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Project-based Activities and Startup Movement in Creative Industries as a Field of Mentorship in Higher Education

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ABSTRACT

This article presents the findings of a study on the development of project-based activities in the creative industries, examined as a field of mentorship in higher education. The authors emphasize that the creative industries, with their intellectual and often collaborative or project-based nature, act as a driver of the modern economy. The research employed scientific methods such as analysis, synthesis, and classification. The informational base consisted of data from the Scientific Electronic Library (NEB), materials from Google Scholar relevant to the topic, and methodological resources on mentorship within the Russian economic framework (both federal and regional levels). The aim of the study was to explore the essence of mentorship in higher education within the context of project-based activities in the creative industries and to develop tools for effective project mentoring in this domain. The outcomes of the research include a refined definition of “project-based mentorship in higher education,” a rationale for the need to study a Russian mentorship model, identification of ten specific forms of mentorship, the creation of a conceptual framework for project mentoring in the creative industries in higher education, and the development of original initiatives to support its advancement. These results may be used to promote the Russian model of mentorship on the global stage. The findings may also be useful to university project participants, startup mentors, and creative industry professionals.

Keywords: mentoring; higher education; creative industries; startup; technological entrepreneurship

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INTRODUCTION

Creative industries, which rely on the intellectual component of individual, group, or project creativity, can be called a driver of the country's economic development. Firstly, they contribute to the GDP growth of leading countries through developments in digital technologies; secondly, they serve as a platform for skill development and the application of emerging competencies of university students; thirdly, they participate in national rankings and competitions at both global and local levels, which, in turn, defines the project-based nature of product (goods, services) creation — from the idea embedded in a startup (project) to its testing, scaling, and commercialization in the market [1]. This highlights the connection between the concepts of project activity and the startup movement in the creative industries, which in this study are considered as an area of mentorship in higher education. They are characterised, firstly, by individual, group, or project creativity, and secondly, by the development of competencies among student youth on one hand, and the implementation of startup projects of various orientations on the University Technology Entrepreneurship Platform (UTP)¹ on the other. Thirdly, the creative industries and startup movements are characterized by their project-based nature, which is reflected in the specific outcomes of startup projects and the mentorship provided during their implementation.

It is important to note the relevance of creative industries as one of the directions of university technological startups,² the new stage of

implementation of which began with the adoption of Federal Law No. 330 from 08.08.2024 (hereinafter — Federal Law No. 330). This regulatory legal act defines the development vector of this sector of the economy and serves as confirmation of the state's attention to it. Despite the short period of time from the adoption in 2021 of the “Concept for the Development of Creative Industries and Mechanisms for Their State Support in Major and Largest Urban Agglomerations until 2030”³ to the approval of Federal Law No. 330, specific directions for supporting the development of creative industries through the efforts of students in collaboration with university faculty have been established in higher education institutions. First, this is about the startup movement in the Russian economic space, which began in 2020 and is understood in this study as university activity culminating in the defense of a startup (as a thesis) and its demand (including in the form of an MVP⁴) for acceleration platforms. The latter allow bringing to market an idea that is of interest to a specific business or grantor.⁵

RESEARCH METHODOLOGY

The information base of the work consisted of the works of the Scientific Electronic Library (SEL — eLIBRARY.RU), research by foreign schol-

and Science of Russia. (Official website). URL: <https://rating.univertechpred.ru/?page=8> (accessed on 09.02.2025).

³ “Concepts for the Development of Creative Industries and Mechanisms for Their State Support in Major and Largest Urban Agglomerations until 2030” from 20.09.2021 No. 2613. URL: <http://static.government.ru/media/files/HEXNAom6EJunVixBCjIAAtAya8FAVDUfP.pdf> (accessed on 29.09.2024).

⁴ MVP (Minimum Viable Product) — minimally viable.

⁵ Support for projects (commercial pilots) that meet the criteria of MTS: the presence of a viable product or ready-to-implement technology; the value of the product confirmed by real customers; the product/technology's alignment with the business verticals of MTS, etc. MTS Startup Hub, URL: <https://startup.mts.ru/> (accessed on 29.09.2024); support for “...travel startups, tourism companies, or independent project teams with a product development stage no lower than MVP”. Moscow Travel Factory. URL: <https://travelfactory.moscow/> (accessed on 29.09.2024).

¹ The University Technology Entrepreneurship Platform is part of the federal project “Technologies” and is a set of activities aimed at involving representatives of the university community in entrepreneurial activities. URL: https://minobrnauki.gov.ru/platform_utp/

² In 2024, the “creative industries” category featured 12.3% of student startups (2nd place among eleven categories); in 2023, it was 14.5% (also 2nd place); in 2022, it was 11.7% (3rd place among seven categories) according to the Ministry of Education

ars (obtained through Google Scholar), as well as methodological materials on mentoring from the Russian economic space with a focus on the regional aspect (Republic of Tatarstan, Ulyanovsk and Tyumen regions).⁶ The selection of regions is based on the following criteria:

- the number of measures to support student research projects (SRP) and scientific mentoring in 2024 according to the Science — ID project, implemented by the Centre for the Development of Scientific and Educational Initiatives with the support of the Ministry of Science and Higher Education of the Russian Federation⁷;

- the results of the research by P.A. Ambarova and N.V. Shabrova in the field of support measures for R&D and scientific mentoring at the regional level (highlighting Ulyanovsk as the region with the highest number of such measures — 14, Tatarstan — 8, and Tyumen as the region with a minimal number of support measures — 2) (*Table 1*) [2];

- the number of projects (startups) on the UTP Platform in the Top-1000 and Top-50 rankings, reflecting the number of startups from the creative industries present in them⁸ (*Table 1*).

The object of the research, which employed methods of scientific analysis, as well as synthesis and classification, was mentorship as an independent direction of higher education activities in the Russian economic space, based on traditional spiritual and moral values; the subject was project mentorship implemented

for the development of creative industries. The purpose of the paper is to reveal the essence of higher education mentorship in the field of project activities of creative industries and to develop tools for their development. The authors addressed the following tasks: a) the formation of a characterization of mentorship in Russian higher education through the prism of project activities, startup movements, and the effectiveness of mentorship in these areas; b) conducting an analysis of the methodological support for mentorship in the Russian educational space; c) clarifying the concept of “project mentorship in higher education”; d) differentiating the concepts of “project mentorship in higher education” and “mentorship” in general within the educational process based on the analysis of researchers’ papers and methodological materials; e) developing a scheme for project mentorship in creative industries in higher education, reflecting subject-object interactions and based on the characteristics of the Russian model, clarifying the results of project mentorship in creative industries in higher education by specific areas.

The search in the SEL was conducted using two groups of keywords: “mentorship, higher education,” “mentorship models, higher education” in accordance with the following conditions: a) by publication area (through analysis of their titles, abstracts, keywords); b) by type (journal articles, books, deposited manuscripts, dissertations, reports, patents, datasets, grants); c) parameters (considering morphology); d) search period (by publication date).⁹ Papers referenced by authors of studies with publications in the RSCI, relevant to the present research, were also analyzed. Articles were selected based on principles such as:

⁶ The selection of regions was carried out randomly based on the criterion of the availability of necessary materials.

⁷ Science ID (portal). URL: <https://scienceid.net/> (accessed on 09.02.2025).

⁸ According to the organizers of the resource, “...the Top-50 is a selection of the best projects from the Top-1000 startups ranking, which is compiled annually using a unique methodology developed specifically for the federal project “UTP Platform” by specialists from the National Research University Higher School of Economics”. “...The Top-50 includes 25 startups with a high degree of readiness and already secured investors, and 25 nascent but promising early-stage projects...” The TOP-50 best university startups of 2024 have been identified.

⁹ The exclusion of publications such as “conference materials” is related to the necessity of analyzing papers on the researched topic, where the main results of the study over a significant observation period of the object are reflected and the research methodology is presented.

Table 1

Number of Startups on the University Technological Entrepreneurship Platform in Top 1000 and Top 50 Rankings and Number of Regional Support Measures for Student Research and Scientific Mentoring in 2024, units

Region	Number of projects				Number of measures to support research and scientific mentoring
	Top – 1000		Top-50		
	Total	Creative industries	Total	Creative industries	
Republic of Tatarstan	251	33	8	0	8
Tyumen	17	0	1	0	2
Ulyanovsk	2	0	1	0	14

Source: compiled by the authors based on [2, p. 69] and data from the ANO "Center for the Development of Scientific and Educational Initiatives". URL: <https://scienceid.net/support-measure-map/index> (accessed on 09.01.2025).

1) in-depth exploration of issues significant to the present study;

2) novelty of theoretical/practical results, methods, hypotheses;

3) relevance to the current work in terms of the period of the study.

The search for publications in Google Scholar was conducted under the following conditions: publication date – no later than 2024; relevance to the research topic – by date; type of articles – any.¹⁰

MENTORSHIP IN HIGHER EDUCATION AS AN OBJECT OF RESEARCH AND MANAGEMENT: ESSENCE, MODELS

L.E. Zavarzina examines the mentorship of student youth from the perspective of the tradition of spiritual and moral education in the Russian educational space, starting with "...the first domestic university – the Slavic-Greek-Latin Academy, created with the direct participation

of Simeon Polotsky..." [3, p. 97]. She notes the connection between education and mentorship, their unity based on "pedagogical tradition", which in her paper is understood as "a historically established complex, stable, and conditionally long-lasting set of norms and rules in education (teaching and upbringing) existing within a single pedagogical area, transmitted from generation to generation mainly in an unwritten form, and orientated towards some idealized model of student preparation..." [3, p. 96; 4, p. 32].

The paper by S.V. Velieva addresses issues in the field of "...the experience of developing and testing a project for extended support of novice teachers as an effective mentoring practice..." [5, p. 14]. The researcher's project includes the practice of supporting students both within the framework of undergraduate studies (first stage), master's programs (second stage), and doctoral studies (third stage); as well as during the process of employment, entering the profession, and engaging in direct professional activities (continuously, extended) [5, p. 16]. At the same time, the directions for supporting the mentee

¹⁰ The terminology of the Google Scholar search engine was used, including the following criteria: "all time" (period specified); "by relevance" (date specified); "any articles" (review articles specified).

include teaching, psychological-pedagogical, scientific-educational, innovative, research, and project activities [5, p. 16].

The study by F. Sh. Mukhametzyanova and N. N. Islanova reflects the relevance of modern mentoring technologies in the context of Russian business education, "...in supporting startups, in training categories of specialists who need the development and improvement of such modern personal qualities as 'creativity', 'inventiveness', 'innovative thinking', 'the ability to work in multitasking conditions'..." [6, p. 3]. These authors note the effectiveness of modern mentoring technologies, which "...are aimed at increasing the competitiveness of specialists, on the one hand, and on the other hand, allow them to be prepared as client-oriented, cross-functional individuals with developed professional skills and competencies that the modern Russian labor market needs, and such graduates from schools and universities are expected in all areas of societal life today..." [6, p. 3]. One of the components in assessing the level of formation is the presence of basic skills — soft skills — in both the mentor and the mentee, including "critical and logical thinking" [6, p. 3]. The focus of the researchers' study is the project "Regional System for Organizing Mentorship of Educational and Administrative Personnel Based on Network Interaction", which involves "...training mentor teachers in a network system: network and school mentor-coaches, mentor-tutors, and, accordingly, mentor-supervisors..." [6, p. 3].

A. V. Dmitrova examines "...the specifics of understanding the phenomenon of mentorship in relation to higher education...". At the same time, the researcher pays special attention to the various mentoring models currently implemented in Russian higher education institutions, such as:

- reverse, when "...younger employees act as mentors for older colleagues and help them improve their skills in using information and communication technologies to solve professional tasks...";

- directed at "...supporting entities engaged in entrepreneurial activities ...";

- multivariate (including mentorship, extending to foreign students, young scientists) [7, p. 29].¹¹

A. V. Dmitrova identifies the following mentoring practices across various directions, taking into account their application forms in domestic universities (teacher — student; employer — invited intern-student; student — student; teacher — teacher; teacher — college student; student — school student): career guidance, educational-professional, personal development, professional. The scholar interprets mentorship "as an educational technology characteristic of federal universities", emphasizing the systematic and multidimensional nature of this phenomenon [7, p. 31]. Regarding the topic of the present study, it should be noted that this author formulates recommendations for improving the effectiveness of mentoring in the university environment as conclusions, without considering its implementation in professional activities.¹²

In the publication by American experts R. G. Lucas-Thompson, R. L. Miller, M. J. Moran, and others (Google Scholar search area "mentoring high school"), issues concerning the potential expansion of "mindfulness-based interventions" (MBIs) through a youth mentoring program are analyzed. These authors note that activities conducted through MBIs contribute to strengthen-

¹¹ The author examines the forms of implementing mentoring practices using the examples of three federal universities — Ural Federal University named after the first President of Russia B. N. Yeltsin (UrFU), Siberian Federal University (SFU), North-Eastern Federal University named after M. K. Ammosov (NEFU), as well as two national research universities — Nizhny Novgorod State University named after N. I. Lobachevsky (NNGU), Kazan National Research Technological University (KSTU).

¹² In particular, A. V. Dmitrova notes that "the effectiveness of mentoring at the university can be enhanced by diversifying the forms of its implementation with the involvement of practitioner mentors from specialized organizations, increasing students' awareness of the mentoring practices being implemented, and supporting the mentoring institution at the state level..." [7, p. 31].

ing the mental health of adolescents; however, young people with mental health disorders do not have access to this program. Experts found during the work that adolescents who received mentoring individually (that is, one-on-one) demonstrated more favorable changes in emotion regulation and symptom internalization [8].¹³ The relevance of this material to the topic of the present study is justified by the necessity to consider mentorship implemented within the framework of project activities and startup movements in the field of creative industries. Moreover, the subjects of mentorship (taking into account foreign experience) can be representatives of youth, university students, who have limited health capabilities (features). This circumstance complements the agenda of mentorship as an educational technology within the framework of social support measures for the learning youth, relying on such qualities of a mentor as “communication skills, pedagogical tact, empathy, initiative, stress resistance, adaptability...” [8, p. 31].

The topic of mentorship for students with special adaptive capabilities is addressed in the work of N. A. Anisimova — they are perceived as “...a special category of young people whose health or developmental conditions hinder their self-service, independent mobility, orientation, self-control, communication, mastering educational programs, in other words, adaptation in society without specially created conditions...” [10, p. 5]. The researcher has justified the need to involve a mentor teacher — an “inclusive tutor” — in such cases.

Based on the conducted analysis of scientific works on the keyword group “mentorship, higher education”, it seems possible to use the

aforementioned works in the present study, specifically in areas such as mentorship (level of education); mentorship methods / methodological approaches to mentorship; the essence of mentorship; the compliance of these works with the criteria of project activities (*Appendix, Table 1*).¹⁴

In the search area “mentorship models, higher education” in the SEL over the past year, five works have been identified. Thus, S.N. Korneva and N.N. Rybakova, as a mentorship model, investigate aspects of the project “The Role of a Mentor in the Professional Growth of a Teacher”,¹⁵ within which network interaction is developed according to the “student-teacher” model [11].

The focus of the paper by L. P. Kostikova, A. S. Olkov, and O. S. Fedotova is on issues related to identifying ways to improve the effectiveness of scientific supervision in graduate school (postgraduate studies) [12]. Scientists, emphasizing the importance of the role of a scientific supervisor in the Year of the Teacher and Mentor, analyze the effectiveness of the interaction between “scientific supervisor — graduate student (adjunct)” based on indicators of publication activity (based on skills in working with databases such as RSCI, eLIBRARY.RU, etc.); as well as mastery of the conceptual apparatus (as a condition of the research). According to these authors, the scientific supervisor of the research work is a mentor to the graduate student (junior researcher), embodying the essence of mentorship within the framework of personal and scientific interaction.

¹³ This topic is also addressed in the work of A. O. Levchenko, where the initial hypothesis of the medical term “internalization of symptoms” is the following assumption: “... girls tend to internalize their problems, depression, or anxiety, while boys externalize, committing violence against people or property...” [9, p.100].

¹⁴ The criteria for project activities have been formulated by the authors based on: a) a review of researchers’ works; b) the differentiation of higher education mentorship and, in general, in the education system (based on the methodological aspects of mentorship, which are presented in the next part of this study); c) the authors’ own mentoring experience, including in the field of project research for student teams in the creative industries (2022–2024).

¹⁵ Implemented at MBOU “Secondary School No. 1 with In-Depth Study of Individual Subjects” in Buinsk (Republic of Tatarstan) — Secondary School No. 1 with In-Depth Study of Individual Subjects.

In the search area “mentoring models higher school” on Google Scholar, about 17 800 papers were identified.¹⁶ In the article by W. Nuis, M. Segers, S. Beusaert, a higher education mentoring program aimed at developing graduates’ employability skills is discussed [13]. Dutch scientists identified the effectiveness of such projects (due to the lack of confirmation) using theoretically developed indicators, creating and testing a new questionnaire to “measure” various types of mentoring support. The author’s model includes factors (related to types of support and their characteristics) such as trust and accessibility, emotional and network support, autonomy support, similarity, and empathy.

In the study by M. A. Hagler, K. M. Christensen, J. E. Rhodes, aspects of mentoring college students during their transition to higher education institutions are reflected [14]. The authors of this paper interpret mentorship as a system of relationships (mentorship network) based on a survey of 176 first-year university students who received support from mentors both in college and at the university. The publication emphasizes the importance of mentoring networks and the necessity for a young person to have multiple mentors.

Based on the analysis of scientific works on the group of keywords “mentoring models, higher education”, the aforementioned papers can be considered in terms of such directions of the present study as the level of education, mentoring model, activities within the framework of mentoring models, and the compliance of these works with the criteria of project activities (in the author’s version) (*Appendix, Table 2*).

It also becomes evident that there is a need to study the methodological support for mentoring in project activities within the Russian educational space (*Appendix, Table 1,2*).

¹⁶ Google Scholar. URL: https://scholar.google.com/scholar?as_ylo=2024&q=mentoring+models+higher+school&hl=ru&as_sdt=0,5 (accessed on 29.09.2024).

METHODOLOGICAL ASPECTS OF MENTORSHIP IN HIGHER EDUCATION IN THE RUSSIAN EDUCATIONAL SPACE: PROJECT ACTIVITIES, STARTUP MOVEMENT

In this part of the paper, the authors pose the research question: what is the methodological support for mentoring in project activities within the Russian educational space, including the field of creative industries, taking into account regional aspects? The initial document regulating this process is the Letter from the Ministry of Education of Russia No. A3–1128/08 from 21.12.2021 (hereinafter — Letter).¹⁷

In the process of analyzing the regulatory framework for this type of mentoring, the following features have been identified:

1. The concepts of forms and models of mentorship in various regional documents have their own interpretations: in the materials of L. N. Nugumanova and T. V. Yakovenko, the «teacher-teacher» mentorship form is explored [15, p. 15].¹⁸ In relation to the Ulyanovsk region, this term reflects the “models of mentorship implementation in additional education”: “student — student”; “teacher — student”; “teacher — teacher”; “specialist — student”¹⁹; in the methodological materials on this topic in

¹⁷ Letter from the Ministry of Education of Russia No. AZ-1128/08, from the Trade Union of Workers of Public Education and Science of the Russian Federation No. 657 from 21.12.2021 “On the Direction of Methodological Recommendations” (together with “Methodological Recommendations for the Development and Implementation of a System (Target Model) of Mentorship for Educators in Educational Organizations”, “Methodological Recommendations for Educational Organizations on the Implementation of a System (Target Model) of Mentorship for Educators”). URL: https://www.consultant.ru/document/cons_doc_LAW_418547/ (accessed on 21.09.2024).

¹⁸ L. N. Nugumanova, T. V. Yakovenko. Handbook. Mentorship: an effective form of education. Informational and methodological materials. Kazan: IRO RT; 2020. 51 p.

¹⁹ Methodological recommendations for organising mentorship among students of organisations implementing additional general education programs. Ministry of Education and Upbringing of the Ulyanovsk Region. 2020. 36 p. URL: <https://clck.ru/3DZW9Z> (accessed on 29.09.2024).

Tyumen, two global mentorship models are highlighted: North American, or “sponsorship mentorship”, and European, or “developmental mentorship”, as well as four methodological models applied in Russian practice: “student — student”; “teacher — student”; “teacher — teacher”; “specialist — student”.²⁰

2. Definitions of the concepts “mentorship models (organizations)” and “types of mentorship” differ: in the aforementioned materials by L. N. Nugumanova and T. V. Yakovenko, the interpretation of the former includes “traditional mentorship model (“one-on-one”); short-term or goal-oriented mentorship, etc. — column E (*Table 2*), that is, in the materials for Ulyanovsk, these terms reflect “types of mentorship relationships”.²¹ In the methodological materials for Tyumen, six types of mentorship are identified, including “mentorship for children in socially dangerous situations” (mentor is a child from the SDS group), which is reflected in column E (*Table 2*).

3. Materials on mentoring in project activities that reflect the specifics of creative industries for higher education have not been found by the authors (*Table 2*).

RESEARCH RESULTS: PRINCIPAL SCHEME OF MENTORSHIP IN THE HIGHER SCHOOL OF PROJECT ACTIVITIES, AUTHORS' INITIATIVES

Relying on the concept of “mentorship” as “...a universal technology for transferring experience, knowledge, forming skills, competencies, meta-competencies, and values through informal enriching communication based on

trust and partnership...”, project mentorship in higher education in this study is understood as an effective working mechanism, a central direction that is personalized and project-team-oriented, serving social demands for implementation at a high methodological level in higher education, with the positioning of project activity subjects based on traditional Russian moral values and the interests of the parties involved [15].²² This refined definition of project mentoring in higher education serves as the foundation for the present study.

Based on the conducted analysis of scientific works on the topic of methodological support for mentoring in the Russian educational space, it is possible to formulate the fundamental differences between “project mentoring in higher education” and “mentoring” in general within the educational process:

1. It is necessary to differentiate between approaches to understanding mentorship as a process and as a result: a) this position develops and complements the conceptual components of mentorship outlined in the article by E. G. Gindes, I. A. Troyan, L. A. Kravchenko, where a similar position is not presented [17]; b) a mentor in the field of higher education project activities is interested in the effectiveness of their work (unlike a project consultant-expert, who provides professional knowledge in the form of a [short] expert report); c) project mentorship in higher education contributes to the upbringing of youth based on traditional spiritual and moral values (not limited to brief expert consulting upon request).²³

2. The nature of project mentoring in higher education as a distinct type of activity, according to the authors of the aforementioned work [17],

²⁰ Development of the mentoring system in the activities of organizations for additional education of children. Methodological guide for institutions of additional education. Tyumen: TOGIRRO; 2021. 68 p.; According to the Letter (see above), it is about types of mentoring 3.2. (Types of mentorship for educational staff in an educational organization).

²¹ According to the Letter, it is about types of mentorship. 3.2. Types of mentoring for educational staff in an educational organization.

²² Nugumanova L. N., Yakovenko T. V. The desktop book “Mentoring: an effective form of learning”: The information method. Materials. 2nd edition, supplement, revision. Kazan: IRO RT, 2020. 51 p.

²³ In this part of the study, the authors rely on works in the aforementioned subject areas in SEL, Google Scholar.

Methodological Support for Mentoring in the Russian Educational Space

Methodological document/region/year	Mentoring area/educational level	Glossary: number of terms		
			Features	Forms/models of mentoring
L.N. Nugumanova T.V. Yakovenko. Mentorship: From Theory to Practice (Republic of Tatarstan, 2020)	For organisations engaged in educational activities in general education, additional general education, and secondary vocational education programs	More than 18 terms	Presented: - the project "Regional System for Organising Mentorship of Educational and Administrative Staff Based on Network Interaction", implemented by the Institute for the Development of Education of the Republic of Tatarstan under the patronage of the Russian Academy of Education; - digital environment "School Mentorship"	y-y ^b
Methodological recommendations for organizing mentorship among students of organizations implementing additional educational programs (Ulyanovsk, 2020) ^c	Additional education among students in organizations implementing supplementary educational programs	More 12	Mentorship program, including: - algorithm of actions for organizing mentorship in an educational institution; - algorithm for developing a Mentorship Program; - a standard "roadmap" for implementing the target mentoring model in an educational organization	S – S; S – T; T – T; St – S
Development of the mentoring system in the activities of organizations for additional education of children (Tyumen, 2021 ^d)	Preschool primary general education, basic general education, mentoring organizations among students of institutions implementing additional general education programs	More 15	Mentorship program, including: - algorithm for developing a mentorship program; - public summarization and promotion of practices	North American and European model; S – S; S – T; T – T; St – S

Source: compiled by the authors based on data [15; 16]^{*}

Note: a – regulatory documents presented in the analyzed source; b – S – S – "student – student"; T – S: "teacher – student"; T – T: "teacher – teacher"; St – L: "student – learner"; S – S: "specialist – student";

^{*} Nugumanova L.N., Yakovenko T.V. The desktop book "Mentoring: an effective form of learning": The information method. Materials. 2nd edition, supplement, revision. Kazan: IRO RT, 2020. 51 p.

Table 2

Essence			
	Models (organizations)/types of mentoring	Evaluation of mentoring effectiveness	Regulatory foundations of mentoring ^a
	Traditional mentoring model (or one-on-one mentoring); short-term or goal-oriented mentoring; speed mentoring; flash mentoring; virtual mentoring; reverse mentoring; self-directed mentoring; team mentoring	D. Kirkpatrick Model: – evaluation of the subject's reaction; – assessment of acquired knowledge or assessment of changes in the level of knowledge	2012–2019
	Traditional mentoring; peer mentoring; group mentoring; flash mentoring; remote (via the information and communication network "Internet") mentoring; reverse mentoring	Results of the implementation of the S – S model (fragment): – improvement of academic performance and enhancement of the psycho-emotional environment within the association (group) and educational organisation; – increasing the level of tolerance towards students with special educational needs, including those with disabilities. Results of the implementation of the S-T model (fragment): a high level of engagement of the mentee in all social, cultural, and educational processes of the educational organization	1993–2019
	Mentorship for children in socially dangerous situations (mentor – a child from the at-risk group); mentorship for gifted children (mentor – gifted child); mentorship in volunteer projects (mentor – volunteer); mentorship in project teams (mentor – project team or group); mentorship in career guidance work (mentor – real sector of the economy); mentorship for children with disabilities	Results of the implementation of the E-E model (fragment): – a high level of engagement of young (new) teachers in pedagogical work and the cultural life of the educational organization; – strengthening confidence in one's own abilities and developing personal, creative, and pedagogical potentials	1993–2020

c – Regional system of organizing mentoring of teaching and management staff based on network interaction. State Autonomous Educational Institution of Additional Professional Education "Institute for Education Development of the Republic of Tatarstan" (official website). URL: <http://www.irort.ru/ru/node/189> (accessed on 28.09.24); d – Development of a mentoring system in the activities of organizations providing additional education for children. URL: <https://clck.ru/3DZY8e> (accessed on 29.09.2024).

depends on the type of project in which the mentees are involved. For example: a) participation in a competition involves receiving prize places with/without material/immaterial rewards, which requires separate discussion to prevent conflicts within the project team; b) implementation of a project with a limited number of participants (i.e., not everyone working in the team can be named), with mandatory publication of research results and corresponding indexing in databases, can become a source of conflict (demotivation of participants, etc.); c) participation in grant programs involves (co)financing of the project research.

3. Project mentorship in higher education is an interaction with adult citizens (students participating in the project). Hence, there may be risks associated with obtaining financial resources and fulfilling the corresponding obligations to the grantor (educational institution) in the medium- and long-term perspectives, combined with the nature of the “mentor-mentee” relationship (as opposed to the “organization leader-[young] employee” interaction).

4. Project mentorship in higher education relies on the competencies and skills of the mentor in areas such as managing intellectual property, knowledge, changes, and conflicts. This circumstance implies the professional development (training) of mentors in these areas (*Appendix 1, Table 1 and Fig.*).

When developing the “Conceptual Framework for Project Mentorship in the Field of Creative Industries in Higher Education”, the authors of this paper relied on the following provisions:

I. Subject-object interactions in project mentoring in higher education: the mentor (object of mentoring) is a young teacher; the student (individual) (or group [team] of students, participant in the mentoring program) who, through interaction with the mentor and with their help and support, solves specific life, personal, and professional tasks, gains new experience, and develops skills and competencies. Project men-

tors (or mentors as subjects of mentorship) are scientific and pedagogical workers; employers, specialists in the field of design — partners of higher education institutions; students with experience working with project teams and interested in creating innovative products — scientific volunteers; participants in the mentorship program who have successful experience in achieving life, personal, and professional results, competent and ready to share the experience and skills necessary to stimulate and support the processes of self-realization and self-improvement of the mentee.

II. The Russian mentoring model is based on: a) traditional spiritual and moral foundations of mentoring in the Russian economic and educational fields [3]; b) the characteristics of scientific mentoring as a scientific and educational institution, relying on the traditions of Soviet and Russian higher education, analyzed in the paper [18]; c) the achievements of Soviet Russia — USSR (1917–1991) in the studied field, including successes in mentoring working youth and pedagogical workers of the Soviet school, reflected in the paper of N.A. Ladilova and I.A. Mishina [19].

III. The five forms of mentorship presented in the Letter have been supplemented by the authors of this study, specifically proposing the following forms relevant to project activities in the creative industries of higher education: M–M: “mentor — mentor”; S–S: “student — student”; T–S: “teacher — student”; St–L: “student — learner”; S–L — “specialist — student”.²⁴ Taking into ac-

²⁴ Letter from the Ministry of Education of Russia No. AZ-1128/08, from the Trade Union of Workers of Public Education and Science of the Russian Federation No. 657 from 21.12.2021 “On the Direction of Methodological Recommendations” (together with “Methodological Recommendations for the Development and Implementation of a System (Target Model) of Mentorship for Educators in Educational Organizations”, “Methodological Recommendations for Educational Organizations on the Implementation of a System (Target Model) of Mentorship for Educators”). URL: https://www.consultant.ru/document/cons_doc_LAW_418547/ (accessed on 21.09.2024). URL: https://www.consultant.ru/document/cons_doc_LAW_418547/ (accessed on 09.02.2025).

count the peculiarities of the development of creative industries (including remote forms of organizing their employees' work), as well as the inclusive practices inherent to these sectors of the economy in terms of employment, the implementation of mentorship forms is considered by the authors in conjunction with the "location" point.

IV. Results of project mentorship in the field of creative industries in higher education by areas:

IV.1 Mentorship in research/competition projects for students — effectiveness based on competition results (with or without publication, with poster presentations, etc.). Based on their earlier works on project activity and the startup movement in creative industries, the authors of this study have refined the direction of "Creative Industries Startup" into "Creative-CultTech-Startup" for its development on grant-giving platforms: "Rosmolodezh.Grants", "Startup as a Diploma", and the National Technological Initiative (NTI) [20].

IV.2 Scientific mentoring — publications in indexed databases taking into account the requirements for the publication activity of the mentees²⁵;

IV.3 Mentorship in an inclusive project should primarily be viewed as a process whose effectiveness depends on an individual mentorship plan (inclusion of the mentee), the formation and development of an inclusive environment for creating objects of the creative industries in the "mentor-mentee" interaction, including the use of remote forms of mentorship²⁶;

IV.4 "Mentor — mentor" — scaling the results of the best mentor through conducting master classes and a series of scientific and methodological workshops on mentoring techniques, pub-

lishing monographs, and publications based on best practices (*Fig.*).

Based on the results of both our own work and the analysis of scientific papers conducted during this study, we have refined two initiatives concerning the development of project mentorship in creative industries at the higher education level²⁷:

1. Implementation of the "Creative-CultTech-Startup" direction on the platforms "Rosmolodezh.Grants", "Startup as a Diploma", NTI;

2. Development of methodological support for project mentoring in creative industries at higher education institutions, including a glossary.²⁸

DISCUSSION

The results of this study develop the ideas presented in the papers of Russian and foreign authors. In particular, the issues of selection criteria for mentors — experts in startup projects (from universities), partner enterprises, as well as the effectiveness of mentoring measures in project activities are being updated (*Table 1*). According to A. V. Dmitrova, "...each university independently determines the requirements for mentors, taking into account the specifics of the implementation of mentoring practices. The following key qualities can be highlighted for a mentor in higher education: diligence, an active life position, kindness, responsibility, confidence, sociability, pedagogical tact, empathy, initiative, stress resistance, adaptability, leadership qualities..." [7, p.31]. Taking into account the opinions of practitioners actively involved in the formation of university platforms for technological entrepreneurship, clear criteria for selecting

²⁵ In particular, the work of E. Goh and S. Richardson notes the effectiveness of the mentoring program in engaging students in the educational process, resulting in higher success rates [21].

²⁶ This topic is being developed through the study of issues related to the use of digital technologies in the inclusive educational process in the Republic of Tatarstan [22].

²⁷ Author initiatives develop the topic of supporting innovative technological entrepreneurship and the startup movement in the regions, as explored in the paper [23].

²⁸ Glossary "Project Activities. Startup movement. Mentorship", compiled by the authors of this article and consisting of more than thirty terms, is an integral part of the author's monograph exploring the issues of digitalization in educational organizations. The monograph is in the process of being published by a federal publishing house.

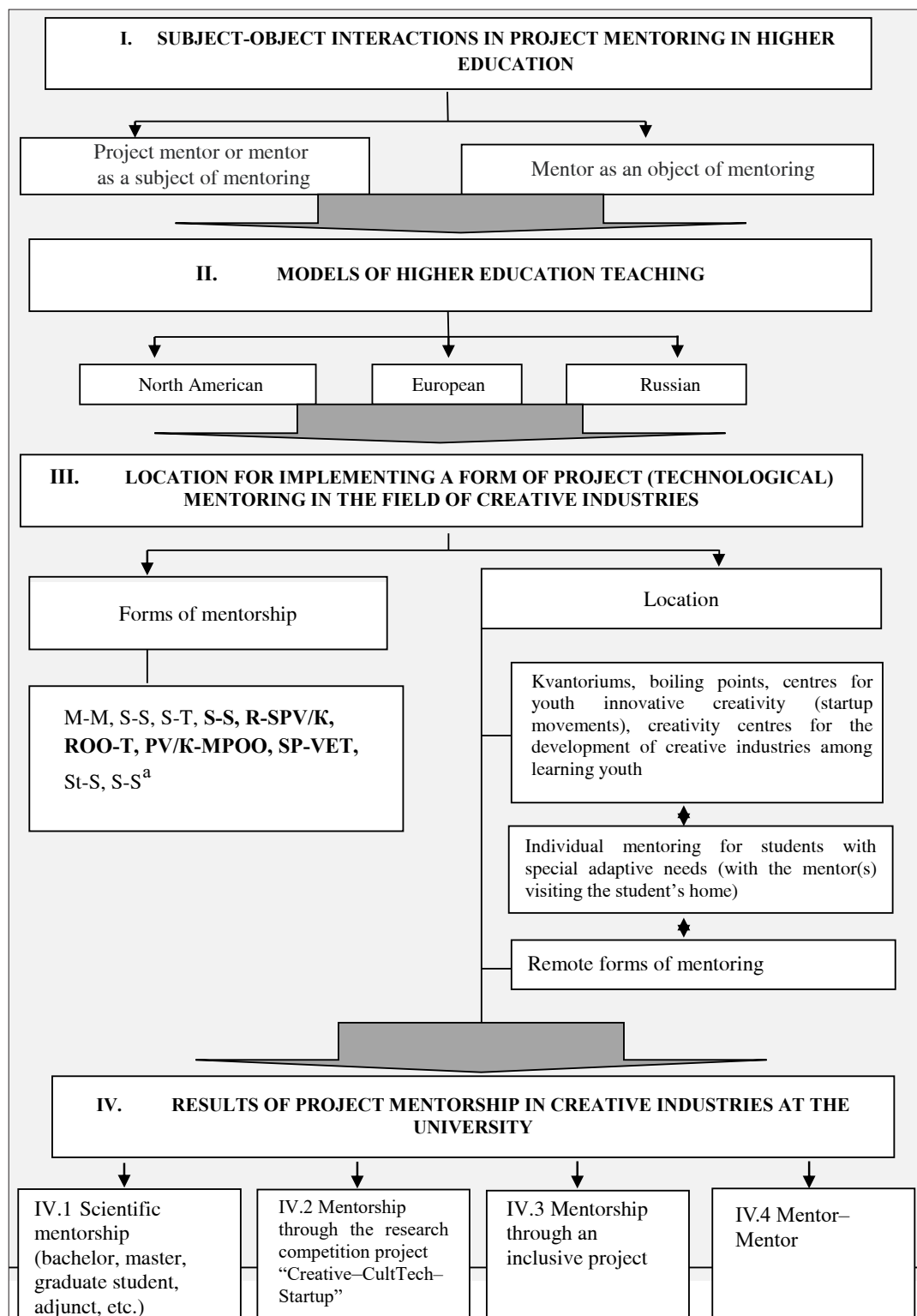


Fig. Conceptual scheme of project-based mentoring of creative industries in higher education

Source: compiled by the authors based on [9, 18, 27], URL: https://www.consultant.ru/document/cons_doc_LAW_418547/

Note: a – N-N – “mentor-mentor”; O-O: “student – student”; O-N: “teacher – student”; P-N: “teacher – teacher”; R-SPV/K: “employer – student of a pedagogical university/college”; ROO-P: “head of an educational organization – teacher”; PV/K-MPOO: “university/college teacher – young teacher of the organization”; SP-VET: “social partner – teacher of the educational organization”; St-O: “student – student”; S-O: “specialist – student”; The forms of mentoring presented in the Letter are highlighted in bold.

mentors for startup projects require clarification and methodological formalization [24, 25]. Thus, the paper of I. Tritoasmoro et al. addresses issues related to the effectiveness of technological universities in Indonesia, startup incubation, and the role of leaders in overcoming the growth challenges of startups in the country [26]. The mentorship in research projects within the Croatian higher education documentation system is discussed in the work of B. Kusevic [27].

CONCLUSIONS

Based on the obtained results, it can be concluded that in the process of work:

1. The concepts of “mentorship in the educational system” and “project mentorship in higher education” are differentiated in relation to the creative industries.
2. The definition of project mentoring in higher education has been clarified.
3. The insufficient effectiveness of regional support measures for R&D and scientific mentorship in conjunction with mentorship in the field of creative industries in university project activities, as measured by the “number of university startups in the Top-50, Top-1000” on the University Technology Entrepreneurship Platform in the Republic of Tatarstan, Ulyanovsk, and Tyumen regions, has been identified (*Table 1*). This topic requires separate research.

4. The necessity of studying the Russian mentorship model is justified by identifying its characteristics based on spiritual and moral traditions, the experience accumulated during the Soviet period, as well as scientific mentorship to promote the model in the global (domestic and international) market — primarily in BRICS countries.

5. Ten forms of mentoring implemented at the time of the study in the Russian practice of the educational-mentoring process have been specified.

6. A conceptual scheme for project mentorship in creative industries at higher education institutions has been developed, reflecting subject-object interactions based on the characteristics of the Russian mentorship model. The latter allows for the clarification of the results of project mentorship in the field of creative industries in higher education in areas such as scientific mentorship, mentorship through student research/competition projects, mentorship through inclusive projects, mentor-mentor relationships, as well as the identification of mentorship tools discussed in this work, namely, mentorship forms, their locations, and effectiveness in each of the aforementioned areas.

7. Two original initiatives have been developed to promote project mentoring in higher education in the field of creative industries.

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APPLICATION

Table 1

Research of project activities, startup movement as areas of mentoring of higher education in the Russian educational space by the group of keywords “Mentoring models, higher education”

Research	Mentoring areas/ level of the education system	Mentoring methods/methodological approaches to mentoring
Zavarzin L.E.	Mentorship of student youth	Not considered
Velieva S.V.	Beginning (young) teacher	Learning by doing and through doing; project-based learning; personal development program; question-and-answer relay model; programmed instruction model; research and creative model for implementing an individual mentoring program; project model
Dmitrova A.V.	Mentorship in domestic universities with “federal” and “national research” categories	Reverse mentoring, mentoring business model, multi-variant mentoring models
Mukhametzyanova F.Sh., Islanova N.N.	Continuous professional education for educators	Internet and flash mentoring, rapid, virtual, and self-regulated, reverse mentoring, tutoring, coaching, storytelling, balding, and many others allow achieving the necessary results even in the absence of the required amount of resources and insufficient motivation of the mentees, whose qualifications need to be changed for various reasons
Lucas-Thompson, R.G., Miller, R.L., Moran, M.J. et al	Basic general education, general secondary education	Youth mentoring programs “Mindfulness-Based Interventions” (MBIs)
Anisimpva N.A.	Higher education	First stage: diagnostic and evaluative direction. Task: defining the trajectory and strategy of the mentor in designing and implementing an individual educational program for a student with disabilities. Second stage: project-based. Development of a set of tools and procedures for supporting a specific student or group of students, taking into account their needs and capabilities. Third stage: consultative, as well as informational and educational, corrective and developmental mentoring, and other directions

Source: compiled by the authors based on [2, 4, 5, 7, 9]

Note: a – mention in the source of these components

Table 1 (continued)

	The essence of mentoring	Mentoring in Higher Education: Project Activities, Startup Movement ^a		
		Project activities	Startup movement	Efficiency of mentoring in project activities, startup movement
	Interconnection with education, reliance on the traditions of spiritual and moral upbringing	No	No	No
	Providing prolonged preventive and operational assistance to a young teacher in understanding, creatively interpreting, and implementing successful pedagogical experience in the practice of an educational organization	Yes	No	No
	Understanding mentorship as an educational technology characteristic of federal universities; emphasises the systematic and multidimensional nature of this phenomenon	No	No	No
	An educational resource that allows for the development of mentors' soft skills through a model of continuous professional education for educators	Mentioned	No	No
	Mentorship (support) for adolescents – students in schools and colleges with mental health vulnerabilities	Not considered		
		Individually, according to the development trajectory (health condition) of a student with special adaptive capabilities	Not considered	

Table 2

**Research of project activities, startup movement as areas of mentoring
of higher education in the Russian educational space by the group
of keywords “mentoring, higher education**

Research	Level of education	Mentoring methods/	
Korneva S.N., Rybakova N.N.	Basic general education, secondary general education	“student – teacher” “teacher – teacher”	Pedagogical of subject physics, co educational methodolo
Kostikova L.P., Olkov A.S., Fedotova O.S.	Higher education	“scientific supervisor – graduate student (adjunct)”	Developm dissertatio scientific s
Nuis W., Segers M., Beusaert S.	Higher education	“university – graduate – employment”	Developm a reliable t education
Hagler M.A., Christensen K.M., Rhodes J.E.	Higher education	“college student – university student”	Mentorshi university

Source: compiled by the authors based on [10, 11, 12, 13] and the Federal Law of 29.12.2012 No. 273-FZ “On Education in the Russian Federation”.

Note: mention in the source of these componen

Table 2 (continued)

Activities within the framework of mentoring models /	Mentoring in Higher Education: Project Activities, Startup Movement ^a		
	Project activities	Startup movement	Efficiency of mentoring in project activities, startup movement
al workshop for young educators; zonal seminar with the participation teachers in the physical and mathematical cycle (mathematics, computer science); practice-oriented seminar for deputy directors for al work; methodological festival for computer science teachers; unified logical week for teachers in the Buinsky municipal district	Not considered		
ent of scientific schools; scientific and methodological manuals for on preparation; consulting members of dissertation councils and supervisors by VAK experts	Research within the framework of a PhD (postdoctoral) program as a project	Not considered	- publications in RSCI, VAK; - skills in working with databases such as RSCI, e-library, etc.; - mastering the conceptual apparatus as a condition for research
ent of a questionnaire based on a reliable theoretical framework as tool for various subgroups of the population in the field of higher	Employment of graduates	Not considered	trust and accessibility, emotional support, network support, support for autonomy, similarity and empathy
p network from the college (school) – mentorship network of the	The first year of university studies for a college student	Not considered	-formed trust in college (school) mentors; -formation of trust in university mentors

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