for university development; the design of diagnostic tools for assessing academic staff readiness for entrepreneurial engagement; and the assurance of scientific validity in professional development programmes, thereby fostering the emergence of new research trajectories.

Given the multifaceted nature of academic staff training for academic entrepreneurship, its theoretical underpinnings shall be examined through the lens of several disciplinary domains, including philosophy [8, 19, 22], psychology [18], sociology [10], and pedagogy [21].

The formulation of the article's purpose. The purpose of this article is to undertake a critical analysis of the theoretical foundations underpinning the training of academic staff for engagement in academic entrepreneurship.

Results

Among the philosophical frameworks that underpin the development of university academic staff readiness for academic entrepreneurship, constructivism occupies a prominent position within scholarly discourse. Its application has been widely debated in academic literature by a range of researchers, who emphasise the active construction of knowledge based on prior experience, previously acquired understandings, and individual perceptions of empirical reality [22]. The central premise is that new facts and information are synthesised with existing conceptual constructs, and that identifying the principles and regularities of this process provides a foundation for enhancing educational practice.

This process necessitates careful consideration of the learner's characteristics, as well as the contextual conditions in which learning occurs, factors that have informed the development of cognitive, social, and radical strands of constructivism [22]. Social constructivism assigns particular importance to the context in which education is enacted (in this case, the training of academic staff for academic entrepreneurship) and highlights the role of collegial collaboration, interpersonal interaction, and productive communication. Cognitive constructivism posits that human cognitive development follows a structured trajectory, comprising successive stages. Radical constructivism, meanwhile, underscores the construction of knowledge for its functional application, thereby emphasising its utility [22].

In light of the core tenets of constructivism, its application in the training of academic staff for academic entrepreneurship is both justified and pedagogically sound. The utilisation of individuals' prior experience, knowledge, and skills serves as a foundation for comprehending the specificities of the contemporary innovation landscape, harnessing creative potential, cultivating innovative ideas, and adopting non-standard solutions. Collaborative engagement and collegial learning, in our view, constitute essential features of the modern university-based professional development system. These elements are particularly significant for fostering entrepreneurial thinking, mastering negotiation techniques, building teams of like-minded individuals, and cultivating a sense of social responsibility in the implementation of entrepreneurial initiatives.

The structured nature of cognitive development, within the context of this study, implies a gradual acquisition of knowledge and the progressive development of skills and competencies necessary for academic staff to design technology transfer models, launch start-ups, and engage in related entrepreneurial activities. Thus, the constructivist paradigm (and its adoption as a foundation for training academic staff for academic entrepreneurship) provides a basis for shaping a personalised trajectory of professional development. It also facilitates the integration of research, teaching, instructional design, international collaboration, and entrepreneurial practice.

Within the framework of existentialism [19], primary emphasis is placed on the uniqueness of each individual, who consciously exercises personal choice through self-determination and self-knowledge, and assumes responsibility for their own self-realisation. According to existentialist thought, it is essential to create conditions conducive to the development of an individual's creative potential, personal growth, and active participation in societal life. The extrapolation of existentialist principles to the professional domain necessitates an understanding of academic staff development through the lens of professional self-determination and self-reflection, including the identification of personal strengths and challenges to be addressed. In line with these ideas, the academic staff assumes responsibility for their own professional practice.

We consider it both appropriate and necessary to substantiate the relevance of existentialist ideas in the context of training academic staff for academic entrepreneurship. The emphasis on individual uniqueness implies the freedom to choose one's path in developing academic entrepreneurship, grounded in reflexive professional self-determination. The recognition of oneself as a professional, alongside an awareness of personal strengths and

limitations, enables individuals to focus on cultivating internal resources and adapting to changes within both the broader educational system and the specific academic environment of the university. Reflexivity, in this regard, is constitutive of internal readiness for innovation design, creative initiative, and entrepreneurial enactment. It also facilitates the overcoming of doubt and uncertainty, which are viewed not as obstacles but as integral components of professional development.

From the standpoint of pragmatism [8], education is conceived as a vital social institution whose primary function lies in the formation of life experience that holds intrinsic value in real-world contexts. In accordance with this perspective, the training of academic staff for academic entrepreneurship within the university's professional development system should be understood as a continuous process of reorganisation, reconstruction, and integration of prior experience under evolving conditions. This process necessitates adaptation and the pursuit of new modes of enactment within both personal and professional domains, thereby opening pathways for initiating independent entrepreneurial activity, engaging in knowledge transfer projects, or launching educational and scientific start-ups.

The training presupposes, above all, personal development that takes into account individual aptitudes and dispositions, and seeks to unlock potential by building upon academic staff's strengths and intrinsic motivation. When combined with the acquisition of new knowledge, skills, and competencies, this approach enables success in academic entrepreneurship. It is important to emphasise that, in pragmatist philosophy, particular value is attributed to knowledge acquired through experience and experimentation – knowledge that has been validated through practice. This aligns with the pragmatist emphasis on learning through action, which is of critical importance in selecting interactive, project-based, and innovative forms and methods of professional development tailored to the specificities of the university's academic environment and the individual characteristics of its academic staff.

Thus, grounding the training of academic staff for academic entrepreneurship in the principles of pragmatism enables the use of knowledge as a tool for successful self-realisation and innovation. It promotes the adaptive and effective utilisation of experience and experiential learning, thereby contributing to the cultivation of innovative thinking and entrepreneurial activity among university academic staff.

In this study, the training of academic staff for academic entrepreneurship is informed by sociological theories, particularly the theory of social capital [10] and the theory of social entrepreneurship [17]. From the perspective of social capital theory, the academic community and its capacity to fulfil the university's functions depend on "a constellation of human potential characteristics, such as teamwork skills, self-confidence, optimism, willingness to collaborate, emotional resilience, tolerance, responsibility, the ability to embrace challenges, and readiness for change" [1, p. 23]. In the context of training academic staff for academic entrepreneurship, these same attributes of human potential are particularly vital within professional development programmes aimed at cultivating entrepreneurial readiness among university staff. Our reasoning is supported by foreign researchers, who assert that "trust is a fundamental social virtue that generates prosperity" [11, p. 26], and that "social capital... serves as a mediator between education and intentions toward social entrepreneurship" [17, p. 2081].

In our case, academic entrepreneurship not only contributes to the innovative advancement of the university and the economic growth of society but also addresses pressing social challenges. In light of the foregoing, and considering the evolving role of the modern university in societal development, it appears logical to extrapolate the core principles of social entrepreneurship theory to the development of academic entrepreneurship, which is similarly oriented towards resolving socio-economic issues.

For the purposes of this study, particular significance is attributed to the theory of social learning, situated within the domains of psychology and pedagogy. According to researchers, "social learning theory (A. Bandura) conceptualises personal development as the acquisition of

habits, skills, and competencies through interaction with others. The source of personal development is an externally organised system of reinforcement (rewards and sanctions), through which personality can be shaped throughout the lifespan” [6, p. 9]. It is important to emphasise that the professional development of academic staff constitutes an integral aspect of their professional activity, as educators learn not only through formally organised educational programmes or courses. Learning occurs continuously through reflection on personal practice, analysis of colleagues’ experiences, and engagement with current issues that accompany teaching, research, and international collaboration.

Direct involvement in project-based activities and task-oriented teams, as well as communication and cooperation within offline and online communities, exemplifies the practical application of social learning theory in professional development. Given that the training of academic staff for academic entrepreneurship is conceptualised here as a component of their continuous professional development, it is deemed necessary to draw upon the theory of personal development [18] within the psychological sciences.

Researchers assert that “personality development may be defined as a process of quantitative and qualitative transformations occurring within the organism, psyche, intellectual and spiritual domains of the individual, under the influence of external (natural and social environment, upbringing, collective activity, communication) and internal (anatomical and physiological predispositions, personal agency realised through activity), as well as regulated (education and self-education) and unregulated (objective, spontaneous environmental influences) factors” [2, p. 44].

Scholars emphasise the intrinsic interrelation between personal and professional development in educators, characterised by existential, activity-based, and value–worldview dimensions. This development is shaped by the integration of internal and external factors, and its overarching aim is to facilitate adaptation to civilisational transformations and educational challenges. Grounding the training of academic staff for academic entrepreneurship in this theoretical framework substantiates the cultivation of initiative and creativity, the key drivers in the generation of new ideas and the development of innovative educational and scientific outputs. It also supports the enhancement of reflexivity and self-awareness, enabling individuals to recognise their identity as persons, professionals, and citizens, and to articulate their personal and professional development trajectories.

Moreover, this approach fosters praxeological readiness to confront diverse challenges and to engage in interdisciplinary projects underpinned by a broad spectrum of general competencies, including critical and analytical thinking, interpersonal collaboration, teamwork, communication, and digital literacy.

As far as the training of academic staff for academic entrepreneurship is situated within the university’s professional development system, it is appropriate to examine this process through the lens of contemporary pedagogical theories and conceptual frameworks. It should first be noted that a substantial body of scholarly research has been devoted to exploring the professional development of academic staff from multiple perspectives. This sustained attention is justified by the recognition that “pedagogical practice requires transformation, continuous and systematic renewal of knowledge, skills, and competencies, professional mobility, and the capacity to respond to contemporary challenges” [5, p. 46].

At the beginning of the twenty-first century, the concept of lifelong learning gained renewed prominence. Researchers identify several key drivers of its development, including: “the accelerating rate of knowledge obsolescence; aspirations for enhanced professional and social status; the need for educational access across diverse population groups; the advancement of information and communication technologies; the transformation of teaching formats and methods; globalisation processes; the erosion of traditional life-stage divisions between learning, work, and professional devaluation; shifting employer expectations

regarding workforce competencies; the expansion of academic autonomy among educational institutions; and demographic changes marked by population ageing” [3, p. 8].

Accordingly, in this study, the training of academic staff for academic entrepreneurship is conceptualised through the prism of lifelong learning theory [21], which entails “continuous, systematic, and sequential improvement, and the multifaceted, holistic, and meaningful development of the individual throughout life, enhancing their capacity for professional and sociocultural adaptation in a rapidly changing world” [3, p. 28]. This framework encompasses formal, non-formal, and informal learning modalities.

From the perspective of the university’s professional development system, formal learning aimed at cultivating academic staff readiness for academic entrepreneurship involves participation in specially designed professional development programmes, continuing education courses, and similar structured initiatives. In terms of non-formal learning, the readiness is fostered through training sessions, seminars, project-based activities, workshops, and other formats of professional development. Informal learning is realised through self-directed learning, engagement with open educational and scientific resources, everyday professional practice, and reflective analysis of personal experience.

Within the context of this study, it is pertinent to refer to adult learning theory as proposed by Knowles [12], which posits that adult learners should be regarded as autonomous individuals responsible for making independent decisions about their learning. The organisation of adult education must be grounded in the learners’ own experiences, which serve as valuable resources for learning. Scholars further argue [13] that adults possess specific learning needs and exhibit intrinsic motivation to engage in educational activities. In light of this, the training of academic staff for academic entrepreneurship within the university’s professional development system should be based on the principle of autonomy, which activates the capacity to initiate and implement entrepreneurial projects.

It is evident that the effectiveness of academic entrepreneurship is closely linked to the life experience of educators and, more specifically, to their professional experience. Given the motivational orientation of adult learners, we contend that academic entrepreneurship represents a form of self-realisation for academic staff, a means of cultivating a positive professional identity and enhancing personal well-being.

The role of educators engaged in adult learning is of considerable significance. As noted, “from the standpoint of andragogy, the educator’s task is to support and encourage the development of the adult learner and to assist in determining the scope and content of learning, as well as in locating relevant information. The educator is responsible for creating the necessary favourable conditions for adult learning. Above all, they ensure a positive psycho-emotional climate and comfortable physical learning conditions, characterised by mutual respect among participants and empathetic interpersonal relations. The educator is also accountable for the scientific and methodological support of the learning process, in accordance with the programme they independently select” [7, p. 83].

For the purposes of this study, these principles are essential in designing the scientific and methodological framework for training academic staff for academic entrepreneurship, and for organising their learning within the university’s professional development system.

Of particular research interest is the theory of transformative learning. Transformative learning centres on critical reflection [16], which, in the context of training academic staff for academic entrepreneurship, involves not only reflection on personal experience but also on underlying beliefs and cognitive frameworks. This process entails a shift from reproductive to strategic thinking and a recognition of the tensions between the demands of the contemporary, highly competitive higher education and research landscape and entrenched conceptions of professional pedagogical practice, highlighting the imperative for its transformation.

The extrapolation of transformative learning principles into the professional development of academic staff, to foster readiness for academic entrepreneurship, draws

attention to the potential of learning organised within interdisciplinary teams. Such teams should include individuals with varying levels of expertise in entrepreneurial practice and should actively engage colleagues with demonstrable success in academic entrepreneurship.

In accordance with the principles of experiential learning theory, the training of academic staff for academic entrepreneurship is conceptualised as a process of experience transformation, wherein knowledge is generated through the transformation of lived experience. This perspective emphasises that the mere acquisition of theoretical knowledge about academic entrepreneurship is insufficient; rather, it is essential to actively engage academic staff in practical educational, research, and innovation-oriented projects.

Experiential learning, as outlined in the literature, comprises several key stages: concrete experience, reflective observation, abstract conceptualisation, and active experimentation [14]. These stages inform the structuring of academic staff training for academic entrepreneurship. Within this framework, the process of engaging with and reflecting upon one's own experience is viewed as an opportunity to re-evaluate personal identity and professional self-conception, to identify avenues for further personal and professional growth, and to pursue meaningful self-realisation. Researchers note that "experiential learning is most effective when it occurs in authentic contexts that reflect the complexity of real-world problems" [9, p. 57]. The university's professional development system is uniquely positioned to provide such contexts, ones that mirror the actual challenges and dynamics of higher education, including collaboration with industry at both national and international levels. This system offers a constructive environment for cultivating academic staff readiness for entrepreneurial engagement. Moreover, "experiential learning fosters autonomy and self-direction, which are essential traits for entrepreneurial activity within the academic environment" [15, p. 12]. This principle further substantiates the theoretical foundation of our study.

Conclusions

Based on the conducted analysis, we identify a range of theories and conceptual frameworks drawn from diverse fields of scholarly inquiry that collectively underpin the preparation of academic staff for engagement in academic entrepreneurship within the university's professional development system. These include: Philosophy (social constructivism, cognitive constructivism, radical constructivism, existentialism, and pragmatism); Sociology (the theory of social capital, the theory of social entrepreneurship, and the theory of social learning); Psychology (the theory of personal development); Pedagogy (the concept of lifelong learning, adult learning theory, transformative learning theory, and experiential learning theory).

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