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UNIVERSITY	SHEI «Pereiaslav-Khmelnyskyi Hryhorii Skovoroda State Pedagogical University»
RATIONALE FOR ICR AT UNIVERSITY	
Aims and objectives	<p>By creating ICR in our university, we pursue the following goals:</p> <ul style="list-style-type: none">- Creation of a single learning and interactive space that will allow the development of sustainable multidisciplinary connections- Development of digital competence of university staff and students- Dissemination of methodological and teaching materials on the use of innovative tools of education in all regions of Ukraine and in the international educational space through forums, conferences, festivals etc..- Distribution of project results in the framework of training, retraining and qualification of primary and secondary education teachers <p>By creating ICR, we set before us the following objectives:</p> <ul style="list-style-type: none">- Formation in students of digital, communicative, polycultural and foreign language competencies, skills of the 21st century in the demand of modern society- Development of skills in the use of innovative tools and teaching methods- Development of case study materials, trainings, supervisions, webinars for further use in pedagogical practice.- Creation of competence centers:<ul style="list-style-type: none">• The center of multimedia technologies



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	<ul style="list-style-type: none"> • Information and Analytical Center • Center for self-knowledge and self-development • Educational Center for Creative Pedagogy • Center for Critical Thinking • Inclusive Resource Center • Center of management bases • Coaching studio • Press Center <p>- Implementation of monitoring and analysis of information in foreign language</p> <p>- Organization of studying on a research basis</p> <p>- Application of Innovative Technologies (case-study, blended learning, flipped classroom, CLIL, distance learning, cooperative learning, mobile learning)</p> <p>- Self-realization of students, future specialists in professional space</p> <p>- Facilitating the formation of students as future teachers of the 21st century</p>
<p>Impact (<i>increasing of the efficiency of innovative teaching methods at the university as a whole</i>)</p>	<p>Creating of ICR on the basis of our University will affect on:</p> <ul style="list-style-type: none"> - large-scale introduction of innovative teaching methods in the university's educational process at all levels of study - rapid and effective development of digital competences of the younger generation



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	<ul style="list-style-type: none"> - development of studying and scientific activities of students and university staff - informatization of education as one of the leading components of technological restructuring of society - introduction of new technologies as intellectual toolkit of the person and its intensive use in practice of work by all social institutes 		
TARGET AUDIENCE		Performance Indicators <i>(provide your proposal)</i>	Risks and Assumptions
Target group during the project life	<ul style="list-style-type: none"> 1) University students 2) Teaching staff of the university 3) The administrative staff of the university 4) Teachers of educational institutions 	<ul style="list-style-type: none"> 1) Number of visitors 2) Specialists involved 3) Exercise of the training load by students 4) Higher academic achievements 	<ul style="list-style-type: none"> 1) Low attendance 2) Failure to complete the curriculum by students
Target group after the project	<ul style="list-style-type: none"> 1) University students 	<ul style="list-style-type: none"> 1) Number of 	<ul style="list-style-type: none"> 1) Low attendance



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finished	<ul style="list-style-type: none"> 2) Teaching staff of the university 3) The administrative staff of the university 4) Teachers of educational institutions 5) Representatives of social institutes of all levels of lifelong education 	<ul style="list-style-type: none"> visitors 2) Specialists involved 3) Exercise of the training load by students 4) Higher academic achievements 	<ul style="list-style-type: none"> 2) Failure to complete the curriculum by students 3) Low interest in personal development
SPACE DESIGN			
<p>Learning Spaces (Zones) as a “Learning Agents” (<i>mixing different zones meaningfully designed as a function of the activities hosted and the specific learning processes involved in ICR at your university</i>)</p>	<p>Our Innovation Class consists of 3 working zones:</p> <ul style="list-style-type: none"> - project zone; - presentation zone; - linguaphone zone. <p>Separately the Fab-Lab zone is provided, equipped according to the requirements of the new Ukrainian school.</p> <p>All zones are compact, if necessary, easily transformed (according to the needs of the class).</p> <p>One of the most prospective components of the educational process is the project zone, as it creates conditions for creative self-development and self-realization of students, and forms the key competencies that were identified at the Council of Europe as major in the 21 century:</p>	<ul style="list-style-type: none"> 1) Exercise of educational load by students 2) Classroom attendance 	<ul style="list-style-type: none"> 1) Low interest in personal development 2) Attraction of low-quality teaching staff



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	<p>multicultural, linguistic, informational, digital, political and social. Independent acquisition of knowledge, their systematization, orientation in the information space, the identification of the problem and decision-making is precisely produced through the method of the project.</p> <p>Project zone equipment:</p> <ul style="list-style-type: none">- Display interactive 65 "SMART SB6065 + notebook 15 / i3-6006U / 4 / 1TB / Intel HD / DRW / W10 SMART Learning Suite + ComputerKapp IQ (BYO + Mobile display booth)- Laptop HP ProBook 440 G4 i5-7200U, 4Gb, (500 + 128SSD) 628Gb, (6 units)- Photo-video camera on a tripod (own cost, co-financing) <p>The functions of the presentation zone are intertwined with the project zone, the purpose of which is the implementation of the 4th stage of the project activity of the students - presentation. In this zone students will be provided with all the conditions for the successful and rapid dissemination of ideas and results of their work, which will accelerate the formation of them as future educators.</p> <p>Presentation zone equipment:</p> <ul style="list-style-type: none">- Interactive complex SMART suite with InV30 + Notebook 15 / i3-6006U / 4 / 1TB / Intel HD / DRW / W10 projector and SMART Learning Suite software (1 unit) TV 55 "Samsung UE55K5500AUXUA black- Multifunctional device AH Hehoch DC SC2020 2 Orpm (monochrome and color) DADF / Duplex / 1Tgaw / Net / USV - 1 unit- SMART electronic flipchart with mobile stand		
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	<p>Linguaphone zone is a digital laboratory and holds a special place in the training. Software «NIBELUNG», ordered for installation in the linguaphone zone (co-funding of the university) is planned for effective use in different directions:</p> <ul style="list-style-type: none">• learning foreign languages;• development of speech;• learning ICT (for example, working with office programs);• studying of general subjects;• presentations conducting;• computer class management. <p>Linguaphone zone equipment:</p> <ul style="list-style-type: none">- Interactive complex SMART suite with InV30 + Notebook 15 / i3-6006U / 4 / 1TB / Intel HD / DRW / W10 projector and SMART Learning Suite software (1 unit)- ZeroClient Classroom (10 + 1 comp.)- ON "NIBELUNG" (Own cost, co-financing) <p>FabLab is an open workshop for young people. Mission of the zone is in scientific and technical education and education of the adaptive generation of youth in Ukraine, capable of generating new innovative projects, applying the knowledge gained and the world's leading knowledge-intensive technologies for their implementation.</p> <p>Fab-Lab zone equipment:</p> <ul style="list-style-type: none">- «MakeBlock» (robotics) lab "STEM" Classroom Kit mBot (15pcs (5*3))		
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	- 3D printer Trident with PLA plastic (2 units)		
<p>Learning Spaces Exercises (<i>creation, research, development, presentation, etc.</i>)</p>	<p>The establishment of such educational agents is aimed at the implementation of the primary pedagogical tasks, «spatial exercises», which in a comprehensive manner contribute to the formation of the student as a first-rate specialist. The student passes all stages of the learning process in turn, and combines them for a quicker understanding of the material being studied.</p> <p>It is planned to create and demonstrate presentations individually or through cooperation, research work, development of new thematic studies with the help of various means of expression, such as drawings, diagrams, diagrams, creation of new educational programs on innovative resources, thematic videos, the analysis of the results of analysis and discussion. their in groups, writing tests, etc. The following pedagogical approaches will be used: Distance education; Comprehensive training; Differentiated learning; Cooperative learning; Research training; Stortelling; Mobile learning; E-learning, etc.</p>	<p>1) Exercise of educational load by students 2) Classroom attendance</p>	<p>1) Low interest in personal development 2) Attraction of low-quality teaching staff</p>
PEDAGOGY DESIGN			
<p>Emerging pedagogical approaches (<i>what and how you are going to teach? Explain the core of the</i></p>	<p>Due to the multifunctionality of the equipment and the possibility of easy and rapid transformation of the training areas on the ICR basis, individual and group training forms will be provided.</p> <p>The appropriate software, introduction of interactive training platforms,</p>	<p>1) Exercise of educational load by students 2) Classroom</p>	<p>1) Low attendance 2) Failure to complete the curriculum by</p>



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<p><i>pedagogical aspects of ICR)</i></p>	<p>innovative teaching methods and technologies in the educational process involves the use of the complex approach to studying of humanities, natural sciences, socio-economic cycles of disciplines, which will help the teacher in qualitative and interesting way to teach the material, to ensure the practical mastery of the knowledge and skills acquired.</p> <p>Particular attention will be paid to the following teaching methods and technologies:</p> <p>STEAM - Education (Science-Technology-Engineering-Art-Mathematic)</p> <p>Gamification</p> <p>Mobile learning</p> <p>Change the role of teacher and teacher</p> <p>IBL (Inquiry Based Learning)</p> <p>IBS (Inquiry Based Space)</p> <p>PBL (Project Based Learning)</p> <p>Computational thinking</p> <p>Blended learning</p> <p>Dual education</p> <p>Peer-to-peer</p> <p>Making</p>	<p>attendance</p> <p>3) Academic achievements of students</p>	<p>students</p> <p>3) Low interest in personal development</p>
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	<p>Storytelling</p> <p>Microlearning</p> <p>BYOD (Bring Your Own Device)</p> <p>3-D printing</p> <p>Collaborative training</p> <p>Inverted Class Technologies</p> <p>Virtual, mixed and complemented reality</p> <p>Technologies of formation of media literacy</p> <p>Computational thinking</p> <p>Distance Learning</p>		
<p>Pedagogical processes <i>(teaching-learning processes organization in concept of the ICR as a main part of ecosystem¹)</i></p>	<p>1) integration of information, technological and mental components, which synchronously provide a qualitative mastery of the system of relevant knowledge</p> <p>2) creation of an individual learning trajectory and, thus, implementation of the basic principles of an individual approach: taking into account the individual characteristics of each student (psychological development,</p>	<p>1) The use of existing tools</p> <p>2) Exercise of the training load by students</p> <p>3) Attraction of</p>	<p>1) Failure to fulfill the training load by students</p> <p>2) Uncomplicated use of existing tools</p>

¹ ecosystem consists of actors (students, lecturers, principals, entrepreneurs, associations, institutions, stakeholders, parents, etc.) and abiotic elements (buildings, classrooms, external locations, tools, IT resources, learning and teaching resources, OER etc.) in use for education through teaching and learning



	<p>temperament, type of nervous activity); taking into account experience, preceded this stage of training; taking into account individual styles of cognitive activity; involvement of each student in active cognitive activity</p> <p>3) teach students the techniques and techniques of the PC (if they do not have these techniques)</p> <p>4) teach students methods and methods of work in the global Internet, as well as in local computer networks</p> <p>5) form the ability of students to search the global Internet for the necessary relevant training information and methodological materials</p> <p>6) teach students to create network educational resources, pedagogical software tools, methodical, didactic and organizational materials for conducting lessons and mastering a wide range of information and communication technologies, their use in conducting various types of classes, both within the educational and non-educational activities</p> <p>7) teach future teachers the didactic, psychological-pedagogical and methodical techniques, which allow to form the necessary information and communication competences in their future students</p> <p>8) form competence in the use of distance learning in their professional activities</p>	<p>additional teaching aids</p>	
<p>Assessment Action <i>(how you will evaluate innovative</i></p>	<p>Innovative teaching and learning processes and their outcomes will be assessed through the level of students' academic achievement and the</p>	<p>1) The use of existing tools</p>	<p>1) Failure to fulfill the training load by</p>



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<p><i>teaching and learning processes and its results in your ICR/ecosystem)</i></p>	<p>development of their competences, as well as through the work of the teacher himself:</p> <ul style="list-style-type: none"> - sufficient qualification in the field of information and communication technologies of teachers and employees (at the level of international computer driving license). - sufficient qualification in the field of information and communication technologies of graduates - automated management of educational process at levels University - Faculty (Institute)-Chair - high-quality access for teachers and students to their own and external electronic educational and methodological resources - high-quality access for teachers and senior students to scientific electronic resources - automated management of own activities of teachers and students - software cleanliness of the software used 	<p>2) Exercise of the training load by students</p> <p>3) Attraction of additional teaching aids</p>	<p>students</p> <p>2) Uncomplicated use of existing tools</p>
<p>TECHNOLOGY DESIGN</p>			
<p>Technology as a facilitator of new teaching and learning practices implementation (<i>explain here how you select the equipment</i>)</p>	<ul style="list-style-type: none"> - dispute, seminar, conference, round table, symposium, debate, colloquium, distance learning, didactic, business games, role games are a means of problem-searching and research methods of training - productive search activity, aimed at creating a new product (first of all, 	<p>1) The use of ICR as a whole, and individual learning areas</p>	<p>1) Unproductive use of existing equipment</p>



<p><i>for your ICR and how these tools will facilitate new teaching and learning exercises at your university)</i></p>	<p>intellectual, cognitive) by students. Online learning systems (on- and off-line), multimedia presentation methods for learning information</p> <ul style="list-style-type: none"> - technical means. Information and communication technologies (multimedia interactive equipment, electronic simulators, electronic textbooks, multimedia libraries, virtual museums and laboratories, systems for modeling phenomena and processes). Commented teaching of multimedia teaching materials. Effective access to educational databases. Network facilities for video conferencing and video lectures. An effective monitoring system for learning activities. Distant means of organization of independent work. Computer testing in on-line and off-line modes 	<p>2) Conducting various types of activities with the use of existing equipment</p>	
<p>SOCIAL DESIGN</p>			
<p>Information hub as a communicator with society <i>(explain how your ICR/ecosystem will promote the innovative pedagogy on Local, regional and national levels)</i></p>	<p>LOCAL:</p> <ul style="list-style-type: none"> - creation of information and communication infrastructure of the university (client sites, networks, software), - training and retraining of personnel; - updating and filling the portal of the university; - improvement of the educational process; - introduction of remote forms in the educational process. - The university manages a variety of assets, such as human resources, financial flows, tangible assets, intangible assets (including intellectual 	<p>1) The level of awareness of the population about the ICR</p> <p>2) Organization of extracurricular activities using ICR</p> <p>3) The conclusion of additional</p>	<p>1) Low level of public awareness</p> <p>2) The low level of ICR use in extracurricular activities of different types</p>



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	<p>property), relationships with students and employees, interaction with various external organizations. The ICR allows you to manage the administrative and academic business processes of the university.</p> <p>REGIONAL:</p> <ul style="list-style-type: none"> - organization of continuous courses of teachers training at the level of international computer driving license and on problems of effective use of ICT in higher educational institutions with the admission of teachers to these courses as a planned qualification improvement; - organizations based on the Department of STEM-education (sector of innovative pedagogical instruments) PCDPU a cycle of seminars for teachers of university departments on practical issues of using the virtual university for the implementation of modern distance learning forms; - Implementation of the responsibility of the departments «responsible for the processes of informatization» for the dissemination of experience among teachers of the region, in particular through advanced training courses - conducting a regional pedagogical experiment on the training and retraining of teachers on information and communication technologies, innovative pedagogical instruments <p>NATIONAL:</p> <ul style="list-style-type: none"> - dissemination of experience in using innovative pedagogical tools for the modernization of Ukraine's pedagogical education among universities 	<p>agreements, and harmonization of such cooperation on an ongoing basis</p>	
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	<p>through presentations at international and all-Ukrainian conferences, symposiums, forums; through the testing of the developed training courses.</p>		
<p>INFRASTRUCTURE DESIGN</p>			
<p>Human resources involved <i>(The personal membership and responsibilities of those responsible for the material and technical preservation, maintenance; technical and informational support of educational activities in the ICR during classroom and non-classroom activities)</i></p>	<p>Among the general requirements for professionals distinguish skills of the possession of modern methods of searching, working out and using information, the ability to interpret and adapt the information to the addressee. As for knowledge and skills in disciplines of general cultural training, it is: knowledge of knowledge about information processes in nature and society, about computer technologies, the possibilities of electronic technologies in the field of culture and education.</p> <p>Psycho-pedagogical specialist training is connected with:</p> <ul style="list-style-type: none"> - possession of the skills of psychological and pedagogical diagnostics, designing organization, assessment and correction of educational process; - knowledge of the foundations of the organization of experimental, experimental and research work in the field of education; - possession of the basic psychological and pedagogical criteria for the use of computer technology in the educational process; - proper maintenance, maintenance, information provision of educational activities in the ICR 	<p>1) Involvement of highly qualified specialists in ICR</p> <p>2) Develop and sign an order for the establishment of ICR on the basis of the university</p>	<p>1) Low interest in personal development</p> <p>2) Improper level of technical support</p> <p>3) Untimely signature of the order, and, as a result, non-compliance with the timing of the project</p>



	<p>Key Functions of Responsible Persons:</p> <ul style="list-style-type: none">- the technical and software of the University's educational process (laboratory work, computer testing, tests and examinations, course and diploma design, training practice, etc.) according to the curricula and applications on the basis of which the schedule for using classes together with the dispatch school year.- interaction with the departments on software issues that are installed and its operation.- conducting consultations and providing assistance to teachers, staff and students on practical issues of work in computer classes and the use of resources of local and global networks.- computer support of conferences, seminars, exhibitions and presentation events of the University.- installation of personal computers and other organizational equipment at departments and workplaces of users, association of computers in local networks, connection to a single local network of the university with access to the external network.- preparation, access and operational use of university resources and external information resources. Providing students and colleagues with the opportunity to obtain the necessary information from the library's library resources of the university library and external libraries.- diagnostics and repair of computer equipment. Purchase of spare parts,		
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	<p>consumables, organization of writing off computer and organizational equipment.</p> <ul style="list-style-type: none">- advising users and assisting in the acquisition and introduction of modern software software and necessary application packages in the learning process.- creation of conditions for postgraduate education in computer science and new information technologies.- organization of independent work of students, postgraduates and university employees in computer classes.- carrying out works on introduction of new promising information and educational technologies aimed at automation of activity, management and control of all units of the university;- implementation and support of information technology using multimedia capabilities (audio, video conferencing, etc.);- support and optimization of activities related to the use of computer technology and technical means of training;- ensuring the performance of the installed computer equipment, including conducting its current reviews and preventive measures;- processing applications for the purchase of computer and other equipment;- preparation, within the limits of its competence, of the proposals on the		
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	<p>volume and order of financing for the purchase of equipment and performance of works in the field of informatization;</p> <p>- control over observance of the rules of operation of computer equipment.</p>		
<p>University Division / Department (<i>responsible for the running of the ICR</i>)</p>	<p>Department of STEM-education (the sector of innovative pedagogical instruments)</p>	<p>1) Involvement of highly qualified specialists in ICR</p>	<p>1) Low interest in personal development</p>
<p>Institutional regulations (<i>provide the main organizational regulations for computer- and classrooms at your university</i>)</p>	<ul style="list-style-type: none"> - sanitary rules and regulations for the placement and equipment of cabinets of computer equipment in educational institutions and the mode of work of teachers and students on personal computers - requirements for the premises and the location of workplaces from the PC - requirements for lighting of premises and workplaces - requirements for microclimate - requirements for equipment and workplace organization - requirements for the organization of the work of teachers and students on personal computers 	<ul style="list-style-type: none"> 1) Compliance with the rules of work in the ICR 2) The appropriate level of ICR support 3) Compliance with the ICR for teachers and students 	<ul style="list-style-type: none"> 1) Failure to comply with ICR rules 2) Improper level of technical support